A Game to Support Children's Participation in Urban Planning

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ABSTRACT
Urban planning is a complex process that involves many different stakeholders and has a very long time frame. The United Nations' Declaration of the Rights of the Child states that children should be given the opportunity to express their views and that these should be respected. The complexity of the urban planning process poses challenges on how to involve children. This article presents *Stadsbyggarna* - a board game designed with the explicit goal to help children understand the nature of urban planning. It has been used in citizen dialog in the development of a new 30-year city plan in a mid-sized Swedish city. Nineteen school classes in the municipality have played the game. The result shows that the gameplay encourage urban planning discussions. Role-playing is identified as a key element of the game. The digital component initially planned to be included in the gameplay was however found to be superfluous.

Keywords
urban planning, board game, serious game, role-playing

INTRODUCTION
The fully organic development of cities is since long replaced by structured urban planning. This process involves many different professions. Architectures with different specialisations work together with engineers, politicians, city administration etc. The time frame for these processes is very long. Infrastructure changes can take many years to realise and the consequences of decisions span decades and even centuries. These consequences affect citizens and in many cases there are legislations for how citizens should be involved in the decision process (Svensk författningssamling 2010; Council of Europe 2000, art. 5(c)). There are however challenges in how to motivate citizens to participate in this complex process as changes may be many years in the future. Many times, citizens react when they see wrecking balls and excavators in their backyard. At this stage it is mostly too late for a change of plans.

Nations that have ratified the United Nations' children's declaration (The United Nations 1989) are obligated to follow it. It states that the interest of children should be of primary consideration. Furthermore, children should be consulted and listened to in all actions that concern them. Decisions in urban planning can easily be argued to concern children. The access to public spaces, such as parks and sports arenas, has obvious effect on children's lives. Furthermore, the decisions made in urban planning

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today shapes tomorrow's cities, of which today's children are inheritors. But how to involve children in this complex process remains a challenge for urban planners.

Games have been used for urban planning in many previous projects (Gordon et al. 2011; Reinart and Poplin 2014). Gordon et al. (2011) review immersive approaches to support public participation in urban planning. They argue that there are three different categories of such systems: challenged-based, sensory and imaginative. In recent years there has been a strong focus on the use of digital technology to support dialog in urban planning (Billger et al. 2017). The powerful visualisation capabilities in digital games have attracted much interest. Games such as *Minecraft* (Person 2009) have been used as tools in dialog projects. There are however many challenges associated with the use of games as tools for learning (Egenfeldt-Nielsen 2004; Berg Marklund et al. 2014) and most of these challenges also applies to urban planning. Moreover, very few previous urban planning games have targeted children.

The study presented in this paper originates from a project where a mid-size Swedish city worked on a new urban layout plan with a time perspective spanning until year 2050. One part of this work was a citizen dialog process. The dialog with children was partly realised with the help of a novel board game, *Stadsbyggarna*, developed specifically for this municipality. This paper presents the game, the design process behind it and the results from using it in citizen dialog. The contribution of the presented study is the focus on children, role-play, low fidelity, and simplification of urban planning policies and processes. This contrasts with many previous studies that has been emphasizing accurate visualisation (Billger et al. 2017) and have been focusing primarily on adult citizens. Our study shows that the complex trade-offs involved in urban planning can be presented to children using principles from role-play design.

THE STADSBYGGARNA GAME

The Process and Design Goals

The game was developed during the course of four months as a collaboration between the city administration at the municipality and a group of four game developers participating in a serious games master class. The developers had a background in game design, art, and programming. The development was iterative and included several test sessions with, for example, urban planners and school children. Figure 1 shows a prototype version of the game.

Figure 1: An early prototype of the playfield with buildings.

This process led to the identification of the game's core-values in the following order of importance:

1. Social interaction through cooperation and dialogue to emphasize the value of democracy and communication. This was both rooted in the topic of the game and meant to be the basis for the main fun of the game. As a part of this, one goal was to stay away from open conflict and to favour cooperation, as opposed to competition and winning.
2. Gamifying and simplifying real policies and processes as to bring fun and accessibility to the topic of urban planning.
3. Creativity to let the players feel that they have power and influence over their own game session and creation within the rules of the game. Thus, players can be made to feel a connection between their own initiatives and effects in the urban planning dialogue.
4. Beauty and quality. The board and pieces of the game should be aesthetically appealing and players should appreciate the look and feel of the resulting city.

The developers highlighted these values as the main attributes that would have the game fill its purpose as both educational and inspiring to the intended users, and thus treated them as the most central and necessary aspects of the game's design.

The focus on a board game was made early in the process. Board games have several advantages over digital games for the usage context this game have. Practically, a board game placed on a table, which the players can gather around, naturally puts the participants in a circle facing each other. As opposed to facing one or many individual displays, this creates favourable conditions for dialogue and has appeared to evoke a greater sense of interpersonal relationships among players (Fang et al. 2016). The access to each other's facial expressions as a primary source of information (in addition to the board) gives direct insight into the social effect of your actions and initiatives. A physical board game also increases accessibility, as interacting with a digital game often demands mastering the navigation of a graphical interface. It has been observed that navigation of game interfaces is a concrete problem when commercial digital games are used in classrooms (Berg Marklund 2015). A board game makes direct interaction with the games content available, letting the players point at, grab and move the objects in front of them. This also adds a performative aspect to the gameplay, as interaction with the game entails that the players exercise creative initiative in the display of each other. The game master also

gets a great overview of the game process, as they too gain direct access to the same playfield and reactions of the players.

Apart from introducing the topic of urban planning in an accessible way, and encouraging participation in the democratic process concerning it, the city administration unit expressed that one of the key insights they wanted players to get was the fundamental difference between the planning phase and the execution phase in city development. The planning phase refers to the period in the urban development process where plans are made accessible to the public, who are invited to participate through open dialogue. The execution phase is when the previously made plans are carried out. At that point, the plans are no longer subject to revision.

The Game

Stadsbyggarna (the city builders) is a collaborative board game played by four teams of one to four individuals each. Each of these teams is assigned an area of responsibility (Figure 2), for example citizens' access to public facilities or the protection of the city's agricultural landscape. Under the direction of a game master, the teams are tasked to build a city through completing missions while abiding simplified versions of urban planning policies and considerations. The board itself consists of a map made in the image of the geographical area where the town it represents is located. The pieces with which the game is played are plastic miniatures of different types of buildings. On the edge of town, plates portraying agricultural areas and forest reserves are placed. During the game, these would have to be "torn down" (removed) in case the players wanted to build on these spots.

In order to incite players to think and act as representatives of their areas of responsibility, as well as to introduce conflictive urban planning issues to the game, team specific policies are provided on each team's role card (Figure 2). These policies can concern the proximities of one type of buildings to roads, water or other types of buildings. They can also concern the removal of agricultural areas or forest reserves in order to make room for new building sites.

Figure 2: A role card specifying team-specific policies.

The game is played as a number of rounds consisting of four phases:

- The players are presented with an event card (Figure 3) which specifies a mission (e.g. to build a school in the city centre or to build a mall on the outskirts of town). One team is designated to have the main responsibility of placing it on the board, but all teams can participate in planning its placement.
- Players discuss within the teams. The goal is to have a proposed solution to the task. The players may formulate arguments based on the policies of their team's role card or on personal thoughts and ideas they find relevant.

- All groups take time to present possible counter proposal and discuss them together.
- A decision is taken, by consensus, compromise or voting. The physical board is updated accordingly by placing one or more physical pieces on the map.

As the game progresses, the map gets filled with pieces and it gets harder and harder to find a solution that meets the goals of all groups. Eventually, this results in that all groups need to compromise in order to move forward.

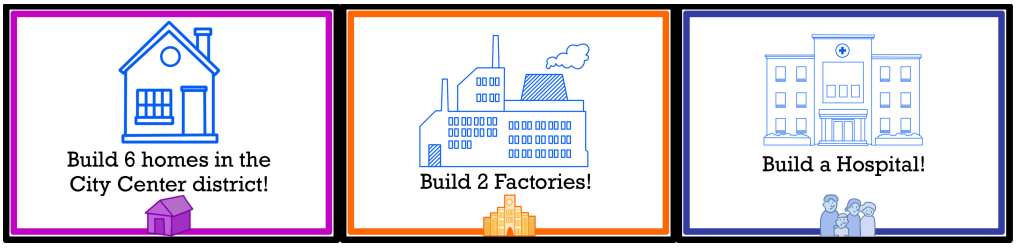

Figure 3: Examples of event cards specifying a shared mission for the players.

An important insight that players should get from the session is the difference between the planning stage and the execution phase in urban planning. To emphasize this distinction in the game, it was decided that each group should be provided with a tablet and a *planning app* (Figure 4). The idea was that each team would use their respective tablet running the app, which provided the teams an intractable version of the board, to come up with proposals for the task at hand. The buildings could be placed and removed indefinitely on the digital play field, but only when a final decision had been made, the buildings where placed on the physical board. Once this decision is taken and a physical piece is placed on the board, the game master updates the digital map on a server so that all groups will have a consistent view in their tablets. The later step, which would be the game's representation of the building phase, was irreversible, making the players realize that they had to make their voice heard before a final decision had been made and the building was "built" in order to have influence.

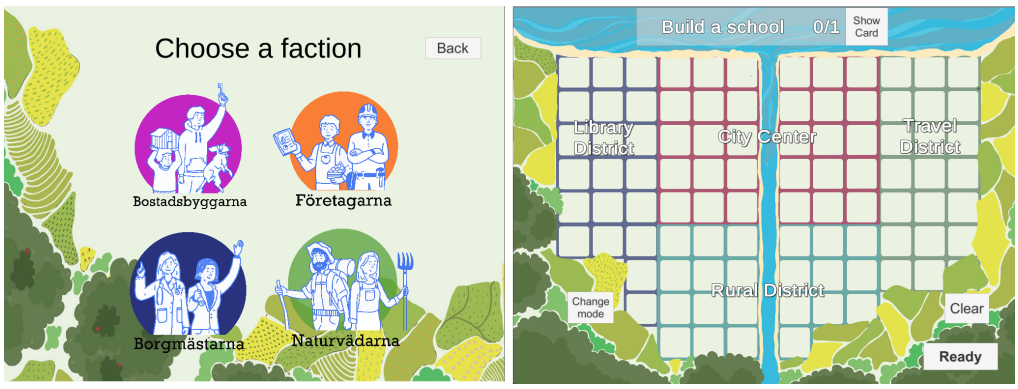

Figure 4: UI from the digital component of the game.

Game Dynamics

Many test sessions were held with prototypes throughout the development process, both with members of the intended target group and others. During these test sessions, it was revealed that the most interesting element of the game is the discussions and negotiations. This insight led to a reduction of formal mechanics and rules. Common elements in games, such as measurable progress and success, winning

conditions and adherence to formulated rules, got replaced with a focus on role-play and creativity in initiative and argumentation. For example, as it is common that games are structured around a conflict eventually resulting in a state where it will be possible to determine a winner, an expectation that the game would adhere to these conventions was noted among test players recurrently. However, since the functional purpose of the game involved encouragement of participation in the democratic process, the rather discouraging experience of seeing your efforts to represent your own interest and influence the outcome of the city's development "lose" against other players' had to be avoided. It was for this reason important to exclude the concept of winning and losing from the games rules, and instead focus on the cooperative elements, despite of sometimes conflicting agendas. One way to do this was to narratively frame the rules of the game in terms of cooperation as opposed to conflict. The team specific policies that the players were to represent was described as "areas of responsibility" and not as individual goals to be prioritized above the overarching goal to build an in all aspects great city together. For similar reasons, it was decided that players' effort would not be rewarded with points or other type of score keeping, another common component in games, as it was deemed potentially discouraging with measurable outcomes and distracting to move motivation from creative interplay to points collecting.

Rather than providing the setting of an asymmetric four way battleground, the divisions of the players into factions was to introduce the real-world conflicts that often recur in urban planning into the game. This also came with the possibility to stress role-play, as having the players represent thematically diverse factions would give the players individual purposes and narrative descriptions, which in turn could constitute as a basis for different identities. This was encouraged by unique illustrations for the teams, color-coded game pieces and the stylistics of the policy descriptions on the role cards (Figure 2).

As the game progresses, the different teams' conflicting policies result in problems. The game is designed with a limited amount of available building slots, which in turn are contained within the city districts of different sizes. Although there is enough space for all buildings to be placed on the board, the players will reach a point where they cannot avoid doing a compromise or make exceptions to their policies in order to proceed. This inevitable consequence was both intended to create necessary conflict on which to build meaningful discussions and argumentation, and to exemplify the complexity of urban development in the face of all its influencing factors.

Another aspect of the urban planning process that the game was intended to exemplify was the difference between the planning phase and the building phase in urban planning, specifically for the democratic process and the possibility to influence through citizen dialogue. The planning phase was portrayed in the game with the help of a digital component. Play testing however revealed that the digital component was superfluous. Players preferred presenting and discussing their proposals by interacting directly with the mutual board in front of them, as opposed to the individual board in the teams tablet computers. It was however not seen as a problem that players choose to present their creative initiative and negotiation early. For this reason the use of the digital app was simply excluded when the game was finalized. Tasks description, which had been revealed to the teams on their displays, was replaced with physical cards (previously mentioned *event cards*, see Figure 3) read aloud by the game master, which had been the method used in previous iterations of the game. The rule to not move a building when an agreement, a compromise or voting had resulted in a decision remained, to keep the distinction between planning and building phase.

In addition to these aspects, it was discovered in playtests that children found the physical components to be appealing and interesting. The physical components was designed and coloured in a way that were supposed to inspire creativity for children. The pieces were also made quite big, especially in the hand of a child. This was not only a result of having a big board, which was necessary as the intention was that larger groups of players would be able to fit around the board, but also so that it would feel impactful to place a building on the board. Providing the children with a big, attractive and colourful physical board was also suspected to be more novel and exciting than a digital version of the game, as most children from the intended target audience are exposed daily to rich digital game environments but less frequently to board games. In addition to this, decorative pieces in the shape of trees were added to the board. Their function was to give the players a chance to express themselves creatively by beautifying their town, unrestricted by rules or need to be wary about negative consequences.

EVALUATION

The evaluation of the game was conducted as part of a city dialog month (29/8 – 27/9, 2019). This project aimed at citizen dialog in the municipality. The urban planning unit arranged an expo in the city centre called *Framtidsverkstaden* (The Future Workshop) where the game was one of many activities. School classes were invited to visit the expo and to participate in game sessions. In total, there were nineteen classes that played the game during the month. The ages of the children varied considerably, with the youngest participants being primary school students from 3rd grade (8-9 years) and up, and the oldest group being secondary school students (16-18 years). Table 1 presents the number of classes in each grade that participated.

Table 1. The age and grade of participants.

Number of classes	Grade	Age
2	Primary, grade 3	8-9
6	Primary, grade 4	9-10
4	Primary, grade 5	10-11
3	Primary, grade 6	11-12
1	Primary, grade 8	13-14
3	Secondary school	16-18

A physical copy of the game was produced for this activity. Paper models were replaced with 3D-printed (Figure 5).

Figure 5: The final version of *Stadsbyggarna*.

The game master has a central role in the execution of the game. This role was handled by one of the designers during the development phase. In the evaluation, five people working at the municipality participated in an hour long training session where they were instructed in the role of a game master. In the remaining game sessions, two of them alternated to act as game master. The developers of the game were only involved in one of these sessions.

During the play sessions, the children were divided into four teams of one to four individuals each. The game master moderated the discussions both during and after play sessions with some assistance from the teachers of the respective classes, who could help root the discussion in the children's local environment.

While the lengths of these play sessions varied due to the children's varying attention spans, they were generally kept under an hour. This allowed the children to solve around half of the game's tasks. A play session in which the players' would have to solve every task could take considerably longer, depending on the lengths of the players' discussions, but the absence of winning conditions makes the game suitable for shorter play sessions such as these too.

The evaluation was made after the city dialog month. A formal semi-structured interview was held with the municipality's planning strategist who had assumed the role of game master in the vast majority of the gaming sessions. In addition, the game masters documented each play session in writing in a semi-structured manner. The documentation, which contained both the children's reasoning as observed by the game masters, and their own reflections on the functionality of the game, was summarized in a document. These summaries were then analysed by the researchers and authors behind this article. All participating game masters gave their consent to participate in this study and have reviewed the final draft of this article.

Result

All play sessions at *Framtidsverkstaden* were successfully conducted and created a strong engagement in city planning discussions among players. The discussions became so intense that they had to be moderated by the game master. They created a structure where each group was given an opportunity to express their opinions before the team responsible for the task took a decision. The teams were not always able to agree on a decision. The discussions resembled those conducted at a political level:

> "…our city major visited once, and he expressed that they [participants] talked about exactly the same issues that he discussed in his world." (planning strategist)

The planning strategist had observed a difference in how well the game worked depending on the age of participants. For younger age groups (8-11 years) it worked well but for the older children (12-14) there was reluctance to role-playing. Interestingly, the game worked well in older ages (16-18), who "ended up in interesting discussions and did not stop until the board was 'filled' [with buildings]". The explanation presented by the planning strategist was that the young teenagers seemed to have a harder time taking the role-playing aspects seriously.

The teachers expressed a positive attitude towards the concept and made enquires about the future of the game:

> "They have asked 'are there more of this [the game] and where will it be later' and such things. So they have probably found it to be a good way of discussing city planning." (planning strategist)

In an email conversation held afterwards with one of the participating schools, the teachers attest that the game was very appreciated and that the discussions that arose during the play sessions continued afterward.

The game had been designed to promote social interaction through dialogue, with the goal to inspire cooperation rather than competition. Problems that emerged during the play sessions were generally solved through argumentation and efforts to convince other players rather than willingness to compromise. The later option did however occasionally occur. At such times, buildings could for example be placed midway between two proposed locations.

Though the children had short lists of simple policies on their respective role cards (Figure 2) to rely on for finding standpoints and arguments, they often transcended these and expressed personal ideas and opinions. This way, the children ended up in a state of partial roleplaying, where their assigned role had to compromise with their self-expression and free thinking. The game's role descriptions were limited and concise in order to appear more as pointers than rules to strictly follow, so that the player could experience creative freedom. In that regard, the game worked as intended. Less desirable from a design perspective would be the degree this might have been a source of confusion and ambivalence.

The child's perspective and child-centred concerns were among the ideas expressed by the children. This showed how the game managed to fulfil its purpose as a tool for citizen dialogue. Such expressions of the child's perspective were partly constituted by desire. For example, many placed playground central, in proximity to shops, so that the children could "have somewhere to play while parents shop". Many also placed both homes and schoolhouse with access to forest and nature rather than closer to the city centre, in spite of the bigger distances to central functions it entailed. Other concerns, expressed through argumentation, had to do with child safety, such as avoiding to place the schoolhouse and playground close to water and by treating cars and roads as potential hazards for children.

The sense of responsibility encompassed more things than just children however, not least the natural environment. The children generally considered green areas,

including the removable agricultural areas and forest reserves on the edge of the board, to be primarily intended for the plants and wildlife. This included planned parks that could be merged into bigger ones because it would be “better for plants and wildlife”. Factories were placed far away from water and nature, to avoid pollution and to avoid disturbing wild animals. In order to not expand the urban area too much and thus threaten surrounding nature, children often choose to densify the town by building vertically, i.e. high-rise residential buildings. The importance of densifying the town to make room for new residents without harming the surrounding landscape had been emphasized as a concern by the urban planning team participating in the project. The fact that the children realized this necessity indicated that the game captured something central and at least in part succeeded to gamify and simplify real policies in a way that could be grasped and appreciated by children.

RELATED WORK

There are several previous studies of how games can be used to support citizen dialog in urban planning (Reinart and Poplin 2014; De Lange 2015). Reinart and Poplin (2014) present a review of games used in urban planning, which covers more than 50 years. This study includes analogue, digital, and pervasive games. They compare the games in terms of participation, interaction, realistic visualisation, learning effect and knowledge transfer. Only five of 22 studied games contained all these elements. Billger et al. (2017) present a study of one of Reinart and Poplin's (2014) five elements namely visualisation. They review a wide set of approaches to visualize urban planning with a focus on how it supports dialog. Gaming is included as one of those but as visualisation is emphasized the focus is mainly on digital games. They identify that one of the important challenges for visualization tools to support dialog is that processes need to be engaging.

There are also examples of digital approaches to citizen participation that has a low focus on visualisation. Wilson et al. (2019) present an initiative to use smart watch app to encourage people to participate in urban development. The *ChangeExplorer* is a location-based app that provides users with a text-based interface where they can input suggestions on improvements of the urban environment. The evaluation included 19 citizens between 14 and 50 years old who used the app for 10 days on average. The evaluation included interviews with users and planners and it indicates that this approach was successful in providing a simple way for citizens to report problems in their environment, but did not motivate users to take a role in the shaping of the future of their area.

Gordon et al. (2017) present a role-playing card game, *@stake*, aimed to increase creativity in civic planning process. The evaluation of the game did not give any clear indications that the approach was successful in comparison to the trivia game they used in the control group. There were however some positive indications on the use of role-playing. This is something that resembles the findings of our study and also in other similar studies (Rumore et al. 2016). The power of role-playing is one of the strongest observations from the use of *Stadsbyggarna*. A big difference between *Stadsbyggarna* and *@stake* is that the latter has no focus on the involvement of children.

Only one of the studied games in Reinart and Poplin (2014) is specifically targeted at children. This game, *Pop-up Pest* is presented by Tóth and Poplin (2013a, 2013b). It is a board game aimed at 12-18 year old children and youth. The playfield is a 25m^2 large iconized map of three districts in Budapest. The gameplay is collaborative with a shared common goal but also team goals and individual goals. *Pop-up Pest* has

many similarities with the game presented in this paper. The main differences are that it involves more complex gameplay and that it targets an older target group. The evaluation of the game indicates a general positive attitude towards the gameplay and self-reported insights. Another game that has some similarities with the game presented in this paper is *Rezone* (De Lange 2013, 2015). In *Rezone* players with different roles and goals need to collaborate against the system which is programmed to drive the city into decay. The game is played on a physical board with augmented reality integration that projects information on physical buildings. A camera registers players' moves in real time. The target players are local stakeholders between 18 and 50 years. *Rezone* is hence different to the game presented in this article both with respect to target group and complexity.

One of the first games focused on urban planning is *CLUG* from 1965 (Keslacy 2015). As in *Stadsbyggarna,* the players of *CLUG* play team wise and to optimize their use of the building spots on the board. Both games use a gridded game board to be filled with buildings by different teams. In a general sense, the two games have similar goals, as both have been designed to raise awareness of the complexity of different perspectives and underlying motivations that are involved in urban development. The games differ greatly to the level they attempt to show this however. *CLUG* is designed for students of architecture and strives to model realities of the urban development process, including the complex economics of taxation, property assessments and even bribery and collusion. *Stadsbyggarna* on the other hand, designed for children, represents urban planning policies and processes in a very simplified way both in regards to game rules and narrative.

DISCUSSION AND CONCLUSIONS

This paper presents *Stadsbyggarna* – a game designed to involve children in urban planning. The presented game differs from previous approaches in that it targets young children and that the game has a reduced and focused design. The game has few mechanical elements and puts a strong emphasis on role-play and discussions in and between teams. Through role-play, the players get acquainted with urban planning politics. However, unlike other role-play simulations, the children are given space to express their personal ideas and opinions in the discussion, alongside those of their assigned roles. The gamemaster plays a central role in this to moderate discussions. The evaluation shows that the desired goals were met during game sessions. Participants were engaged in discussions that revealed a strong engagement in aspects that are central to urban planning. This included planning of green-space and densification of cities (Haaland and Konijnendijk van Den Bosch 2015). Most previous approaches in this field have not been targeted at children and there has been a strong emphasis on competitive gameplay, digital modelling and visualisation. The digital component developed for Stadsbyggarna was abandoned based on the experiences from playtesting. The challenges of using digital games in a school environment has been analysed in previous studies (Egenfeldt-Nielsen 2004; Berg Marklund et al. 2014). Technological factors, such as network availability and security, in combination with technology literacy factors, can many times cause obstacles to the use of digital games in educational context. The abandonment of the digital component in *Stadsbyggarna*, made the game sessions much easier to arrange and execute. There was no need for wireless network access and there was no risk for hardware or software failures that the gamemaster should be prepared to handle. The lack of digital components did not have any negative impact on the engagement of school children. The novelty and impress factor that was once associated with digital solutions appears to be diminishing. A contrary, there appears to be a similar effect for the physical components of the board game.

In *Stadsbyggarna,* players get introduced to urban planning policies and processes by taking on roles as the representatives and executive authorities behind them. The assigned roles are constituted by bundles of conceptually related policies, incentives and buildings, gathered under a thematically unifying name. Compare this with many table-top role-playing games whose roles are centred on characters, often with accompanying personality traits. Just as a role-player acting as such a character, the players of *Stadsbyggarna* are asked to adhere to assigned motivations implied by their respective roles as they reason and act. However, this identification with the role is only partial, as the players remain themselves on an individual level throughout the play session, as they are not presented with a personification of these motivations to incarnate. The effect of this was that the children came to argue as advocates for both assigned and personal standpoints as the discussions evolved during the play-sessions. On the positive end, this gave the children space for self-expression. On the negative end, this split position from where to formulate arguments would seem to confuse the children at times. Fine (1983, p. 206-207) separates *person-self* and *role-self* in the context of role-playing games*,* of which the first self is one's own identity and the latter is the identity implied by the role, which can be adopted to different degrees. Fine claims that the true role-player loses himself in the fantasy of being someone else. That possibility is something which the rules of *Stadsbyggarna* do not attempt to offer, making it something else than a pure role-playing game. Instead of fully confine the children and their shared discussion in role-playing, the game tries to leave room for the expression of personal ideas and opinions to take place, which in turn serves as the first step of engaging the children in the public urban planning dialogue.

In defining role-play simulations, Duchatelet et al. (2019) describe the distinction between games, role-play and simulations as a continuum in which the degree of structure (such as rules) and agency (space for individual choices within the role-play) determines which of these categories a playable experience might be closer to. In similarity with *Stadsbyggarna*, Duchatelet et al. (2019) describe the outcomes of a role-play simulation as less quantifiable than those of games, that commonly end up in a state of winning/losing. *Stadsbyggarna's* invitation for the players to express themselves as individuals in addition to role-play adds an extra dimension along the agency factor, making the game harder to categorise with these measures alone however.

Stadsbyggarna is not the only urban planning game that has been designed to provide an opportunity for the players to express their own opinions and ideas in regards to their environment. The game *Pop-up Pest* (Tóth and Poplin 2013b) is, similarly to *Stadsbyggarna,* a game where children are divided into distinct interest groups, tasked to place buildings on a board representing an urban area in order to build a good living environment. The purpose is to enable children to express their opinions concerning their local environment. While the functional goals and in regards to game elements are conceptually similar, *Stadsbyggarna's* use of role-play simulation (as opposed to gameplay) puts the on-going discussion in the forefront of the experience. The idea is that this most central part of the game is not left at the table as the game session finishes, but can continue in the classroom and elsewhere afterwards, which teachers of the classes participating in the play sessions reported it to have. Persistent dialogue is a part of the game's functional purpose to serve as an introduction and incitement to on-going citizen participation in the local urban planning matters. This is also the reason why *Stadsbyggarna's* gameplay revolves around a democratic process in which communication and negotiation is the means of progress for everyone, rather than having the players strive for taking their own team to victory, as in the case of *Pop-up Pest*.

One of the driving factors behind the development of the game presented in this paper was the fact that the Swedish parliament has made the United Nations' children's declaration legally binding from 2020. This will increase the demand for tools and methods that involves children in decision processes. The use of role-play simulation games was a successful approach in *Stadsbyggarna*, and it is likely to be useful also in other decision processes.

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