Playing with Urban Complexity

What can we learn for Participatory Planning and Governance from Playing Games

university of groningen

faculty of spatial sciences

GREEN CITY LAB

OBERÖSTERREICH

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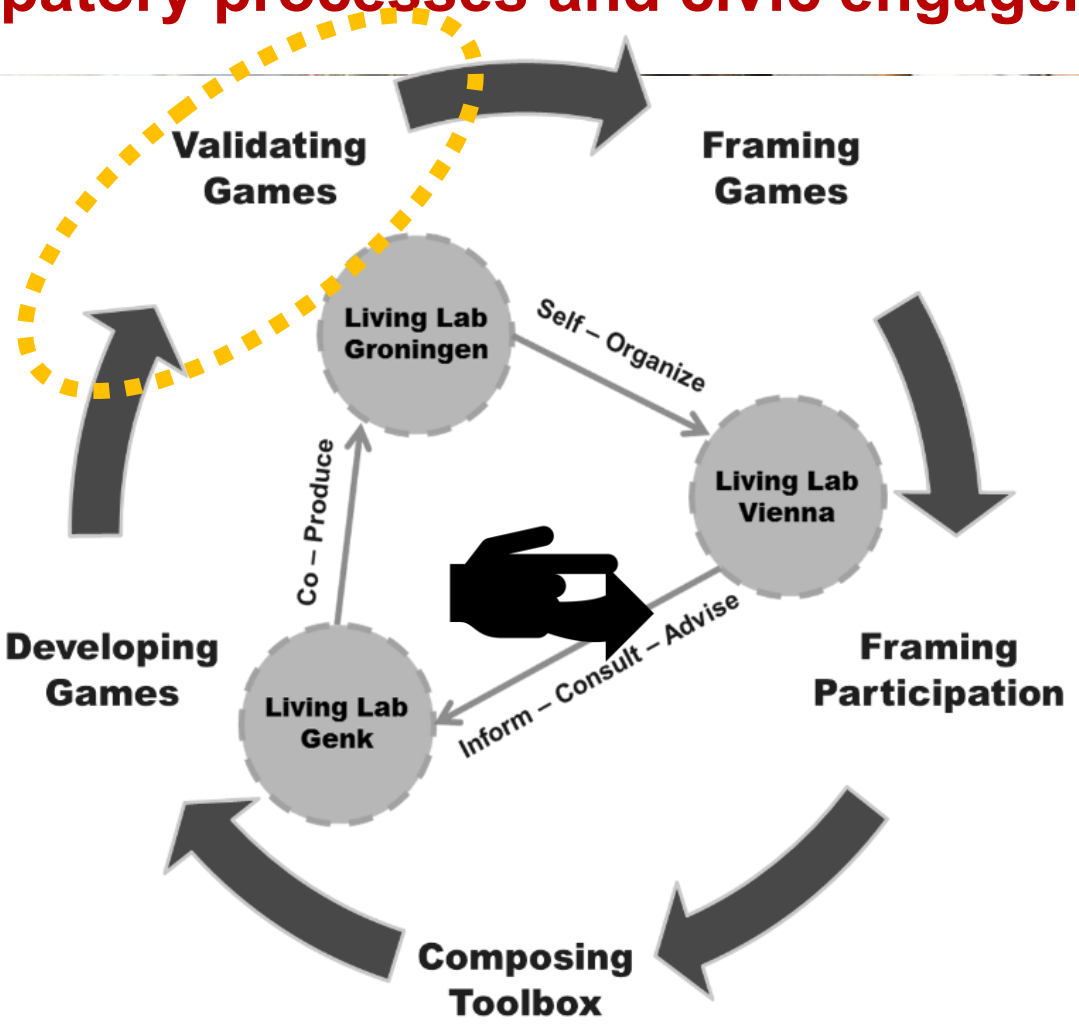
KNOWLEDGE IN ACTION

URBAN EUROPE

“(…) explore the potential of analogue and serious games for participatory processes and civic engagement”

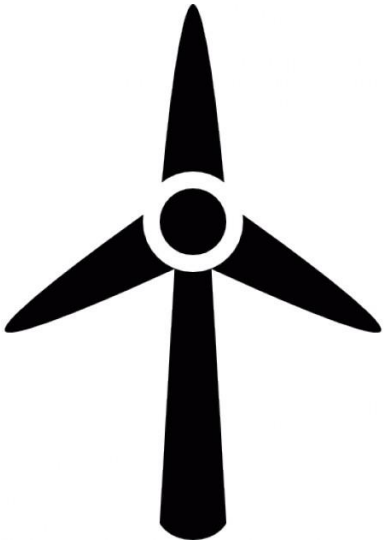


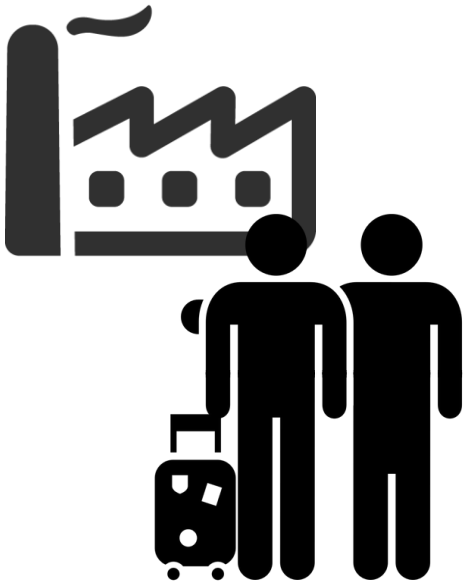
Policy Design, Learning & Implementation

Area based Local needs & Interests

Enhancing the knowledge base

Groningen **Genk** **Vienna**





Contributing to the Priority Themes European Urban Agenda

ENERGY TRANSITION

INTEGRATION of MIGRANTS in the CITIES

URBAN MOBILITY

WHY ARE WE RESEARCHING ON GAMES

Ampatzidou C., Gugerell, K., et al. All work and no play? Practical experiences, benefits and barriers in the facilitation of serious games and gamified tools in participatory planning and urban governance, Planning Theory and Practise (in review)

(1) Hype and proliferation in the last years

(2) Little Experience and knowledge about games and gameful environments – **fuzzy understanding of facilitators and planners**

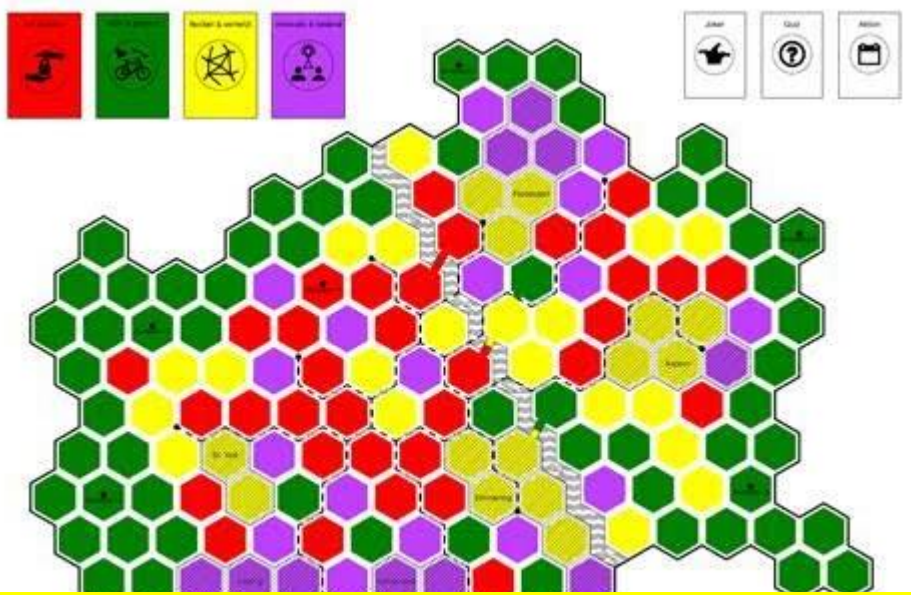
(3) 'Pleasant' learning environments, where learning, experimenting and capacity building is activated by the process of playing *(e.g. Huizinga 1999, Piaget 1962, Gee 2005)*

(4) Game **mimic real world issues** and situations, possibility to experiment with practices, taking risks, improve understanding of the system (run through processes in shorter time)

(5) Instigate **playful learning** to support key processes for sustainability transitions: build up capacities and literacy, coalition building, questioning existing models – create novel institutional practices *(e.g. Wittmayer&Schäpke 2014*

Energy Safari

Mobility Safari



Energy Safari

Mobility Safari

Co-located multi-player game (up to 6 persons)

Game-board spatial representation of province Groningen/city of Vienna & spatial appropriation of policy (colours)
Strategy learning game

Mix of collaborative and competitive game mechanics (necessary to keep game attractive)

Core mechanics function the same – we can compare Vienna and Groningen

Smart City Strategy Vienna

Transition towards a more sustainable mobility system

- Increase share of CO2 free modes of mobility
- Lowering individual, motorised traffic to 15% (currently 27 %) by 2050

Mobility Safari

Vienna's ambitions regarding policy success:

(a) Rising awareness among various actor groups

(b) Inform which resources needed for green-Mobility and ‘sharing’ projects

(c) Support networking and trust building to set up sharing initiatives and citizens collectives

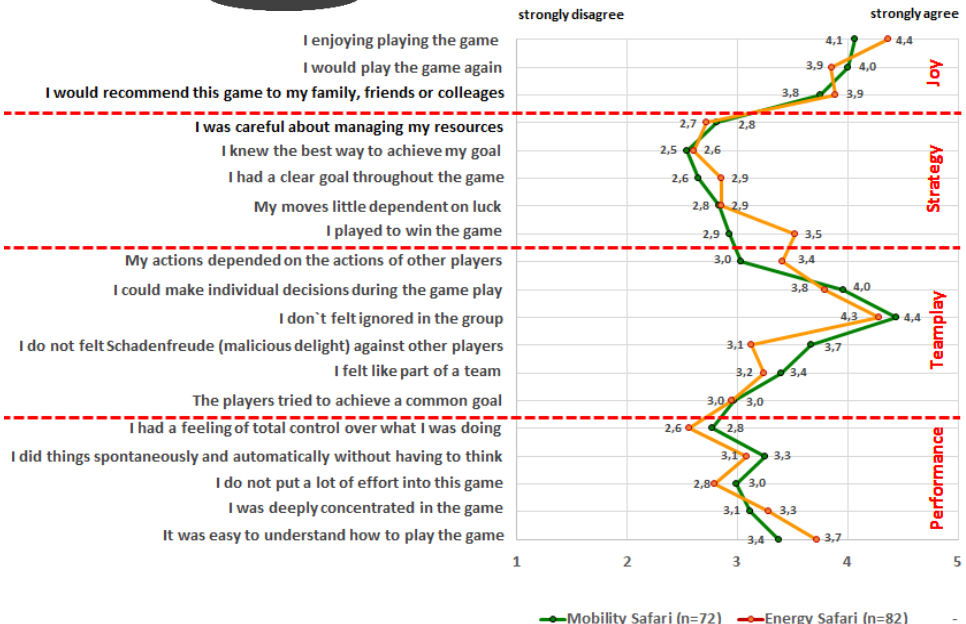
(d) Inform citizens on existing initiatives

Top 3 Reasons
why engaging with (serious) games might be useful based on results from Mobility & Energy Safari

1

Games are joyful and entertaining learning environments

Games are fun, entertaining learning environment



Game work as **joyful & entertaining learning format** for obtaining knowledge about policy

\+ **High willingness for replayability**

\+ Players are linking game play with their real-world experiences

To evoke learning, the **combination of playing the game & reflection in a debrief** is crucial (link between game world and real wold – needs sufficient time)

2

Games evoke learning on actionable knowledge, system and normative knowledge

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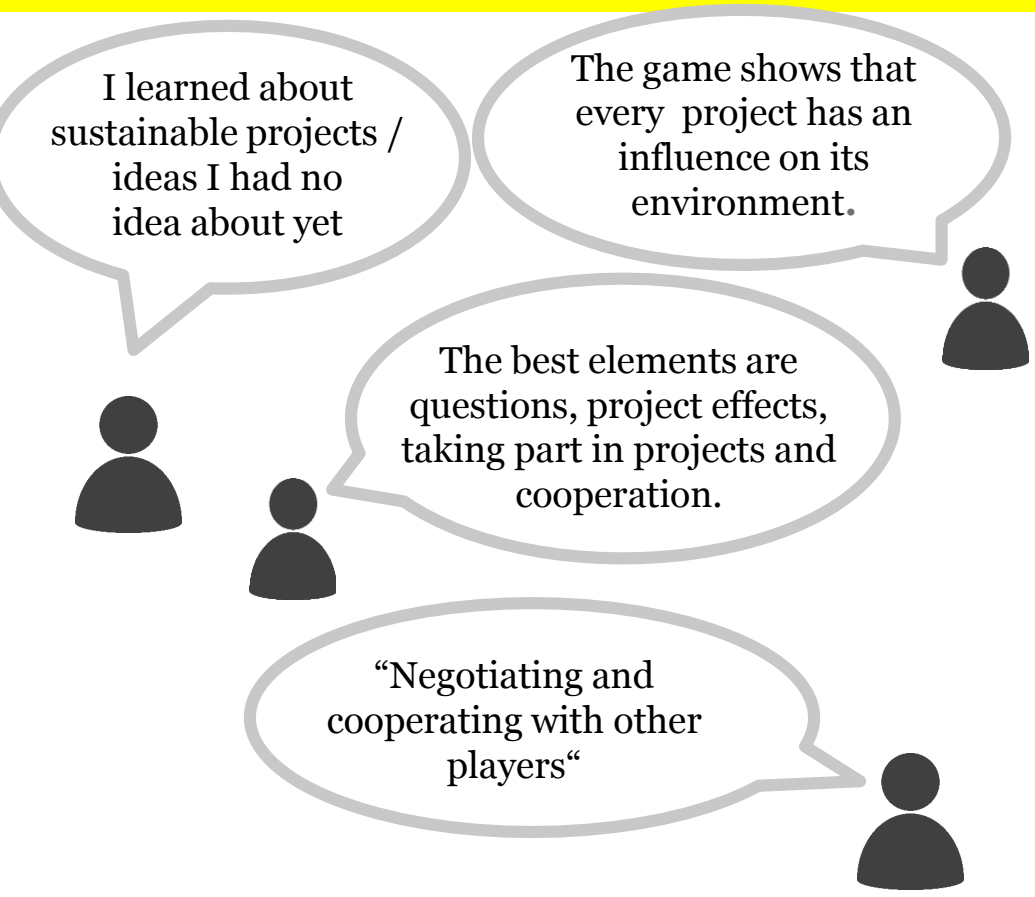
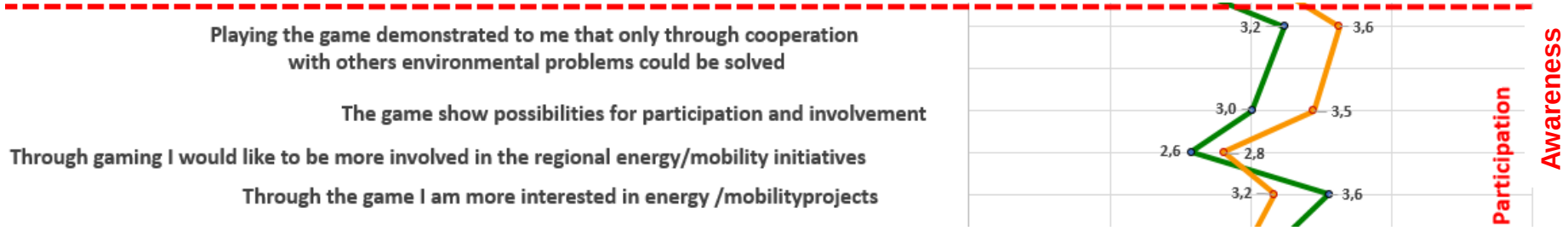


Factual learning (single loop) is existing but to a modest extend – hard fact

+ **Capacity building and cooperation** (experimenting for sustainability transitions)

+ Understanding **the game better – understanding real life context better**, because game mimics real life context

+ Informing and **activation regarding opportunities and involvement**



3

Co-creating Games already supports better understanding of the urban challenge

Those who are co-creating the game learn probably more than the players later…

Journal of Cleaner Production xxx (2017) 1–12

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Gaming for the energy transition. Experimenting and learning in co-designing a serious game prototype

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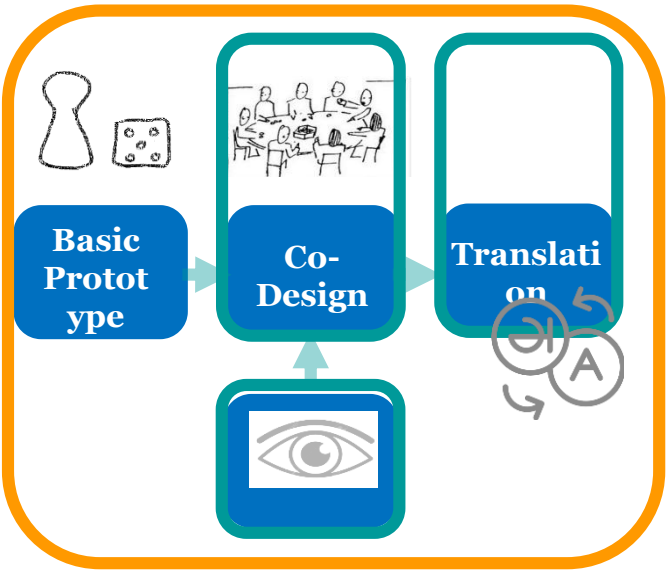

Ampatzidou C., Gugerell (in review): Participatory Game Prototyping for the Energy Transition in Groningen, Journal Co-Design

Game as artificial **systems allow participants to experiment and try things out with lesser restraints** that the would perhaps do with a "real world" on the table

"Its just a game" offers freedom to think outside the box, or – is there even a box, lesser biased by everyday commitments and organisational responsibilities

Hands on – and active creation of prototype forces concrete discussions and on-spot deliberation **(specific not abstract)**

Game prototyping as means for individual and collective practises of **exploring, learning (for policy), searching and creating novel narratives and institutional & spatial arrangements**

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Lessons Learned (so far…)

- ✓ Games tools work for gameful activation and triggering different forms of learning (system understanding, discussing norms and values, actionable knowledge)
- ✓ Great potential in the activity of co-designing of serious games
- ✗ advise: it’s a very popular tool but use it in a thoughtful way – not everything can be gamified (apart from the costs)
- ★ Uptake by Austrian Climate and Energy Fund

JPI Urban Europe Conference: Engaging for Impact. The next step in Urban Transition, 29/5/2017

Thank you for your attention

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