Core team: Lisa Diedrich, Andrea Kahn (SLU Urban Futures); Jonas Bylund, Caroline Wrangsten (JPI Urban Europe)

### The STRATEGIC SYNTHESIS STATE OF PLAY 2020\_09

A process-knowledge capture document, collecting and collating ongoing work and working processes:

I	(motivations)	"8 observations worth exploring"	
11	(outcomes to date)	"7 sample synthesis process tools"	
		"working lexicon to nuance discourse"	
		"reading list"	
<i>III</i>	(emerging questions)	"what are we asking now?"	
IV	(process model)	"project timeline/iterative working process model"	

**STRATEGIC SYNTHESIS is an "open project".** It began by asking basic questions about what synthesis work could involve and what it could produce, and by articulating basic aims:

 Make research useful: In today's TMI ['too much information'] context, synthesis clarifies research relevance (what matters?) with a focus on audience (to whom does it matter?).
 Model a synthetic mind-set: Demonstrate ways to dynamically mobilize existing knowledge resources, using knowledge creation processes that involve criticality, and reflexivity-on-the-go.

If you are interested exploring how you might take part, please contact <u>Andrea.Kahn@slu.se</u>.

To learn more about the **STRATEGIC SYNTHESIZER working group**, check out the links below:

Jonas Bylund <u>https://jpi-urbaneurope.eu/ & https://jpi-urbaneurope.eu/app/uploads/2019/02/SRIA2.0.pdf</u>

Lisa Diedrich www.slu.se/urbanfutures; www.slu.se/en/departments/department-of-landscape-architectureplanning-management/about-the-department/design-av-urbana-landskap/critical-urbanities/; www.slu.se/en/ewcv/lisa-babette-diedrich/

Andrea Kahn <u>www.design-CONTENT.com</u> & <u>www.slu.se/en/Collaborative-Centres-and-Projects/slu-urban-</u> future/collaborative-projects/synthesis-lab/

Joanne Leach www.birmingham.ac.uk/staff/profiles/civil/leach-joanne.aspx; www.icevirtuallibrary.com/doi/abs/10.1680/jsmic.19.00021

Henrietta Palmer <u>www.mistraurbanfutures.org/en</u>, <u>www.mistraurbanfutures.org/en/our-research/research-</u> <u>school</u>; <u>https://henriettapalmer.academia.edu</u>

Anna Sundman <u>www.TheoryIntoPractice.se</u>; <u>https://indd.adobe.com/view/eabe8655-e261-4ed3-90f4-a4338d1752af</u>

**Elizabeth Viktor** <u>www.pwc.de/en/sustainability/climate-excellence-making-companies-fit-for-climate-change.html</u> & <u>www.pwc.de/en/about-us.html</u>

**Caroline Wrangsten** <u>https://jpi-urbaneurope.eu/</u> & <u>https://jpi-urbaneurope.eu/urban-lunch-talks-a-webinar-series/</u>& <u>https://jpi-urbaneurope.eu/app/uploads/2019/02/SRIA2.0.pdf</u>

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The STRATEGIC SYNTHESIS STATE of PLAY 2020\_09, organized around key moments in the project's ongoing development, outlines project motivations ("8 observations worth exploring"); outcomes to date ("7 sample synthesis process tools", working lexicon, and reading list); emerging questions; and a timeline/ working-process model.

### I. (MOTIVATIONS)

### "8 Observations worth continued exploration"

KEY MOMENT 2019 – ITD CONFERENCE OPEN WORKSHOP, "Crossing the Line: REIMAGINING SYNTHESIS WORK"

This workshop explored how "synthesis" – re-imagined beyond the conventional academic literature review – may be mobilized as a potential and powerful transdisciplinary format. It yielded a preliminary set of **operational characteristics** associated with **strategic synthesis**, meriting deeper investigation, and providing the foundation for follow up work.

- Strategic Synthesis is not inventory, collation, or coordinated packaging
- Strategic Synthesis **produces** more than the sum of the parts **new knowledge**
- Strategic Synthesis takes **different forms in varied forums**, e.g.: Synthesis in different time frames/temporal registers, Synthesis at/for different scales
- Strategic Synthesis, conditional and transparent on the provisional nature of 'facts', is not truth.
- Strategic Synthesis yields partial perspectives (not a "God's eye view").
- Strategic Synthesis is **positioned** between the message, the messenger and the audience.
- Strategic Synthesis is **chemistry**: it is **catalytic**, how you get things to react and interact.
- Strategic Synthesis is dynamic, it moves towards results but is never final

### II. (OUTCOMES to DATE)

#### *"7 Sample synthesis process tools"*

(capture/adapt)

(collect/distil)

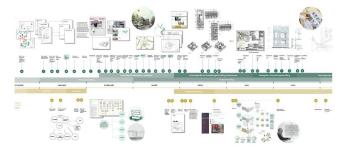
#### KEY MOMENT 2020: Follow-up STRATEGIC SYNTHESIS INVITED WORKSHOP, June 2020

This working session focused around 3 questions, and included participants from the ITD Workshop, plus the core team: Do you have a preferred synthetic method/process? How might it be adapted by others who work in different contexts/fields/modes? How could it be strengthened through 'mixing' with others ways of synthesizing? Aiming to expand synthesis work beyond the standard academic literature review it yielded **a preliminary 'tool-box'** for in-process knowledge-capture, narrative development, visualization, transdisciplinary process design, communication, problem framing and process scoping.

More detailed discussion of the tools, their potential applications, and adaptable formats, is provided in the pages below:

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SAMPLE TOOL: Theory into Practice (TIP) - Learning History



#### Learning History

#### = TOOL for in-process knowledge capture & finding 'common grounds'

WHY CAPTURE IN-PROCESS KNOWLEDGE? "We need to think about what goes on as we work on a project, not just make assessments after that project is finished. Reflection must be an active ingredient during the process...if we don't stop to reflect on whether our efforts still make sense as situations change around us, we risk meaninglessness." (Bylund, J. "Adopting dilemmas and reflexivity-on-the-go", '**Scape 16 Dossier**, CROSSING THE LINE, 2019)

TOOL TYPE: Annotated Timeline

JOB/USE: Helps to identify those moments/events in a collaborative working process that yielded new/synthetized knowledge, to better understand the context supporting synthetic knowledge production (What happened? When did it happen? Who participated and how? What finding key to which actor(s)?) A lot of outputs are key to maintain "common ground", and to reaffirm "the core" throughout all the twists and turns of a project. A tool for reflection; both in the making of the learning history, and as a result.

<u>Possible timeline formats</u>: Graphic, Annotated diary/journal (text based); Gantt chart (visual) Spreadsheet (list); Annotated project history

FIND OUT MORE: TheoryIntoPractice:

<u>www.TheoryIntoPractice.se</u> https://indd.adobe.com/view/eabe8655-e261-4ed3-90f4-a4338d1752af

Field Manual for a Learning Historian, Version 4.0, October 28, 1996, by Art Kleiner, George Roth, and the learning historian pioneer's group at the Center for Organizational Learning, Massachusetts Institute of Technology © 1996, MIT-COL and Reflection Learning Associates, Inc.

Jonas Bylund, on "Reflexivity-on-the-go", <u>www.scapemaqazine.com/scape16/</u>

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#### SAMPLE TOOL: #UrbanGirlsMovement Video



#UrbanGirlsMovement Voices on UrbanGirlsMovement

www.youtube.com/watch?v=aarX3R-ttas&t=24s

#### Video = TOOL for structuring a narrative

WHY NARRATIVE? "Narrative synthesis is a form of story-telling. We are part of a story telling culture, and bringing together evidence in a way that tells a convincing story of why something needs to be done, or needs to be stopped, or why we have no idea whether a long established policy or practice makes a positive difference is one of the ways in which the gap between research, policy and practice can start to be bridged. Telling a trustworthy story is at the heart of narrative synthesis." (Popay, J. et.al, Guidance on the Conduct of Narrative Synthesis in Systematic Reviews, Version 1: April 2006)

TOOL TYPE: Storytelling

JOB/USE: Crafting a story that incorporates multiple, diverse voices. Helps to organize and prioritize key information/findings, in order to communicate usable knowledge to diverse audiences (what was this project? Why does it matter? How can it help others facing similar challenges/aiming at similar goals?)

<u>Possible/Alternative narrative formats</u>: Video, audio, text, oral presentation, animation, jointly-told tales

FIND OUT MORE:

Guidance on the conduct of narrative (accessed 29 August 2020) -

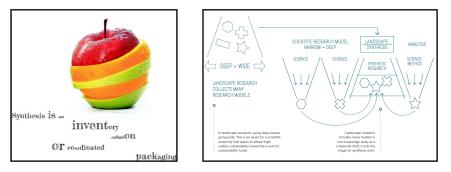
https://www.researchgate.net/profile/Mark\_Rodgers4/publication/233866356\_Guidance\_on\_t he\_conduct\_of\_narrative\_synthesis\_in\_systematic\_reviews\_A\_product\_from\_the\_ESRC\_Metho ds\_Programme/links/02e7e5231e8f3a618300000/Guidance-on-the-conduct-of-narrativesynthesis-in-systematic-reviews-A-product-from-the-ESRC-Methods-Programme.pdf

#UrbanGirlsMovement project: <a href="http://www.globalutmaning.se/rapporter/">www.globalutmaning.se/rapporter/</a>

www.youtube.com/watch?v=aarX3R-ttas&t=24s

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#### SAMPLE TOOL: Illustrating Synthesis (J. Leach) & Research Process Diagram (SLU Landscape)



#### Visualization

#### = TOOL for representing synthesis (products and processes)

WHY REPRESENT SYNTHESIS WORK? "Diagrams offer particularly helpful tools when working with large teams or complex topics because diagramming requires synthesizing information, distilling key ideas, hierarchizing information and identifying relationships. Diagrams also support communication across disciplines and between stakeholders. They do this primarily by making information visible. This information can then be discussed, recorded and collectively revised." (Vogler, E. "Working Diagrams as Communication Tools", **'Scape 16 Dossier**, CROSSING THE LINE IN UNCERTAIN TIMES)

TOOL TYPE: Annotated visualization

JOB/USE: Helps to explain the synthesis process and/or the product of synthesis work. (How to bring different inputs together in an integrative manner? What does an integration process look like? What does it yield?)

<u>Possible/Alternative graphic formats</u>: Diagram, photo-montage, storyboard, cartoon, comic strip, drawing.

FIND OUT MORE:

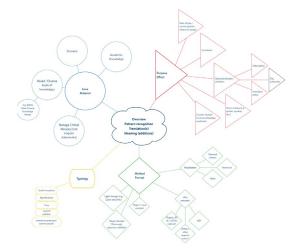
Emily Vogler, on visualization tools for complex projects - www.scapemagazine.com/scape16/

*Edward Tufte, on diagrams assisting thought* – "Fundamental Principles of Analytic Design", *in Beautiful Evidence (2006)* 

Bruno Latour, on visualisation and cognition – "Drawing Things Together", in H. Kuklick (ed.) Knowledge and Society: Studies in the Sociology of Culture Past and Present, Jai Press vol. 6, 1-40

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#### SAMPLE TOOL: Project framework development map (J. Bylund and K. Schylberg, 2018)



#### **Relational Mapping**

#### = TOOL for scoping and problem framing

WHY DOES SCOPING MATTER? Choosing among formats and approaches to synthesis work requires scoping "what's-on-hand" and a framing of the setting, materials and/or activities to be synthesized. Instead of taking a one-size-fits view, which forces different settings and materials to fit one preferred or default format and approach, scoping along the framework helps in determining which formats and approaches will be best suit the work at hand.

TOOL TYPE: Mapping

JOB/USE: Helps to explain relations between multiple vectors and or components of complex processes and projects. (What materials are you working with? What working methods are you using? What are your communication and documentation formats?)

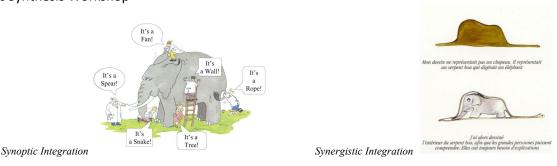
<u>Possible/Alternative mapping formats:</u> spatial, temporal, mental mapping, deliverable lists, flow chart?

#### FIND OUT MORE:

On Rich Pictures: <u>www.betterevaluation.org/en/evaluation-options/richpictures</u> On Concept mapping: <u>https://billtrochim.net/research/epp2/epp2.htm</u>

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**SAMPLE TOOL: "Framing Concepts" and "Collective Learning Spirals"**, excerpt from H. Palmer, 2020 Strategic Synthesis Workshop



"...two different forms of knowledge integration can be outlined, equally essential to transdisciplinary co-production research: *synoptic* vs *synergistic* integration. To visualize these, let us turn to two children's stories. The seven blind men, if capable of identifying the elephant's body parts correctly, could be an example of a synoptic integration. In approaching a problem complex we need to bring perspectives from all knowledge cultures in parallel, to be able to produce a broad response to the first question of the learning cycle *What should be*?; then compile the observations from each knowledge culture to reach an exhausted response to the second question *What is*? The second image, of the elephant inside a snake, visualizes a synergistic form of integration. In this mode, we do not need to know all details about the elephant and the snake, but we need to be open toward that which emerges when one eats the other. This, the creative part of knowledge integration, involves generating new ideas and theories and putting them into an active experimentation in response to the two following questions of the learning cycle: *What could be*, and *What can be*?" [Hemström, K. and Palmer, H. "On participatory research, knowledge integration and societal transformation," forthcoming)]

#### Framing Concept = TOOL for navigating/interpreting complexity

WHY DO WE NEED FRAMING CONCEPTS? "I think of strategic planning as the job of collecting and analyzing the enormous amounts of data that characterize the modern world and monitoring changes in markets and the competitive environment. This process, which requires frameworks and concepts, is where academics can contribute most in the way of ideas..." Fred Gluck, Synthesis, capabilities, and overlooked insights: Next frontiers for strategists (McKinsey Quarterly, September 2014)

TOOL TYPE: Conceptual construct

*JOB/USE:* Helps formulate and codify relations. Useful when trying to comprehend complex situations, navigate epistemes, and/or integrate non-commensurate inputs.

Possible framing concept formats: Matrices, Images

#### Collective learning spirals = TOOL for integrating knowledge

WHY DO WE NEED COLLECTIVE LEARNING SPIRALS? Knowledge integration is complex and contested, and requires acknowledging the differences between distinct knowledge cultures and thought styles, and

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recognize that at different moments in a process of inquiry, these cultures and styles could be integrated differently.

TOOL TYPE: Process of inquiry and learning tool

*JOB/USE: Helps to position questions that arise as part of a research process in relation to different stakeholders' knowledge and expertise.* 

#### FIND OUT MORE:

Hemström, K. and Palmer, H. On participatory research, knowledge integration and societal transformation, in Dymitrow, M. and Ingelhag, K. (eds) *Anatomy of a 21st-century sustainability project: The untold stories,* Gothenburg: Chalmers (forthcoming)

Brown VA (2010) Collective inquiry and its wicked problems. In: Brown VA, Harris JA and Russell JY (Eds.) *Tackling wicked problems through the transdisciplinary imagination*. New York: Earthscan, pp. 61–83.

Brown VA (2008) *A Collective Social Learning Pattern*, conference paper from EuroPLoP Workshop, Klosters Irsee, Bavaria.

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#### SAMPLE TOOL: "Terms of Engagement", excerpt from E. Viktor, 2020 Strategic Synthesis Workshop

- Identify the roles and hierarchies assumed during interactions between academia and practice, to make them transparent and to eliminate any hierarchical gaps
- Allocate time to explain the meaning of terminology used
- Discuss and agree on format for output at the beginning, iteratively adjust this throughout the project duration if needed —> aim of synthesis is unique and tailor-made for each project/instance

#### **Rules of the game** = TOOL for devising synthesis work protocols

WHY EXPLAIN THE RULES OF THE GAME? "Communication among designers, scientists, and local actors is often complicated because they use terms that can have different meanings in different disciplines or institutions. There are also more fundamental problems related to the way project participants express and judge ideas. Expressing an idea in such a context means exposing yourself to a critique that can be very unfamiliar, where the value of the speaker's intention is not understood and acknowledged." (Muller, et.al, "A Transdisciplinary Learning Approach to Foster Convergence of Design, Science and Deliberation in Urban and Regional Planning")

TOOL TYPE: Operational framework

*JOB/USE: Helps to define and/or document protocols of a synthesis process* 

#### FIND OUT MORE:

Müller, D.B., Tjallingii, S.P. and Canters, K.J. (2005), A transdisciplinary learning approach to foster convergence of design, science and deliberation in urban and regional planning. Syst. Res., 22: 193-208. doi:10.1002/sres.655

Gabriele Bammer, "What makes a researcher transdisciplinary? A framework to identify expertise" *Frameworks for transdisciplinary research* #8, doi: 10.14512/gaia.28.3.2

Pohl et al. (2010) Researchers' roles in knowledge co-production: experience from sustainability research in Kenya, Switzerland, Bolivia and Nepal, *Science and Public Policy*, 37(4): 267–281. DOI: 10.3152/030234210X496628.

Inquiry Based Approach (IBA), See: See Westin, Calderon, Hellquist (2016) *Att leda Samverkan*, Uppsala: SWEDSD <u>http://uu.diva-portal.org/smash/get/diva2:1040497/FULLTEXT01.pdf</u>

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#### Lexicon for strategic synthesis discourse/practice

(nuance)

### Co-production

'Co-production has become a popular term in relation to societal problems in various areas of governance, policymaking and research (cf. Klenk and Meehan 2017). First emerging through Elinor Ostrom's work in the 1970s, the concept has developed separately in several academic fields. On the one hand, 'co-production' carries a normative aspiration to integrate a diversity of perspectives and actors in research and the generation of knowledge on how to change the world, and/or a normative aspiration outside of science, to include a diversity of perspectives and actors to collectively produce public services. For others, the same term refers to the interdependencies between knowledge and the context in which it is produced, carried and put into practice, and is used to critically analyse the co-evolution and constitution of science and society (Miller and Wyborn 2018).'

From Hemström, K. and Palmer, H. (2020) On participatory research, knowledge integration and societal transformation, in Mirek, D. and Ingelhag, K. (2020) *Anatomy of a 21st-century sustainability project. The untold stories*. Gothenburg: Mistra Urban Futures, GMV and Chalmers University of Technology.

### References:

Klenk, N. and Meehan, K. (2017) Transdisciplinary sustainability research beyond engagement models: Toward adventures in relevance. *Environmental Science and Policy*. 78: 27–35.

Miller, C.A. and Wyborn, C. (2018) Co-production in global sustainability: Histories and theories. Environmental Science and Policy. Doi.org/10.1016/j.envsci.2018.01.016.

### **Transdisciplinarity**

'Transdisciplinarity has become a popular term to refer to the integration of multiple perspectives but is far from uniformly defined. The term can be traced back conceptually to scholarly work in the 1950s and 1970s but is broadly recognized to have gained popularity through the early 1990s works on so-called post-normal science and 'Mode 2' knowledge production. (see Nowotny, Scott and Gibbons 2003; Gibbons et al. 1994; Hessels and van Lente 2008; Jahn, Bergmann and Keil 2012). By criticising the paradigm of disciplinary science and illustrating that social science facts are not value free, these pointed to the need to recognize a multiplicity of legitimate perspectives. The currently most predominant definition of transdisciplinary research refers to the extension of academic knowledge production to include a variety of actors, with an open perception of the relevance of different forms of knowledge. Characteristic for this approach is that it is problem-oriented and based in real-world problems; it addresses the complexity of these problems by involving a variety of researchers and extrascientific actors (i.e., actors from outside of academia) and accounting for the diversity of their perspectives; and aims to generate normative and solution-oriented results with relevance for both research and practice (Lang et al. 2012; Pohl and Hirsch Hadorn 2008; Polk 2015).'

From Hemström. K. and Palmer. H. (2020) On participatory research, knowledge integration and societal transformation, in Mirek, D. and Ingelhag, K. (2020) *Anatomy of a 21st-century sustainability project. The untold stories*. Gothenburg: Mistra Urban Futures, GMV and Chalmers University of Technology.

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### References:

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994) *The new production of knowledge: the dynamics of science and research in contemporary societies*. London: Sage Publication.

Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M. and Thomas, C. J. (2012) Transdisciplinary research in sustainability science: practice, principles, and challenges. *Sustainability Science*, 7 (Supplement 1): 25–43.

Pohl, C. and Hirsch Hadorn, G, (2008) Methodological challenges of transdisciplinary research. *Natures Sciences Sociétés*, 16(2): 111–121.

### Suggested reading list

(share)

"Expertise in research integration and implementation for tackling complex problems: when is it needed, where can it be found and how can it be strengthened?" Gabriele Bammer et al. *Palgrave Communications, Humanities*/*Social Sciences*/*Business*, https://doi.org/10.1057/s41599-019-0380-0

"Collective inquiry and its wicked problems", Valery A. Brown, in Brown VA, Harris JA and Russell JY
 (Eds.) Tackling wicked problems through the transdisciplinary imagination (New York: Earthscan, 2010),

 structuring a process of inquiry and implementation for knowledge integration, as a spiral sequence along four questions and related actions.

"Science, Democracy and Emergent Publics, in Chilvers & Kearnes (eds.) *Remaking Participation: Science, Environment and Emergent Publics*, (Abingdon, Oxon: Routledge, 2016) 1–28

"Synthesis, capabilities, and overlooked insights: Next frontiers for strategists," Fred Gluck, Michael G. Jacobides, and Dan Simpson, *McKinsey Quarterly*, September 1, 2014 <u>www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/synthesis-capabilities-and-overlooked-insights</u> - the value of synthesis and academic contributions to it, from a non-academic perspective

"Visualisation and Cognition: Drawing Things Together", Bruno Latour, in H. Kuklick (editor) *Knowledge* and Society: Studies in the Sociology of Culture Past and Present, Jai Press vol. 6, 1-40

Material Semiotics, John Law, www.heterogeneities.net/publications/Law2019MaterialSemiotics.pdf

"The Fundamental Principles of Analytic Design," Ed Tufte, *Beautiful Evidence* (Graphics Press, 2006) - how graphic visualizations of data can function to support (or hinder) synthesis work

"Reflect | React | Redraw", Judith Dobler, in *Studies in Material Thinking*, <u>www.materialthinking.org</u> Vol. X (12/2013),ISSN 1177-6234, AUT University, Auckland, NZ

"Briefing: Embedding transdisciplinarity in engineering approaches to infrastructure and cities", Joanne Leach and Chris Rogers. *Proceedings of the Institution of Civil Engineers – Smart Infrastructure and Construction*, <u>https://doi.org/10.1680/jsmic.19.00021</u>

- Why engineering needs transdisciplinary approaches

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*Evidence synthesis for policy: A STATEMENT OF PRINCIPLES,* The Royal Society, The Academy of Medical Sciences <u>www.royalsociety.org/evidence-synthesis</u>

- outlines evidence synthesis and needs for its further development

*Field Manual for a Learning Historian*, Version 4.0, October 28, 1996, by Art Kleiner, George Roth, and the learning historian pioneer's group at the Center for Organizational Learning, Massachusetts Institute of Technology © 1996, MIT-COL and Reflection Learning Associates, Inc.

Cynefin Framework: https://www.youtube.com/watch?v=N7oz366X0-8

- a way to sort out very broad but typical situations where synthesis would be helpful

### III EMERGING QUESTIONS

What questions are we asking now?	(provoke/iterate)
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### (1st series, distilled from June 2020 workshop discussions)

- 1. How to make a messy process palatable to people looking for '10 easy steps'?
- 2. Does synthesis work run the risk steering away from disruption towards safer 'messages'?
- 3. How to effectively capture/convey knowledge 'along the way'"?
- 4. How to sustain differences and still reach a synthesis?
- 5. Who does a synthesis target?
- 6. How do you determine the right method for the right moment in the synthesis process?

### (2nd series, emerging out of June 2020 workshop follow-up)

- 7. How to relate to power issues within synthesis work?
- 8. How to keep differences alive within synthesis work?
- 9. How to engage with conflicts within synthesis work?
- 10. How does negotiation work in synthesis work? When do we negotiate and when do we not?
- 11. Where (in what system and/or situation?) and when (timing) is a strategic synthesis most needed?
- 12. What's positive in occupying different camps, of not belonging to one sector/side or another? (How to occupy the interface as *an opportunity*?)
- Since synthesis requires some sort of amalgamation to not be just a list of added things, what could synthetic fusing materials be – in a wide sense, tools, instruments, notions, gestures, approaches, various media, etc.? (Cf. also < <u>https://jpi-urbaneurope.eu/app/uploads/2018/02/bylund-blarticlecosmograms-final-2.pdf</u>>)
- 14. What are (probably) different synthetic approaches to 'simple' materials, complicated materials, complex materials, and chaotic materials? (cf. the Cynefin Framework, in "Learn More")
- 15. What role can visuals play in/for synthesizing?

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- 16. How can the activity of drawing and making visuals contribute to synthesis? What is the epistemic agency of synthetic drawing and visualizing?
- 17. Is the main goal of strategic synthesis about developing a useful output, or about the process of working on synthesizing information by connecting different disciplines and learning to understand each other across disciplines?
- 18. How can non-academics benefit from synthesis work? How can the "strategic" part of strategic synthesis engage non-academics as a target group, so outcomes can be useful in the real world?
- 19. How will we know when we have 'successfully synthesised'?
- 20. Are there dangers in 'over synthesising'?
- 21. Are there benefits to 'under synthesising'?

### (3rd series: evolving hypotheses (H) and related lines of further inquiry (I)

*H*: A strategic synthesis tool should be adaptable to different formats and forums.

*I: When would it be adapted? Why?* 

I: How can adaptable tools help navigate across communities of practice?

### I: What could a strategic synthesis process produce?

H: Strategic synthesis need not yield "one big take-away".

H: Strategic synthesis could yield a meta-narrative, or a meta-research question

### IV PROCESS MODEL

Project timeline work process ("	"how can our process inspire yours?")
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Jan 2018

\_Meeting #1 (Launch Synthesis Project. Ask basic questions. Identify desired outcomes) (action: GOAL-SETTING) Work starts from a shared interest in exploring how research on urban issues can be more effectively communicated to influence policy agendas and real-world activity.

(action: COLLECT) Basic questions map out territory for deeper exploration. What could synthesis be? Where is it needed? What's missing from current discourse on "research synthesis"? Why does synthesis matter in an era of global urbanization? How can syntheses be better reported/communicated? How can contribute to subsequent research calls?

(action: DISTIL) Foundational intentions frame preliminary directions. <u>Make research useful</u>: In today's TMI (too much information) context, synthesis clarifies research relevance (what matters?) with a focus on audience (to whom does it matter?) <u>Model a synthetic mind-set</u>: Demonstrate dynamic ways of putting existing knowledge together in new ways, adopting knowledge creation processes that involve criticality, and reflexivity-on-the-go.

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#### **April 2018**

\_Meeting #2 (Exchange ideas about what synthesis could be. Imagine possible outcomes.) (action: HONE IN/ FINE TUNE) The group explores ideas on what synthesis of urban research done in transdisciplinary contexts, might involve, how it might be communicated and to whom. (Link to Mind Map/AK text):

*(action: CRITICAL REFLECTION)* Synthesis, a 'research concept', is overused yet poorly understood. The concept needs nuancing. Synthesis work, a 'research practice', is too narrowly defined. Urban research involving transdisciplinary collaborations presents big hurdles: Academic and non-academic research practices each produce knowledge, but these enterprises prove difficult to combine due to incommensurate metrics, diverse habits of mind, separate value systems, unstated assumptions, etc. We need tools to help overcome these hurdles to synthesis.

(action: SPECULATION/PROJECTION) Imagine possible useful outcomes:

 An intro-level communication tool to help people grasp materials, methods, means and motivations for undertaking a synthesis project - *The BASICS: what's involved and why it's done*.
 A more advanced capacity-building tool to broaden views on synthesis, foster new formats, and position synthesis work relative to time frames, audiences, need levels, immediate and long-term

goals/projects: HOW to MANUAL - on methods, formats, processes

#### August 2018

#### \_Meeting #3 (Define a project structure. Establish a work process).

(action: OUTLINE A PROJECT) The work acquires shape as an 'open project' to build a shared knowledge base by taking advantage of opportunities and circumstances arising 'along the way'. To guide the work, we agree on core values and shared ambitions for potential project outcomes:

- Synthesis adds value by 'capturing' otherwise randomly floating bits and pieces of effort and cooking them into usable knowledge.
- We need 'test cases' (to work on separately, or together) and a 'structuring framework' to support 'reflection-in-action' and a critical practice of 'iterative knowledge creation.'
- It's important to clearly communicate in-process discoveries as outcomes to actively model dynamic, strategic, synthesis-oriented thinking. (e.g. 'Scape Dossier 16)

#### October 2018

\_Meeting #4 (Launch the "Strategic Synthesis Working Group") (action: DEFINE AN APPROACH)

The working group adopts a practice-based approach ("learn by doing") to develop "strategic synthesis" tools useful for urban projects undertaken in transdisciplinary work modes.

(working definition) Strategic synthesis pulls together diverse knowledges and knowledge makers; it is not the same as the conventional academic synthesis *qua* literature review.

(preliminary work plan) Collect samples/examples of knowledge production in action. Identify potential testbed projects. Create capacity-building opportunities. Build a synthetic practice community. January - April 2019

Core team: Lisa Diedrich, Andrea Kahn (SLU Urban Futures); Jonas Bylund, Caroline Wrangsten (JPI Urban Europe)

\_Meeting #5 (Prepare and plan ITD Conference workshop session proposal (link to ITD proposal) (action: COMMUNICATE and ITERATE) Transdisciplinarity, while popular in principle, is not yet viable in practice, as it lacks proven formats and methods for doing, and for communicating the outcomes of synthesis work. The workshop will explore how "synthesis" – re-imagined beyond academic literature review – gets mobilized as a powerful transdisciplinary format by accommodating heterogeneous knowledge practices and making them accessible to different discursive/practice communities.

### August 2019

#### \_Meeting #5 (Confirm workshop scenario and goals)

(action: TEST) When you hear "strategic synthesis" what do you think? What synthesis tools do you use?

#### September 2019

\_ITD Conference Workshop "Crossing the line: Reimagining Synthesis" (action: ASK BASIC QUESTIONS. DOCUMENT PROCEEDINGS.) "Why" reimagine synthesis? What do we mean by strategic synthesis? How is it different from normative synthesis? What's in the toolbox? What could be? Who are audiences for strategic synthesis?

#### "How to" rehearse an interactive synthesis?

Case study: "The Valencia workshop: from JPI Urban Europe Placemaking Week, June 2019" Rehearsing strategic synthesis & Presenting synthesis outcomes

#### "What next" - engage in reflexivity on the go

Comparing parallel synthesis efforts, what can we take away? What could the synthesis craft entail? Did the toolbox expand?

#### November 2019

\_ Meeting #6 (Debrief from ITD workshop. Distil outcomes. Define next steps.) Propose a follow-up workshop to

January - March 2020: Design a follow-up workshop for select 2019 ITD participants

#### April 2020

#### \_Meeting #7 (Set goals for the June 2020 Workshop)

- 1. Collect examples of different practices/approaches to synthesis across sectors
- 2. Demonstrate/discover alternatives to conventional text-based (1-3 p) policy brief
- 3. Explore the potential of strategic synthesis as a "dummy-on-the-go" to support policy decisions.
- 4. Use synthesis work to develop sharable information for urban-focused projects.

#### June 2020

#### \_ Strategic Synthesis Workshop #2 (Reflect on 2019 ITD outcomes) (Link to prompts)

(action: COLLABORATE/CO-CREATE) Explain your motivation. Share a reference. Respond to a prompt. Pose a question. Lay foundation to co-create a 2021 ITD Conference session.

#### August 2020\_ Document 'State of Play'

November 2020\_ Meeting #9 (Plan 2021 ITD conference submission)