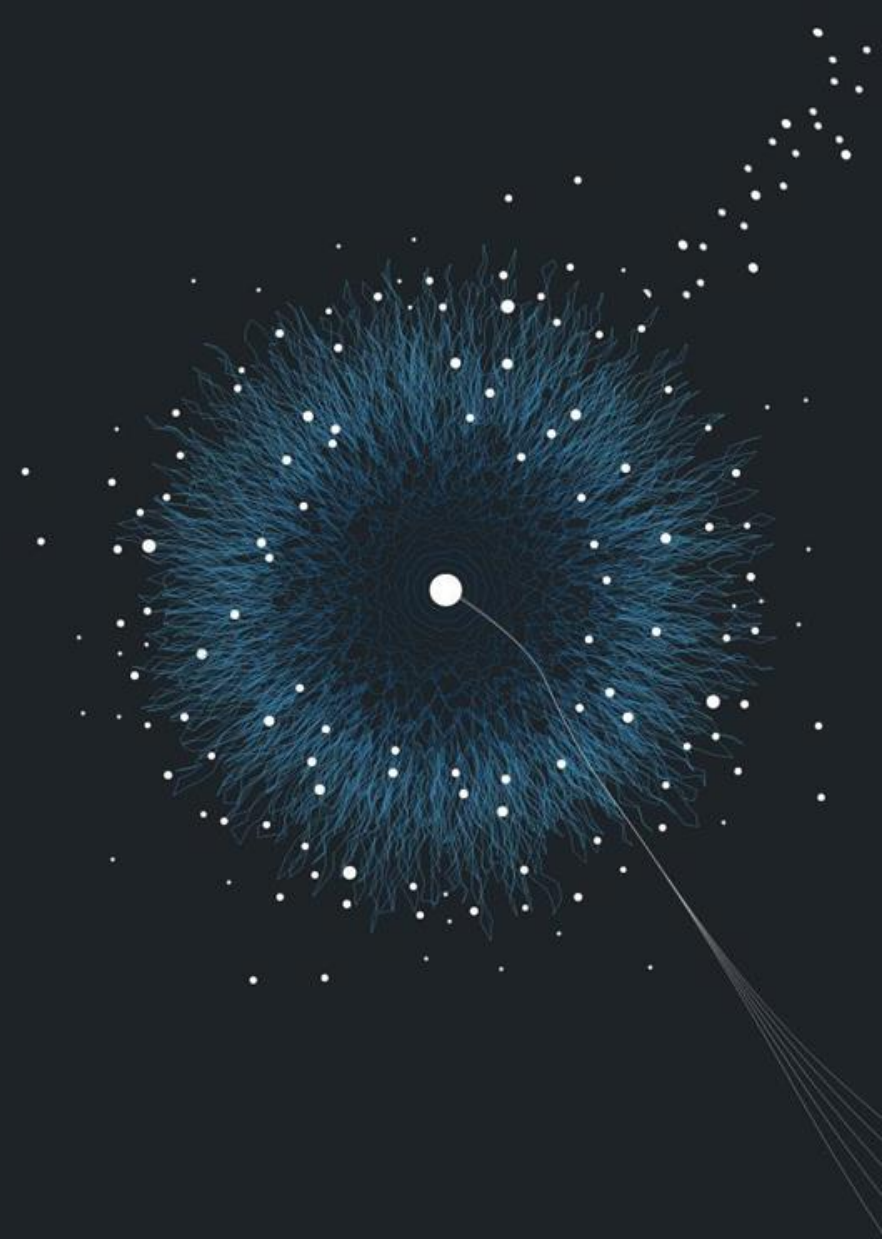# THE 15-MINUTE NEIGHBOURHOOD GAME

DEVELOPING A SERIOUS GAME FOR THE 15-MINUTE NEIGHBOURHOOD TRANSITION:
LESSONS LEARNED FROM AN EXPERT WORKSHOP

KELT GARRITSEN (UNIVERSITY OF TWENTE)

ANNA GRIGOLON, BARAN ULAK & KARST GEURS (UT)

LARS BODUM, ANDREA VICTORIA HERNÁNDEZ BUENO & TOM BØRSEN (AALBORG UNIVERSITY)

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GOAL & CONTENT

- **Objective of this work**
    1. **Develop** a serious **game** in the context of the 15-minute city
    2. Collect **experts' opinion** on the game's design & usefulness

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| Setup of the game | Playing the game | Evaluating the game |
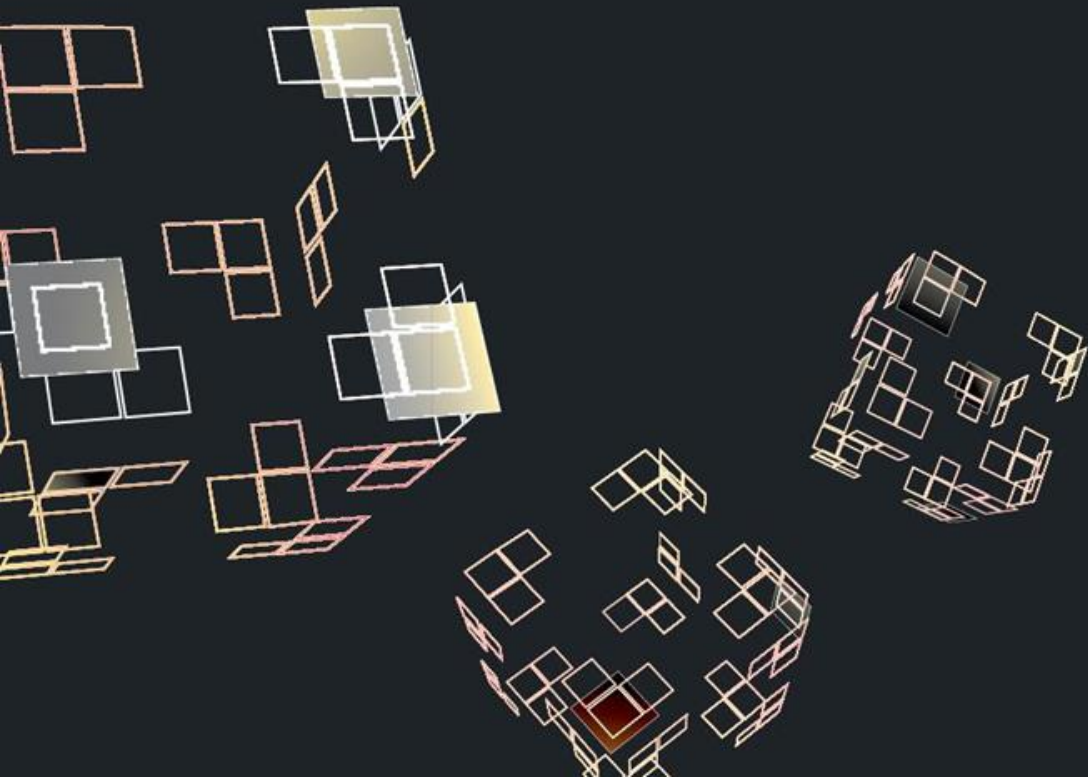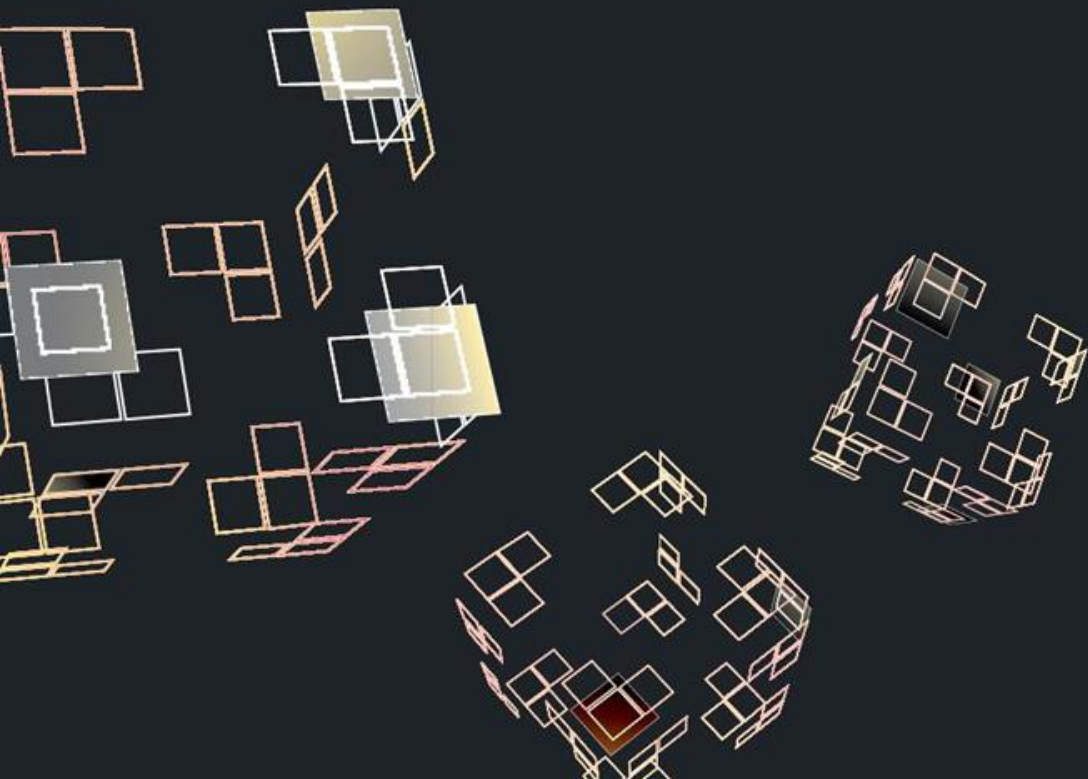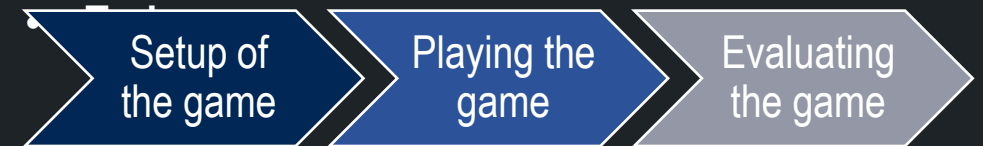
WHY A CO-DESIGN GAME?

- **Co-creation** of the 15-minute city – playful way of starting discussion

- Unique **barriers & needs** of different population groups in terms of mobility & services

- **Collaboration** in creating urban space

- Making complex topics more **tangible**

Driving Urban Transitions

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WHY A CO-DESIGN GAME? (2)

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- **Collaboration** in creating urban space

- Making complex topics more **tangible**

- **Previous experiences**

SmartHubs project Co-design game for the city of The Hague (Garritsen, 2023; Geurs, 2022)

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02 SETUP OF THE GAME

THE 15-MINUTE
NEIGHBOURHOOD GAME
1. GOAL

'To design a neighbourhood that fulfils and satisfies **the goals and needs** of the player's character'

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THE 15-MINUTE NEIGHBOURHOOD GAME

2. THE GAMEBOARD

- No real-life location

- Analogue game (e.g., Tellioglu et al., 2023)

- Scarcity of space ⬄ trade-off

The gameboard with the other game elements, such as the design elements, character cards & satisfaction cards (Garritsen, 2023)
Designs are based on the designs of the SmartHubs game materials (Tellioglu, Mikusch & Kadic, 2023)

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THE 15-MINUTE NEIGHBOURHOOD GAME

3. THE ELEMENTS

- Based on the **six urban functions**

- Different sizes ⮕ trade-off

- **Points per element**
  - Based on "contribution" to 15-min city
  - E.g. higher points for active transport etc.

Commerce	Healthcare	Education	Entertainment	Transportation
Small shop	Dentist	School	Café	Local bus stop
Local supermarket	Small healthcare centre	Library	Restaurant	Large PT stop
	Gym		Park	Bike parking
				Shared bike parking
				Taxi stand
				Car parking
				Loading & unloading zone
				Petrol station

THE 15-MINUTE NEIGHBOURHOOD GAME

- Using **persona's** 🡒 **Character card**
  - Profile
  - Travel behaviour
  - Characteristics

- **Evaluation card**
  - Personal goal
  - Satisfaction with neighbourhood afterwards

Your game character
Madhu

Age: 16

Role:
Local resident

Usually travels with:
Public transport or moped.

Characteristics:
Likes to meet up with friends.

Your Evaluation Card

Table: [ ]

Character: [ ]

Personal goal:
What is your character's personal goal?
[ ]

Satisfaction score:
How satisfied are you with the final design?

| 1 | 2 | 3 | 4 | 5 |

Thank you for playing!

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THE 15-MINUTE NEIGHBOURHOOD GAME

5. THE PHASES

1. Each player gets a **character card** & **evaluation card**. Fill in the evaluation card, except from the *satisfaction question*.

2. **Playing the game**. When it is your turn:
   1. Place or remove an **element and argue why!**
   2. Throw the **action dice,** and perform the corresponding action
   3. Next player…

3. **End of the game**
   • Decided by **moderator**

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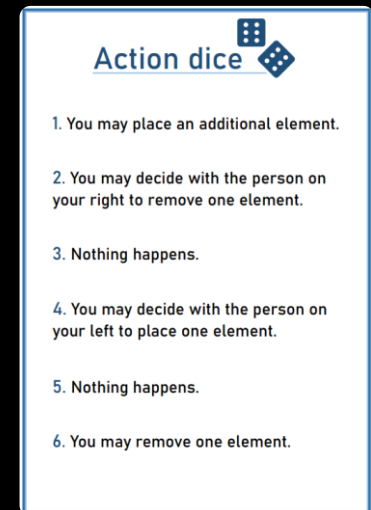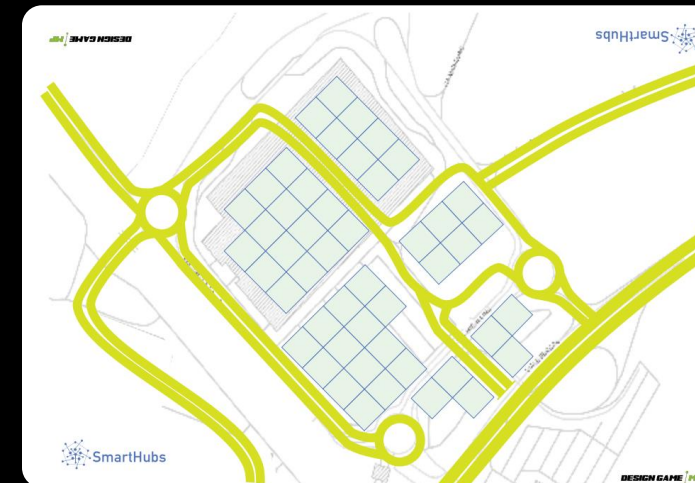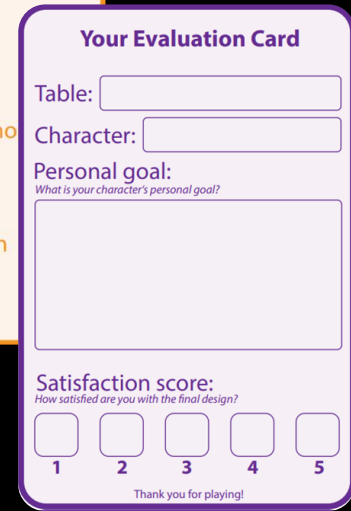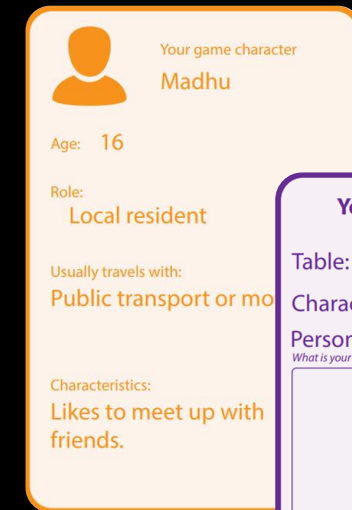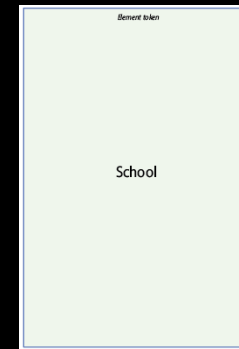
03   **PLAYING THE GAME**
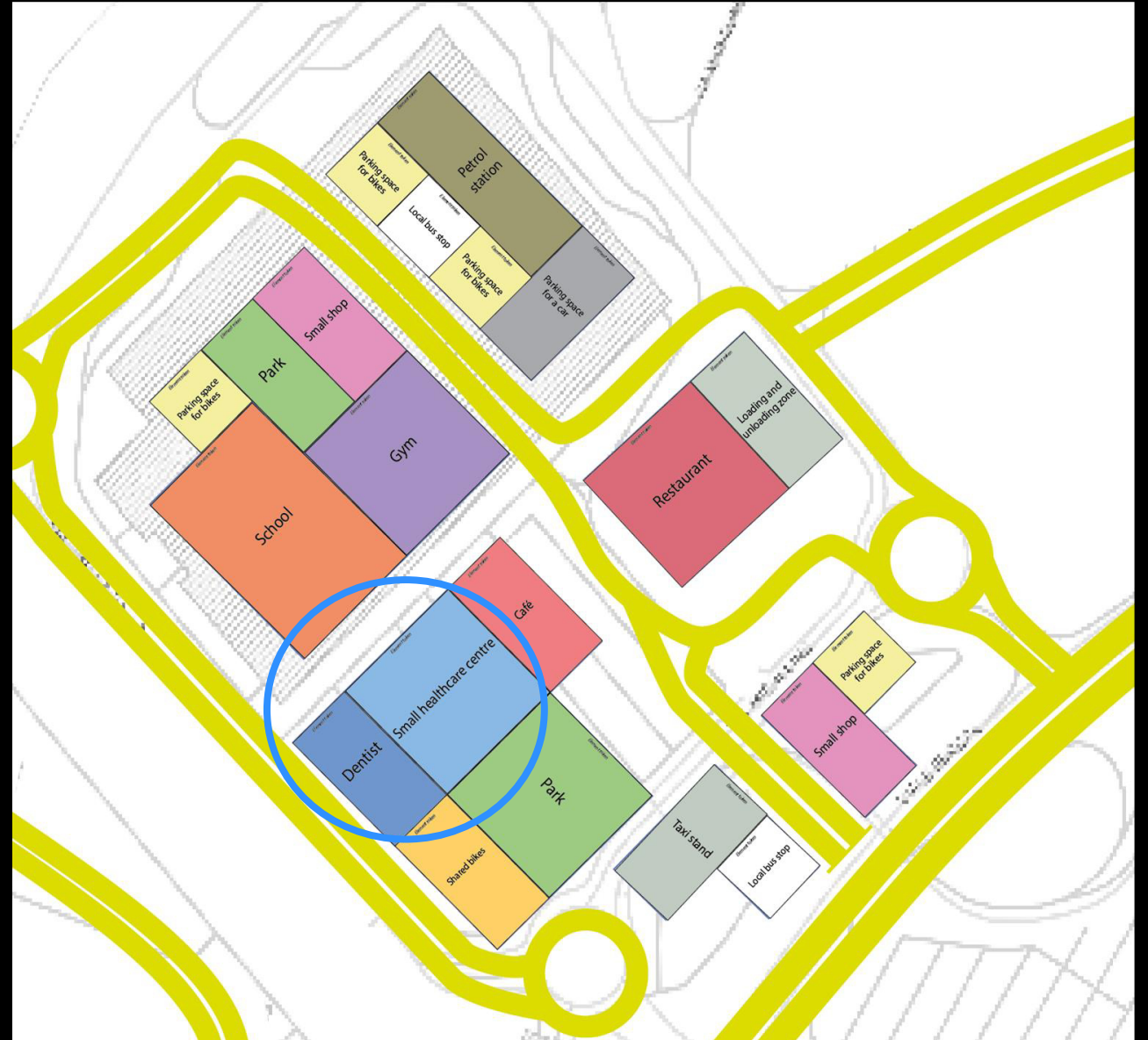
WORKSHOP
@ ECIU CONFERENCE, BARCELONA

- 32 participants ⯈ 4 teams

- Scientific background – different expertise

- Playing with **persona's**

NEIGHBOURHOOD DESIGNS
SOME INTERESTING RESULTS

- Placing **healthcare elements** together

- Creating "mobility hubs"

- Only local public transit stops

- "Battle for space" is won by smaller shops

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NEIGHBOURHOOD DESIGNS
SOME INTERESTING RESULTS

- Placing healthcare elements together

- Creating "**mobility hubs**"
  - *Experts at play?*

- Only local public transit stops

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NEIGHBOURHOOD DESIGNS
SOME INTERESTING PATTERNS

- Placing healthcare elements together

- Creating "mobility hubs"

- Only **local public transit** stops

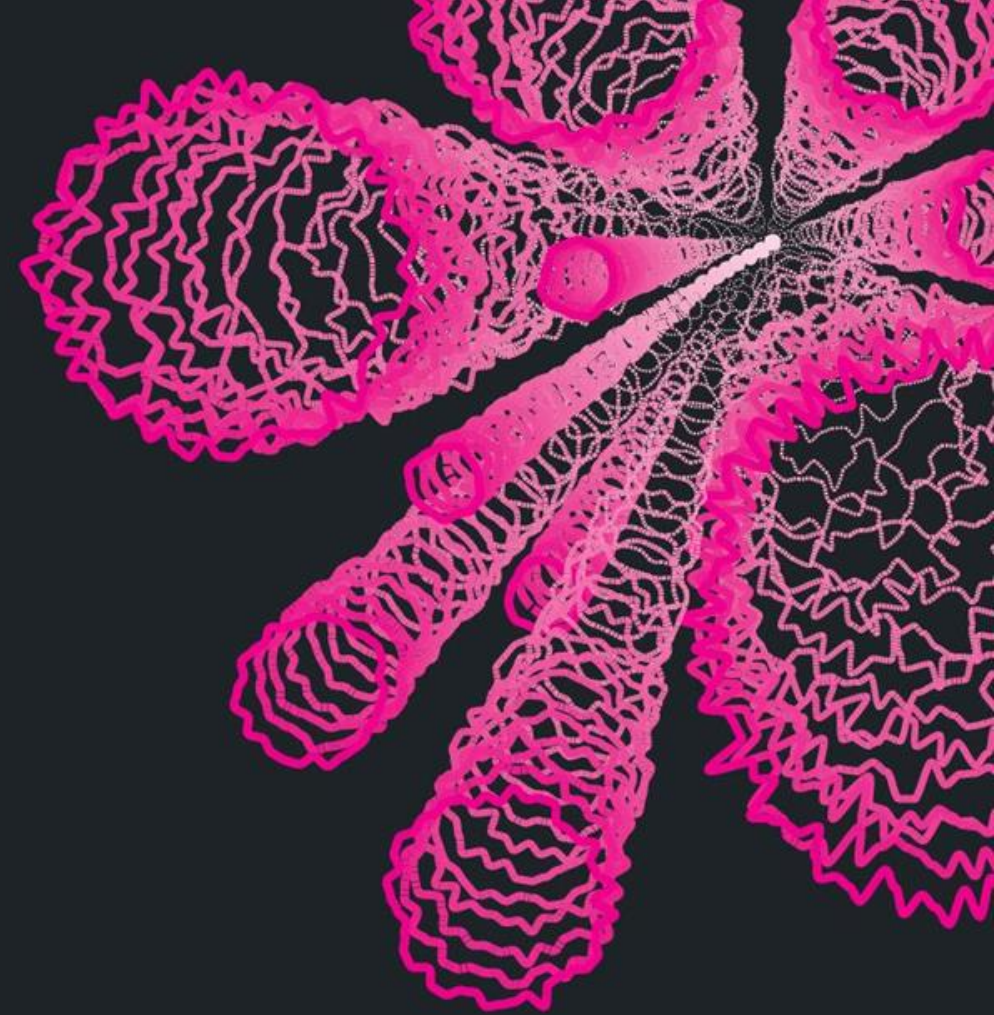- "Battle for space" is won by smaller shops

NEIGHBOURHOOD DESIGNS (2)

POPULARITY OF NEIGHBOURHOOD SERVICES

- **Most popular services:**
  - Local bus stop
  - Café
  - Restaurant
  - Dentist
  - Small healthcare centre

- **Least popular services:**
  - Car parking
  - Petrol station
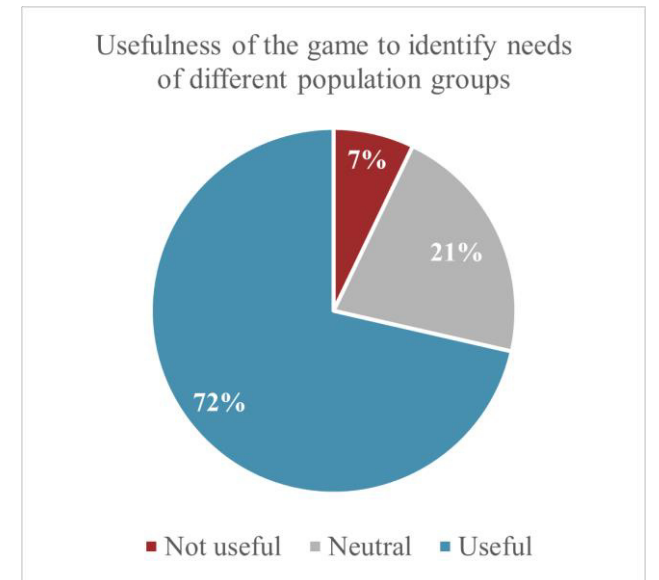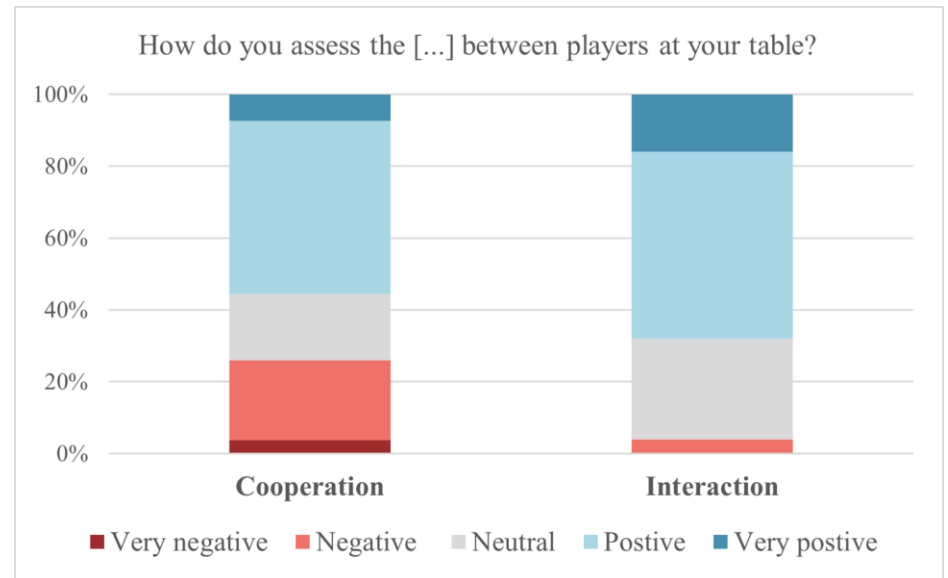 - Large PT stop
  - Local supermarket

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03 EVALUATING THE GAME

EVALUATION OF THE GAME

1. OPINION OF THE PLAYERS

- Overall **high satisfaction**
  - Except for the "car lover" personas

- 72% think it is useful

- Overall, a positive, cooperative experience

Results based on survey (N=32) with the workshop participants

How do you assess the [...] between players at your table?

■ Very negative   ■ Negative   ■ Neutral   ■ Postive   ■ Very postive

Usefulness of the game to identify needs of different population groups

7%

21%

72%

■ Not useful   ■ Neutral   ■ Useful

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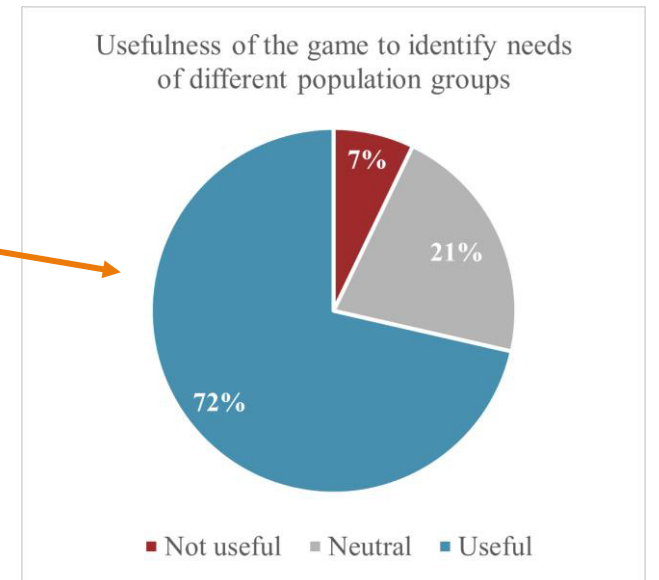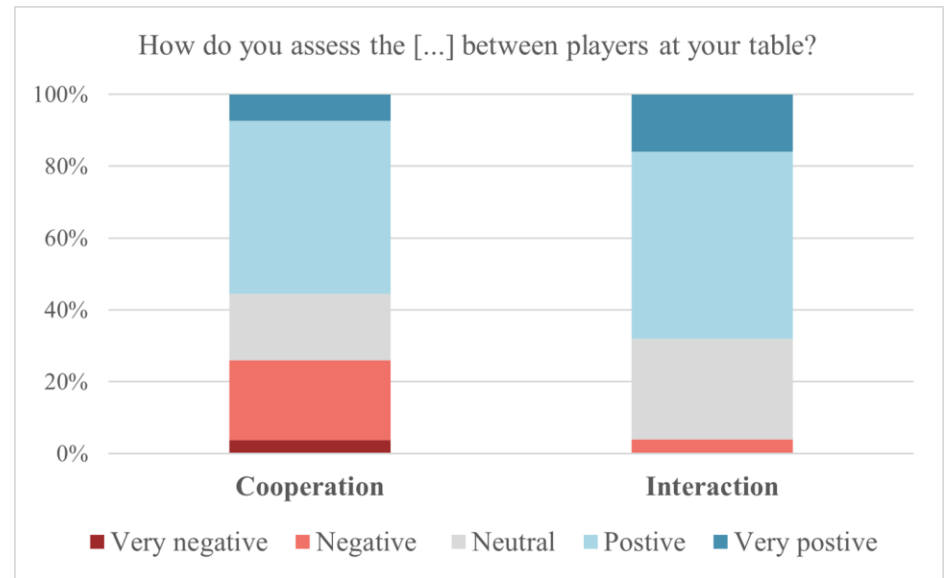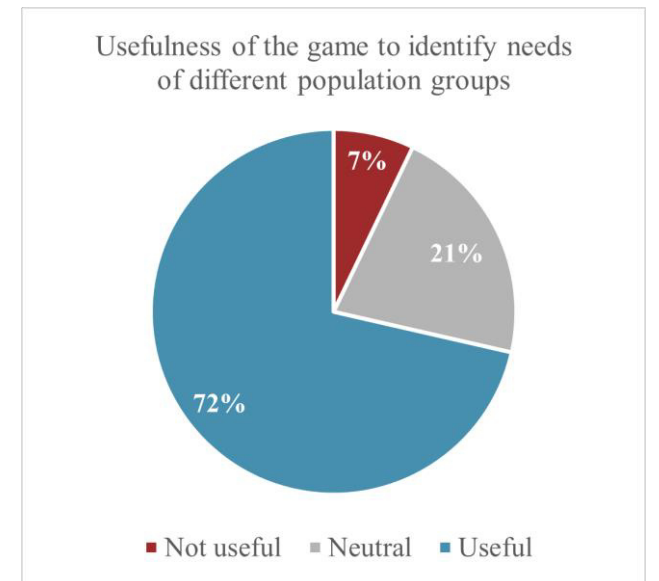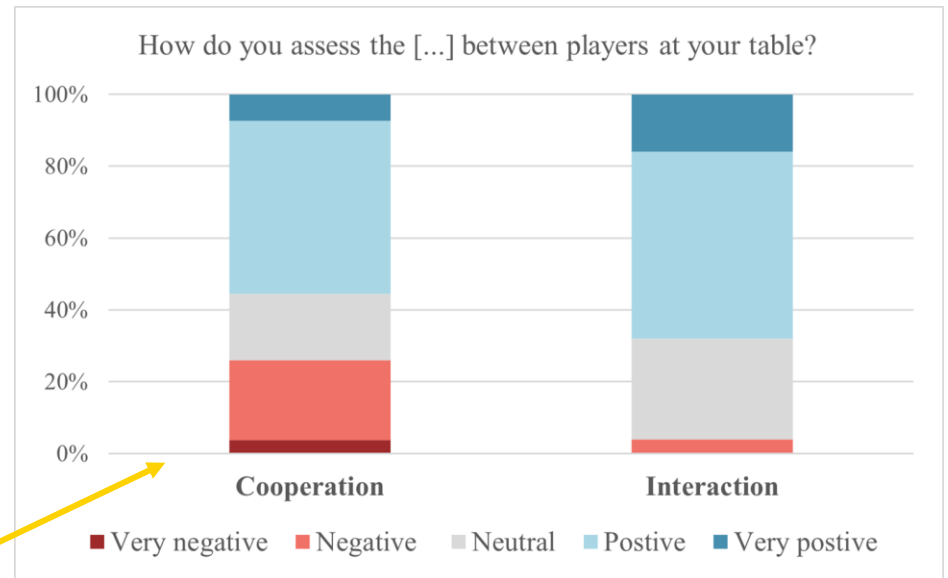■ Not useful ■ Neutral ■ Useful

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EVALUATION OF THE GAME

2. DID THE GAME FULFILL ITS GOAL?

- High **engagement** & consensus-making

- Planners not planning for themselves

- Balance of complexity vs. playability

- **"Fit-for-all"**
  - Helping citizens envision their goals

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EVALUATION OF THE GAME

3. LIMITATIONS & FUTURE WORK

- High engagement & consensus-making

- Balance of complexity vs. playability

- "Fit-for-all"

- Playing & testing with **citizens**

- More on needs, less on alliances

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INTERESTED IN PLAYING? K.E.GARRITSEN@UTWENTE.NL

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