5: Playing the City

In the previous chapters on LEGO toys and Wright's computer games we have seen how the geography of play became more complex, networked, social and increasingly digital, expanded and allowed for fast and frequent transfer between core and periphery. Increasingly, companies rely on a vibrant and active periphery of play to keep their brand vital and commercially successful, to maintain a positive relationship between player, consumer, game and company. We have also seen how the many-to-many template is becoming common practice among both traditional toy makers and digital game developers. The many-to-many template has attracted a lot of attention of other companies as well who are seeking new ways to involve consumers into the world of their

brand. The dedication of both LEGO and *SimCity* and *The Sims* fans is something most companies dream of.

Notably, the attractions of the many-to-many model have not gone unnoticed within the realms of politics and policy-making. Not only commercial companies recognize the potential value of this participative model that can create a symbiotic relationship between different and traditionally remote stakeholders. In this chapter, such a policy domain using the many-to-many model will be investigated. This chapter focuses on the use of (computer) games – which I will label Serious Urban Games (SUGs) – as participatory tools in urban planning.[105] Public participation may be defined at a general level as the practice of consulting and involving members of the public in the agenda-setting, decision-making and policy-forming activities of organizations or institutions responsible for policy development (Rowe & Frewer, 2004, p. 512). Defining urban planning is a haphazard task because it is not a fixed discipline but rather a term that indicates the coming together of different stakeholders in a process that aims at generating urban change.[106]

Digital technologies are generally considered democratizing tools in the sense that they facilitate

[105] The name 'urban games' commonly refers to entertainment or artistic games that take place in urban places and typically combine a screen based game world with the 'real world'. These games strive to merge physical and virtual game worlds whereby handheld technology (GPS, digital camera, cell phones) will link players in the real world with those onscreen. Well-known examples come from the London based group Blast Theory. This group has staged many urban games around the globe such as *Can You See me Now?* (2001) and *Uncle Roy All Around You* (2003). Like urban games, SUGs will most likely combine different media and will establish a 'direct' link between the virtual game world and the 'real' world.

[106] "Stakeholder is a term commonly used in planning and public policy. A stakeholder is defined as someone with a 'stake,' or interest, in the issues being addressed" (Margerum, 2006, p. 49). I have used the term throughout this thesis outside of the domain of urban planning and policy-making as well to indicate actors within a given field that have a stake in what is negotiated and debated within that field.

democratic involvement in a low-key, non-authoritarian environment.[107] 21st century policy reports are packed with terms like 'e-democracy' – the belief that participation can be democratized through new media applications (many municipalities will, for example, offer online e-services). New media technologies, such as game-based software, used for public participation would then, from the point of view of e-believers, democratize participation.

This chapter has as its leading case study the SUG *Face Your World* initiated by Dutch artist Jeanne van Heeswijk (Heeswijk & Kaspori, 2002-ongoing).[108] *Face Your World* was designed for and played in the Dutch garden city Slotervaart in 2005. It was initiated to deal with the dilapidated garden city, its poor child-related facilities and lack of social cohesion. *Face Your World* is a multi-faceted participation and design process with a multi-player game, the Interactor, at its core. Besides the use of the Interactor, 49 meetings and workshops were organized. Both children and adults participated in the design of a new neighborhood park. The participants worked more than half a year (January till July 2005) on the design of the park and on March the 1st, 2006, the city council of Amsterdam decided to go through with the project and realize the design as conceived by the children and neighborhood residents. If all goes as planned, the park will be realized by 2010.

[107] In relation to the democratizing potential of new media, Jenkins and Thorburn write: "Networked computing operates according to principles fundamentally different from those of broadcast media: access, participation, reciprocity, and many-to-many rather than one-to-many communication" (2003, p. 2).

[108] There are many other SUGs that center on public participation of course. See for example *Ground Zero Planner* (GothamGazette, 2007a), *Plan Your Future Park* (GothamGazette, 2007b), *Geo-Wiki Game* (Dormann & Biddle, 2006) and *PlastiCity* (Fuchs, Manthorp, & Schlusmans, 2006). I have chosen *Face Your World* as primary example because this participation trajectory actually took place and its outcome – the design of a community park – has been approved by the municipality of Amsterdam.

Face Your World will be assessed on the levels of media-specificity of the participation tools (what types of media and forms of participation are being used?), the participation trajectory as a whole and the Interactor specifically. In doing this, this fifth chapter looks into the many-to-many model when used outside of the world of entertainment and considers the impact of Serious Games on geographies of play. The first part of this chapter sketches the background against which *Face Your World* needs to be understood. The second part looks into the forms of participation used in *Face Your World* and the *Face Your World* trajectory as a whole. The final part considers the geography of Serious play.

The sources used in this chapter are literature on public participation and urban planning, documentation of *Face Your World* (the archive of Van Heeswijk, the ward Slotervaart and the commissioner SKOR have been studied), 28 in-depth interviews with different stakeholders and observations of the use of the Interactor by children in De Kunsthal, Rotterdam (when writing this chapter, *Face Your World* Slotervaart had already taken place. Therefore, observations of the actual use of the Interactor are based on *Face Your World* De Kunsthal).

FACE YOUR WORLD

Before assessing *Face Your World* on the levels of media-specificity, the participation trajectory and the Interactor, some background information is needed about Slotervaart, *Face Your World* as part of the renewal plans for Slotervaart, and public participation in urban planning in general.

The Western garden cities (Westelijke Tuinsteden) in Amsterdam, The Netherlands were built after the Second World War according to the utopian CIAM (Congrès International d'Architecture Moderne or International Congress of Modern Architecture) tradition. CIAM, a think thank of modern architects such as Le Corbusier and Gerrit Rietveld was established in 1928 and disbanded in 1959. Dutch architect and urban planner Cornelis van Eesteren (1897-1988) was the CIAM president from 1930 to 1947. He designed the general expansion plan (AUP, Algemeen Uitbreidingsplan) for Amsterdam in 1934. The Western garden cities were part of this general expansion plan. Air, light and space were leading principles in both the design of the houses and the neighborhoods. In 1954 the satellite city Slotervaart – where *Face Your World* took place – was built.

The Western garden cities of Amsterdam have seen a decline in reputation over the last decades. They have gone from utopian and visionary living areas to neighborhoods fraught with social, economical, infrastructural and reputational problems. The end of the 1980s sees the initiation of the urban renewal of postwar neighborhoods in The Netherlands. There are two important players in the renewal of the Western garden cities. On the one hand there are the different boroughs or wards (stadsdelen) of Amsterdam West (Slotervaart, Osdorp, Bos en Lommer, Geuzenveld/Slotermeer) who all have their own ward alderman and legislative council. On the other hand there are the eleven housing corporations who own the houses in the garden cities.[109] Based on pilot projects and research conducted in the boroughs (both by the wards and the housing corporations) the report *Richting Parkstad 2015* (direction park city 2015) was

[109] Initially, these housing corporations were established to handle public, affordable housing but these corporations have largely privatized during the '90s and have thereby become more like profit-oriented real estate agents.

published in 2001. *Richting Parkstad 2015* is the basis of the current plans for renewing the postwar garden cities, although it has been revised, changed, discussed and adapted many times over. The situation is very complex (mainly due to re-housing problems) and there is a general sense of insecurity and confusion among the neighborhood residents concerning the future of their homes and neighborhood.

Given the complex situation in Slotervaart and the many conflicting stakeholders in the urban renewal process, it is surprising that some things, like *Face Your World*, do in fact happen. Securing the commission to undertake this participation project took considerable time and effort and the word 'coincidence' is often used when people describe how *Face Your World* became a part of the Slotervaart renewal effort (Interview with Engelsman, 2007; Hartoog, 2007; Huisingh, 2007; Wien, 2007).

Van Heeswijk developed the first version of *Face Your World* in 2002 for the Wexner Centre of the Arts (Columbus, USA). The project in Columbus raised the attention of Wilfried Lentz, director of SKOR (Stichting Kunst en Openbare Ruimte - foundation for art and public space). Lentz commissioned Van Heeswijk to develop the Interactor software to educate VMBO (Voorbereidend Middelbaar Beroeps Onderwijs or preparatory middle-level vocational education) students on the importance of their environment (Interview with Lentz, 2007). Although it is not made explicit by neither Lentz nor Van Heeswijk, the underlying assumption seems to be that children having a hard time learning the traditional way will be more easily reached and engaged through computer-based learning tools. Developing a park and initiating such an intense and long participation project was never the intention of SKOR. SKOR's initial assignment – the development of a re-usable educational software application for VMBO students –

has, as of yet, not been met (ibid). Van Heeswijk and Kaspori are still working on achieving this goal. They are writing a manual for *Face Your World* that should allow other people in other situations to use the Interactor for educational purposes (Interview with Heeswijk, 2007; Kaspori, 2007). In securing the commission to design the neighborhood park for Slotervaart, the goal of the project drifted from developing an educational tool to involving neighborhood residents otherwise hard to reach and designing a park with them that would be supported by the different age and ethnic groups in Slotervaart.[110]

After the commission by SKOR, Van Heeswijk presented *Face Your World* at a media festival for children in Amsterdam (Cinekid). AFK (Amsterdams Fonds voor de Kunst - Amsterdam art council) was present at this demonstration and was interested to join the project. Annemieke Huisingh, who then worked for AFK, tells me she had been in contact with Van Heeswijk for some time and that they had been looking for an opportunity to work together (Interview with Huisingh, 2007). For both Huisingh and Van Heeswijk it was important to link *Face Your World* with a real life situation. AFK was already working in the Western garden cities so they sought for an opportunity for *Face Your World* there. Huisingh brought different stakeholders in Slotervaart together in order to find support for *Face Your World* (ibid). Both Rob van Aarschot, then the project leader of the renewal of part of Slotervaart and Hanneke Engelsman, area developer for housing corporation De Alliantie, were convinced early on of the possible merits of such a participation project (Interview with Engelsman, 2007). They had been looking for new ways of organizing public participation because the regular hearings only attracted the same few elderly white men

[110] On drift in policy-making see *Software vulnerability due to practical drift* by Christian Lundestad and Anique Hommels (2007).

who would always make the same objections or suggestions (ibid). The most difficult to persuade was apparently the ward alderman Henk Goettsch who was – so everyone told me – not fond of artists. In the end he agreed by supposedly saying, "as long as I don't have to call it an art project" (ibid).

Besides the difficult task of convincing Goettsch, the ward council had some reservations. They worried that *Face Your World* would end in the design of a park that they would not be able to finance.[111] Designing a park with neighborhood residents that would be too expensive to realize, would damage the image of the ward. Current project leader Harry Wien tells me that neighborhood residents already have the feeling that the ward does not take citizen participation serious. Organizing a large participation trajectory that would result in a park that the ward could not afford to build would only further this feeling and confirms citizens' skepticism concerning their role in the urban renewal process. After some bickering the parties came to an agreement. In retrospect Wien is satisfied with how Van Heeswijk handled the budgetary restrictions and the communication with the citizens concerning what is possible, what will actually make it into the design of the park and what not (Interview with Wien, 2007). Three 'special' elements that were thought up and designed by the children fell outside of the budgetary restrictions and Van Heeswijk is searching for external funding for these elements. These elements are a statue for the park, trees with multiple functions and a recreational area with water.

Another point that was hard to negotiate concerns the pre-set conditions for the park that the ward had assembled (Interview with Broekhuizen, 2007; Hoeve, 2007). The list contains some 25 criteria

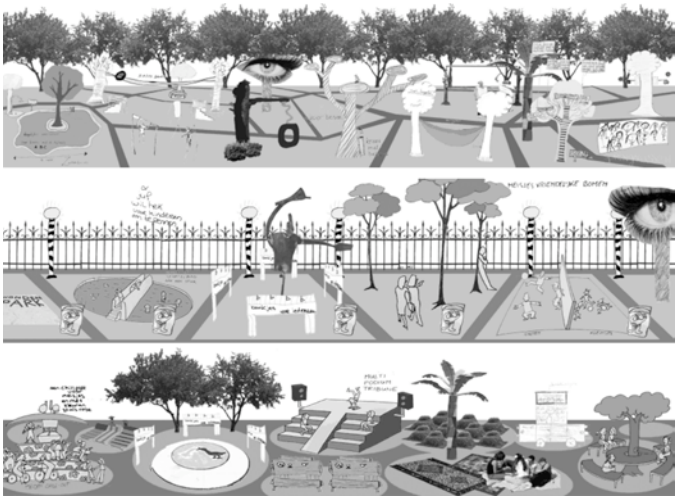
[111] The specified budget for the park remains undisclosed until the park is realized.

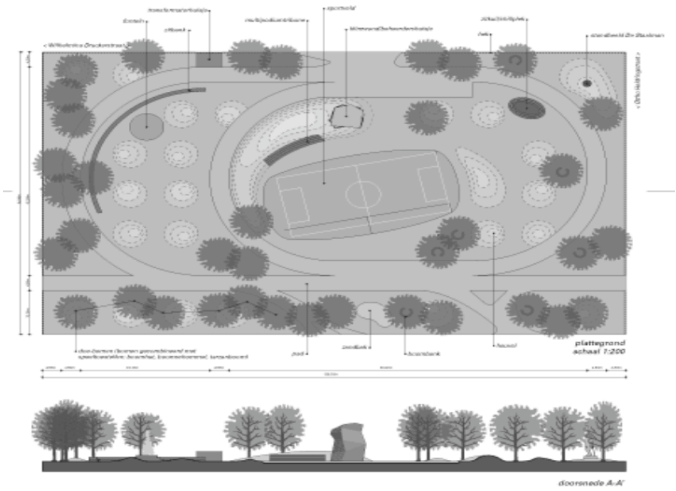
for the park that range from the number of times the results have to be shown to a team of supervisors (minimally twice) to the preservation of old trees in the park, from common-sense elements for a park such as lights and dustbins to specific square meters for certain activities (e.g. 2945 m2 for the playground).

Both communication advisor Leta Hoeve and public space designer Joris Broekhuizen from the ward Slotervaart described the negotiations concerning these conditions as difficult. Some of these conditions were met but others were debated and ultimately changed by Van Heeswijk (e.g. the location of the five entryways into the park). Besides these rather specific conditions, the two main requirements from the ward Slotervaart and De Alliantie were that the participation process would involve neighborhood residents otherwise hard to reach and that the different age and ethnic groups in the neighborhood would support the design of the park.

Public participation in urban planning has a rather short history; it became an important aspect of urban planning processes during the 1960's. This is not to say that since the sixties participation is always exercised. A key texts on public participation in urban planning – *A Ladder of Citizen Participation* by Sherry Arnstein (1969) – stems from this period. Arnstein distinguishes between eight different forms or degrees of public participation (rungs on a ladder) to reveal that public participation is all too often used to cover up manipulation. Real participation would only be achieved through the redistribution of power, thus resulting in "citizen power" (2003 [1969], p. 245-246). She writes:

> There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process. (…) participation without redistribution of power is an empty and frustrating process for the powerless. It allows the powerholders to claim that all sides were considered, but makes it possible for only some of those sides to benefit. It maintains the status quo (p. 246).





Illustrations 54 & 55: The top image shows an abundance of ideas for the park generated by the children with the help of the Interactor. The bottom image is the final design for the park that resulted from the *Face Your World* participation trajectory (both images courtesy of Van Heeswijk).

The municipality of Amsterdam also uses a ladder of citizen participation. The lowest level of participation is informing the citizens, the highest level is co-production (Interview with Hoeve, 2007). The council of Slotervaart strives to minimally reach the second or third rung of this ladder, which means that citizens will minimally be able to advise the ward on a certain plan (ibid). Although the design of the neighborhood park in Slotervaart through the *Face Your World* trajectory has not been labeled co-production by the ward, it comes very close to being that says Hoeve (ibid). Van Heeswijk and Dennis Kaspori (the architect on the *Face Your World* team) both consider the design of the park the product of co-production (Interview with Heeswijk, 2007; Kaspori, 2007).

Jim Burns outlines in another key work on public participation in urban planning a process of user involvement that goes from awareness to perception to decision-making and finally to implementation or action. Concerning the first step in the process, awareness, Burns writes that this can come about both in a negative or positive way: "Negatively, people can be made aware suddenly by a threat to their community and its patterns of life. (…) The usual result is (…) a win-lose situation wherein either the community gets its way or the forces of the other side get to fulfill their plans" (1979, p. 21). Characteristic of this situation is that 'decisions have been made before people become aware of them' (p. 27). This leaves the people only an antagonistic position, "either resisting the proposed change or trying to force another change in its place" (p. 27).

The Harbour Game (Kollision, 2002), a SUG designed and played in Århus, Denmark resulted from negative awareness of urban (re)development plans. *The Harbour Game* concerned the extensive redevelopment plans for the Århus harbor. *The Harbour Game* was created and played to confront the

municipality, to raise awareness among policy-makers concerning the importance of public participation in such large-scale planning processes and to alert the public to the existing plans for the harbor (Interview with Delman, Løssing, & Lykke-Olesen, 2007). As Burns indicates, this is a win/loose situation. In relation to *The Harbour Game*, the municipality won in the sense that the outcome of playing the game did not affect their redevelopment plans. The plans for the harbor area remain unchanged.

Awareness can also be raised in a positive way and will as such mark the beginning of a "process of agreed-upon change" (Burns, 1979, p. 21). Positive awareness will lead to perception and understanding (p. 25). The problem is that in reality different actors in a participation process might experience and/or understand things differently or experience and/or understand different things. Although Burns sees a direct connection between and movement from perception to decision-making and ultimately implementation, in reality, it is very difficult in participation trajectories to actually cover these last two steps of decision-making and implementation. During participation processes, numerous things can frustrate these final two steps, ranging from citizens losing interest in a given situation to a new political coalition that decides to do things differently, from running out of money to see the process to the end to the disapproval of the decisions by those higher up. Van Heeswijk and Kaspori negotiated until they were authorized to traverse the whole process described by Burns together with the citizens (Interview with Heeswijk, 2007; Kaspori, 2007). Otherwise, participation processes are simply an excuse, a sort of painkiller for difficult urban renewal plans, they state (Interview with Heeswijk, 2007; Kaspori, 2007).

Besides different levels on which the public can be engaged in urban planning – from simply being

informed about a project to being allowed to co-create a project – there are of course many different forms in which participation can be practiced. SUGs are only one means of exercising public participation and a relatively new one at that. Throughout the decades that citizen participation has been placed on the agenda of planners, architects, municipalities and politicians, it has been practiced in various ways.

The *Planning and Urban Design Standards* handbook lists, for example, nine different forms of public participation in urban planning. Some of these are common participation methods such as surveys (either in the form of an interview or questionnaire), public meetings and public hearings (Cogan & Cogan, 2006a, p. 62; 2006b, p. 59; Nishikawa, 2006, p. 51). Other forms of participation are less well known. As, for example, asset mapping ("identifying (…) the individual, organizational, and institutional capacity and gifts of a particular community") (Kretzmann & McKnight, 2006, p. 53), community visioning ('creating a shared vision for the future') (Ames & Ames, 2006, p. 55), charrettes ('a multidisciplinary team of professionals develops all elements of a plan') (National Charette Institute 2006, p. 57)[112], facilitation ("designed to reach consensus through a process that includes meaningful involvement of all parties") (Whorton, 2006, p. 65) and consensus building and dispute resolution (Susskind, 2006, p. 66).[113]

[112] Bill Lennertz gives the following explanation of the historical background and meaning of the term 'charrette': "The term 'Charrette' is derived from a French word meaning 'cart' and refers to the final intense work effort expended by art and architecture students to meet a project deadline. At the École des Beaux Arts in Paris during the 19th century, proctors circulated with carts to collect final drawings, and students would jump on the charrette with their work and frantically put finishing touches on their drawings. This intense burst of activity is similar to the atmosphere of the Charrette process" (2003, p. 12).

[113] Besides these handbook forms of participation, commissioners seeking the input from their community might also organize, say, a picnic, as did Broekhuizen when designing another park for a Dutch garden city (Interview with Broekhuizen, 2007).

Games and playing were popular participation tools from the very beginning of public participation in urban planning. Henry Sanoff was an early advocate of games and playful activities as participatory tools in urban planning processes. He designed, for example, the 'Best Fit Slide Rule', a discussion tool to examine alternative street infill solutions and their consequences (1988, p. 35). Sanoff would also organize workshops, such as the 'House Activities' workshop, around rule-based games. The rules of the workshop are described on a leaflet: "Each player makes an alternate choice from the activities shown in the pictures below. The point value of each arrangement is displayed in the lower left hand corner of each picture. The total of the choices cannot exceed 45 POINTS" (p. 36). When a certain combination of rooms exceeds those 45 points, players have to trade off rooms and their corresponding functions until they have reached 45 points or below. This workshop was designed and used to raise awareness considering alternative house activities.

The use of computer game-based tools for public participation is a rather new phenomenon. In general, such tools, commonly referred to as Serious Games, have found their way into many professional fields and are widely used and experimented with as training and educational devices.[114] The name Serious Games came into use when in 2002 the Woodrow Wilson Centre founded the Serious Games Initiative. The Serious Games Initiative is focused on the use of games "in exploring management and leadership challenges facing the public sector" (Rejeski & Sawyer, 2002). Serious Games strive to combine the entertainment value and technological possibilities of entertainment computer games with an educational and/or political agenda. Serious Games are employed

[114] Besides Serious Games that have been designed to educate, inform, simulate or involve, entertainment games are also used and experimented with in classrooms and professional settings.

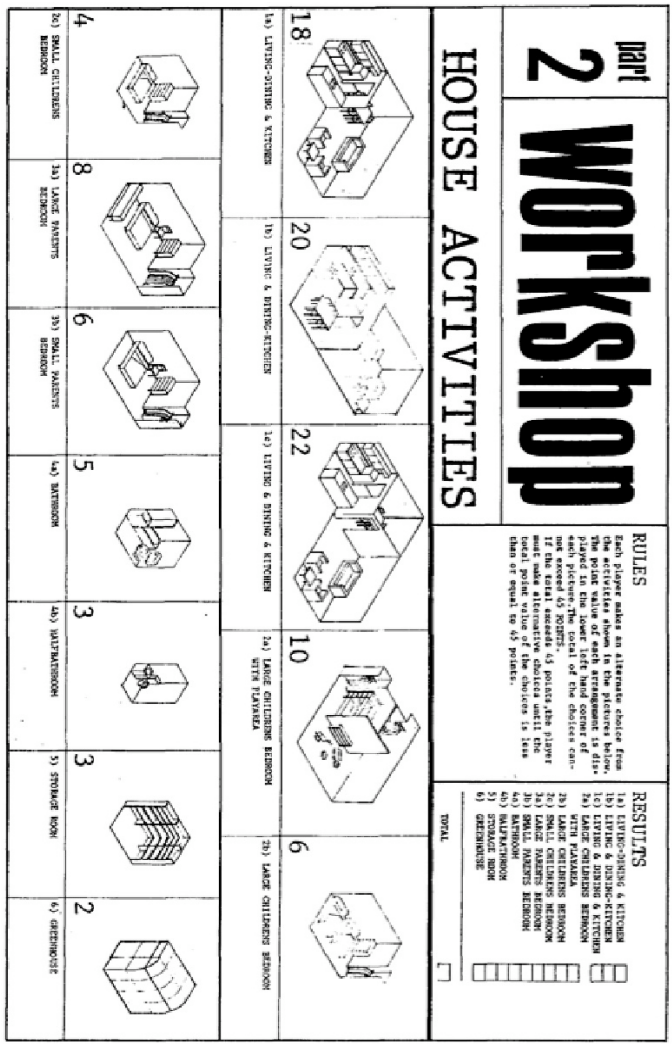


Illustration 56: An early participatory urban planning game: The House Activities Workshop (Sanoff, 1988, p. 36).

in various areas of education and training. Bogost labels games that either support or disrupt social and cultural positions, persuasive games.[115] These games are persuasive because of their "procedural rhetoric", the "practice of using processes persuasively" (2007, p. 28). Bogost considers the procedurality of computer games, or what I already referred to as a string of potential design actualizations, as an agent for generating political and social change.

Most urban planning projects will use a combination of different participation methods at various stages of the planning process. *Face Your World*, for example, combined a computer-based public participation game with surveys, workshops, public meetings and public hearings. These different forms of participation were used for different reasons. The Interactor was used to design the park. Surveys were used to get an idea of what the neighborhood residents needed, wished and hoped for in relation to the park. Public meetings and public hearings were either used to gather more data on the local wishes for the park, to educate people on what to expect from a park or to present ideas and designs for the park that people could then comment on. Each and every one of these forms of participation has certain advantages and disadvantages. Some will work well in a certain situation but might not work at all in a different situation. Combining different forms of participation seems the most effective way to actually reach different groups of citizens. None of the participation methods above is in itself successful in reaching out to a whole community.

[115] See the website watercoolergames.com for examples of Serious Games outside of the domain of public participation in urban planning (Bogost & Frasca, 2007).

ASSESSING PUBLIC PARTICIPATION

Participation projects can be assessed in terms of their medium-specificity and the participation trajectory as a whole. Concerning the first, games used as participation tools have changed considerably over the last decades. The paper toys used by Sanoff between the sixties and eighties have been replaced by high-end computer games. There are, needless to say, both advantages and disadvantages to this change in participatory gaming from non-digital to digital.[116] Kheir Al-Kodmany, professor in urban design and physical planning, identifies some important pros and cons of computer-based public participation. One advantage of digital technologies is the possibility to represent contextual data: "Computerized tools can illustrate abstract concepts, such as environmental impacts, in a way that would be impossible with traditional tools" and these tools "provide so much more specific information that can be provided on the spot, thus enabling the public to explore alternatives quickly and with more competence" (Al-Kodmany, 2006, p. 63). The Interactor makes abstract concepts related to the how and what of designing a public park 'tangible' and visible. In a digital environment such as

[116] In popular and scholarly debates on the (negative) influence of computer-based technologies on the practice of urban planning, *SimCity* takes a prominent place (Beckett, 1996; Cascio, 2004; Lobo, 2005; Lobo & Schooler, 2004; MacIntyre, 2005; Starr, 1994; Sutherland, 2006). Critics worry about the future of urban planning when *SimCity* becomes the touchstone both on the technological level and on the content level. They assert that urban planning is not a game, even when the technologies used for urban planning increasingly look like *SimCity* (Lobo, 2005; Lobo & Schooler, 2004). A major issue relates to ideological assumptions embedded in *SimCity*: "Did a conservative or a liberal determine the response to changes in tax rates in SimCity?" sociologist Paul Starr asks (1994, p. 19). However, *SimCity* is mainly used as a powerful and seductive metaphor in articles and news reports dealing with urban planning in the 21st century rather than as an actual planning tool in urban design.

the Interactor, one can indeed explore alternatives quickly and without lasting consequences.

A second advantage is the possibility to display information selectively: "When working on paper, even a relatively small amount of information can quickly become overwhelming and appear cluttered" (p. 63). The Interactor is first and foremost a design tool and not so much a tool for information dissemination. Therefore, we can locate this advantage on the level of design elements present in the game world. The library of the Interactor contains a standard set of 400 images from which players can pick and choose. Would one make a non-digital version of *Face Your World*, those 400 objects would indeed appear 'overwhelming' and 'cluttered'.

Third, the ability to navigate the geographical scale is considered an advantage because "With traditional tools, multiple maps are needed for each geographic scale: region, city, community, neighborhood, and individual lots. Computerized mapping allows for zooming in on a region, city, neighborhood, or even a specific house on a single map" (p. 63). In the Interactor, players navigate between a 'micro' level view during the sketch phase (where they work on a single picture of the neighborhood) and a more 'macro' level view of the whole park during the design phase.

Concerns Al-Kodmany raises have to do with the relation between realistic computer generated images and reality:

> One drawback of computerized tools is that the images can be so realistic and persuasive that they mislead people. It has been found that computer visualization can lead to false conclusions by the public. (…) there is the danger that audiences may see a generated image as constituting reality. (…) Just as these tools can be used to create compelling representations of future urban development, they can create compelling misrepresentations as well (p. 63).

SUGs in general are rarely "so realistic and persuasive

that they mislead people" (p. 63). With SUGs it will generally remain clear that what the player is dealing with is a ludic, artistic or architectural vision on a planning project. As Syb Groeneveld from Digitale Pioniers (digital pioneers), one of the sponsors of *Face Your World*, told me: "*SimCity* is a realistic environment in terms of design but not in terms of interaction. *Face Your World* is realistic in terms of interaction but not of design" (Interview with Groeneveld, 2007).

Second, the considerable "costs" involved in using these computerized visualization and simulation techniques are considered a problem (p. 63). The costs of the long and intensive participation trajectory of *Face Your World* are indeed high: the software development amounted to a total of €180.000 and the management of the Lab where most activities took place €80.000. SKOR, AFK, Stedelijk Museum, the ward Slotervaart, housing corporation De Alliantie and Digitale Pioniers have financed this. The high costs, the efforts involved in finding so many different financial investors, communicating with them and delivering a product that all can agree upon, makes these large-scale participation trajectories unfeasible for many cities.

Thirdly, Al-Kodmany criticizes participants' limited options for social interaction when computer-based tools are used:

> In general, traditional non-computerized public participation methods are more participatory, experiential, and interactive. They provide more social interaction among participants. (…) Practical experience asserts that the added value of real-time social interaction among neighbors, while using a physical simulation game, for example, surpasses computer simulations even when they have user-friendly computer interfaces (p. 63).

Al-Kodmany is in favor of using a combination between "the social benefits of low-tech methods and the efficiency and power of high-tech methods" (p. 64). *Face Your World* makes this combination between

the Interactor on the one hand and meetings, workshops and social events on the other hand. The *Face Your World* trajectory consisted of more than a computer-based participation tool. Real-time social interaction and experimenting was amply facilitated as well.

Basically, there were three groups of participants: children enrolled in *Face Your World* as part of their school curriculum, neighborhood children who participated on an individual basis and adult participants. There were roughly two means of participation: computer-based and non-computer-based. Both groups of children participated mainly through the use of the Interactor. This was complemented with lessons, excursions and real-life drawing and modeling. The adults participated almost exclusively through workshops, meetings and surveys. Over the course of the seven months when *Face Your World* Slotervaart took place, 49 different events – workshops and meetings mainly – were organized. These 49 events, except for one workshop for teenage girls, were targeted at the adult participants. The meetings and workshops each addressed a specific group of stakeholders: elderly neighborhood residents, Turkish women, Moroccan women, teenage girls and men in general. There were meetings with local citizen groups such as Sciandri (sports), De Blauwe Olifant (for children with learning and social integration difficulties), the playground organization De Wentelbaan and so on. During these events, an illustrator visualized all ideas and wishes of the neighborhood residents to guide the discussions and make suggestions more 'tangible'.

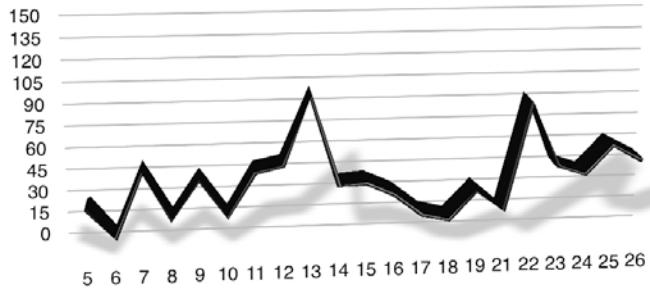
The central location for all activities was an old sporting hall – renamed Stedelijk Lab (urban lab) – that was destined for demolition and stood on the very grounds where the park would be developed. The Lab was open for public on Tuesday, Wednesday and

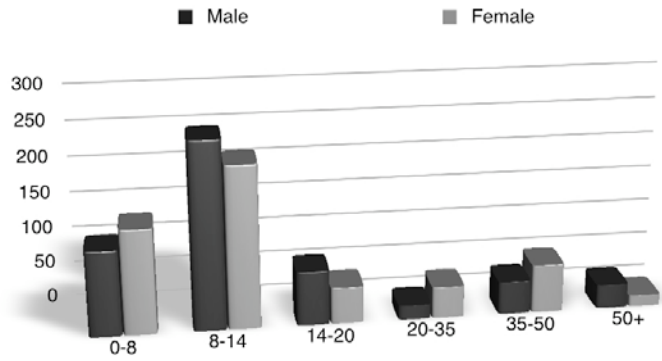
Illustrations 57 & 58: The top image shows a meeting where different generations and ethnic groups discuss the safety and the maintenance of their future neighborhood park with Wien, project leader at the ward Slotervaart. The bottom image shows a clay model of the trees with multiple functions made by one of the participating children (both images courtesy of Van Heeswijk).

Thursday from 14 to 18 hours. During these public hours neighborhood residents were free to walk in and make suggestions for the park (these were all noted down in a logbook) and children could come in and join in the design process. The interns managing the Lab – Irene den Hartoog and Nienke van Ankeren – guided children working on the design of the park during public hours. The popularity of the Lab increased immensely among neighborhood children during the *Face Your World* trajectory. Not all of the children intended on working on the design of the park. Since it was the first time for the *Face Your World* team to be involved in such an extensive participation trajectory, they had to learn how to deal with these problems along the way (Interview with Hartoog, 2007; Heeswijk, 2007; Kaspori, 2007). Over the 26 weeks of the *Face Your World* trajectory, hundreds of people and children visited the Lab during public hours. To deal with the growing number of visitors, two interns joined the Lab: Maria Klaassen and Willemijn van der Sloot.

The Lab was further used on Tuesday mornings between 9:30 and 12:30 by the students from VMBO school 'Calvijn met Junior College'. The two participating classes came Tuesdays alternately. On Wednesdays between 11:30 and 14 hours the children from elementary school Professor Einsteinschool came to the Lab. It had been the intention that these children would come every other week but due to some miscommunication they showed up at the Lab weekly (Interview with Hartoog, 2007). This called for some improvisation on the part of those managing the Lab.

Combining both low- and high-tech, non-digital and digital participation tools has the advantage of including different users. SUGs appeal especially to younger people already familiar with gaming and not afraid of the technology they need to work with in order to participate. SUGs exclude mainly older people





Figures 6 & 7: Visitors at the Lab. From week 5 onwards, visitors were noted in a logbook according to age and gender. The top graph shows the increase in visitors. After the peak of 108 visitors during week 13, access to the Lab was restricted to handle the amount of visiting children. The bottom graph shows the total amount of visitors according to age and gender. Graphs based on the *Face Your World* logbook.

without PC or gaming experience. However, when SUGs are used in combination with non-digital forms of public participation, the group of possible participants diversifies. Children and teenagers have largely been excluded from participation in urban planning. Game-based participatory tools can enable them to become part of participation processes as well. Figure 7 shows that mainly children aged 8 to 14 visited the Lab and participated in *Face Your World* through the use of the Interactor. But adults were present in large numbers during those 49 activities that were organized and during the public presentations of the design. The progress made on the design of the park was presented halfway through the trajectory during a public event that attracted 600 visitors and the presentation of the final design attracted 1000 visitors.

To be sure, the digital divide is not simply a generational divide separating (grand) parents and children. Among children, boys are often more knowledgeable about and familiar with computer use in general and gaming in particular. When I asked two participants what aspect of their days spent at the Lab they liked best, the girl Khadya Abdi (14 years old) told me anything BUT the computer while the boy Hicham Amakizan (12 years old) liked working with the computers best (Interview with Abdi, 2007; Amakizan, 2007). Abdi did not like working with the computer because she has to work a lot with computers at home to do her homework. More importantly, she found the game difficult at first, especially the placing of objects from the library in the game. When she mastered the workings of the game it became more fun to use the Interactor. According to her, using the Interactor did not decide the design of the park but it did make it easier to see what you were doing and what you were creating (Interview with Abdi, 2007). Amakizan did not experience the Interactor as difficult. He had fun creating his own world and collaborating

with other players to get new ideas. According to him, the Interactor was an essential addition to the design process because it allowed the players to shape their ideas. Playing with the game also generated new ideas because abstract things would take a concrete shape: "When someone would put, for example, a McDonald's in the game, then I would think: 'a terrace in front of the McDonald's restaurant would be nice so that people can sit outside while eating'" (Interview with Amakizan, 2007). According to him, the computer made things easy. You could simply click on an object and place it in the game world. With clay you had to first make the objects (ibid). Abdi's lack of computer game experience made it hard for her to master the working of the game. Amakizan plays a lot of games at home (mostly racing games) and had an easier time learning how to play and design with the Interactor.

Al-Kodmany ends his article by stating: "these tools often fall short in allowing the participants to design and alter the representation" (2006, p. 64). In other words, players are not granted access to the design of the design tool itself. This critique is very much in line with Cascio and Turkle's comments on the black-boxed nature of simulations such as *SimCity*. Starr argues likewise:

> The critical problem raised by simulation is the black-box nature of the models. (…) to most participants in policy debates as well as the public at large, the models are opaque. Only a few can penetrate the black box and understand what is inside (1994, p. 28).

This is true in relation to the Interactor as well. The designed core of the game and the embedded scripts were not open for redesign, centrifugal appropriation, meddling or altering. Children designed the park with the tools provided. They could not redesign or alter these tools.

Besides the general concerns Al-Kodmany raises in relation to digital participation tools, there are some specific issues concerning the Interactor as a digital game-based participation tool that need to be addressed. These issues not so much relate to *Face Your World* Slotervaart but might be of importance when the Interactor will, as commissioned by SKOR, be further developed as an educational tool.

When I am researching *Face Your World*, the Interactor is being used in De Kunsthal in Rotterdam. The museum park of Rotterdam will be completely renovated but the different parties cannot come to an agreement. Schools can enroll their classes in an educational, three-hour session at De Kunsthal during which the children are asked to help solve this deadlock in the redesign of the museum park (Heeswijk, Kaspori, Mosterd, & Berg, 2006-2007 weblog). The program at De Kunsthal is a very short version of *Face Your World* Slotervaart. First the children go outside to explore the area and discuss some aspects of what a park is or could be, then they make a pen-and-paper drawing for a new park and finally they translate this design into the Interactor.

At the museum I meet Femke Hameetman who organized to have *Face Your World* at De Kunsthal, Margriet Brouwer, a final-year intern in charge of the sessions with the schoolchildren and Ratna Werry and Marieke Ooms, second year interns responsible for one aspect of the educational program. All four have reservations concerning the Interactor software. Hameetman tells me that the option to click and drag ready-made objects into the digital world is too easy and attractive. Children completely fill the game world with these objects (Interview with Hameetman, 2007). Werry and Ooms both agree that the availability of the objects under-stimulates the children to actually draw and be creative with the software. Children then simply say they cannot draw and continue to use the ready-

Illustrations 59 & 60: These two images show children at work with the Interactor during *Face Your World* Slotervaart (both images courtesy of Van Heeswijk).

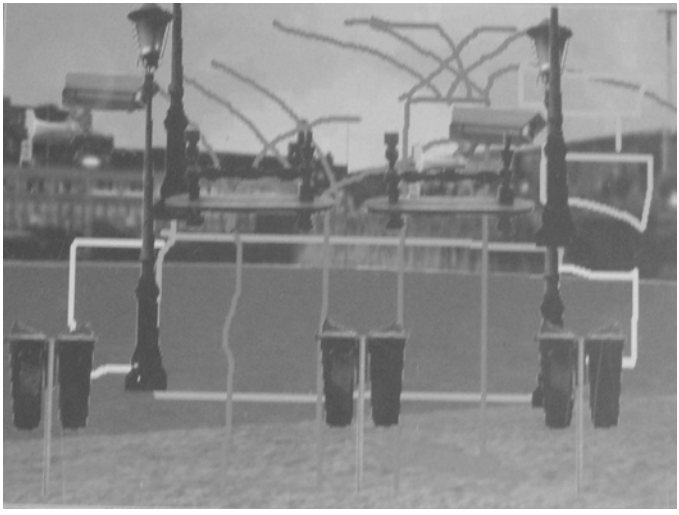
made objects to fill the digital park (Interview with Ooms, 2007; Werry, 2007). This problem might be solved when children get to work beyond the sketching phase of the game (the game consists of four phases: exploration, sketching, discussion and design). But because these school classes only have three hours at De Kunsthal, they almost never get to work through the whole cycle of the Interactor. Occasionally, Brouwer can work with a really productive group through the four stages of the game but most groups do not get further than the sketching phase (Interview with Brouwer, 2007).

Werry and Ooms have also noted that the children are frustrated with various aspects of the game and its setup. The ready-made objects are too big, unrealistic and they fill the canvas too quickly. In the designing phase of the game the objects can be scaled and rotated. The game world dooms up when you run through it because the images are generated when you approach them. This is confusing to children not familiar with this aspect of computer games. They run towards a grassy field in the park and when they get there, all at once, the grassy field has filled up with statues or benches or even a large building. While some children know immediately how to make their onscreen character run through the world others are stuck in one place and become irritated and aggrieved pushing the buttons fruitlessly. The screens are embedded in a table design that is part of the *Face Your World* setup. The computers, on which the Interactor is installed, are placed in a square so that the players are always facing each other. The screens are lowered inside the tables so that the faces of the players are not hidden behind monitors. However, the screens are positioned in an awkward angle that catches the light in such a way that children have to hang over the screens to see anything at all (Interview with Ooms, 2007; Werry, 2007). Another problem

related to this set-up is that there is no room around the computers where children can put their drawings. Although they are asked to retake their drawn designs for the park inside the game world, they cannot keep their drawings close by.

One important aspect of the game, the embedded chat function meant for discussing the design progress, does not work as it has been intended and projected. Everyone at De Kunsthal agrees that the chat function is a hindrance. The children do not use it for communication about the game, deliberation or consultation. The children simply shout things at each other and use the chat function for nonsense or verbal abuse. Brouwer has therefore decided to forbid the use of the chat function. It works as a negative trigger she tells me (Interview with Brouwer, 2007). The chat function posed a problem during *Face Your World* Slotervaart as well. Once discovered by the participating children, this chat function was readily abused and used for other purposes than communicating about the design of the park. Pressing issues concerning the design of the park were simply shouted at each other. Amakizan liked abusing the chat function at first but when things got really out of hand, he was happy they put a stop to the verbal abuse (Interview with Amakizan, 2007).

Besides these problems related to the set-up and functioning of the Interactor, the hardest part seems to be the translation of the physical park around them into a pen-and-paper design for a new park and then reworking that design inside the digital world of the Interactor. The translations from physical space to drawing and from drawing to digital world are very hard to master in a three-hour session. In the Slotervaart project, different workshops and specific educational programs had to smooth these translations. Not only need the forms and media used for public participation be assessed, so does the trajectory as a



Illustrations 61 & 62: These drawings made with the Interactor show the combination of and struggle with ready-made objects and drawn objects (both pictures taken at De Kunsthal by ML).

whole. Measuring effectiveness of participation efforts is a difficult task, as risk analysts Gene Rowe and Lynn Frewer state in *Evaluating Public-Participation Exercises*. "The merits of participation (…) are difficult to ascertain, as there are relatively few cases in which the effectiveness of participation exercises have been studied in a structured (as opposed to highly subjective) manner" (2004, p. 512). The authors confirm that "there is a move away from an elitist model in which expert advice acts as the authoritative source for regulation" but the question "how we can be sure that 'participation' results in any improvement" remains unanswered (p. 513). Rowe and Frewer describe an agenda of sequential steps to evaluate effectiveness in a structured rather than subjective manner.

First of all, effectiveness needs to be defined in terms of process or outcome effectiveness (p. 517-522). In relation to *Face Your World*, both process and outcome effectiveness was intended. The process had to involve neighborhood groups that were otherwise hard to engage and the ultimate design of the park had to be supported by the different age and ethnic groups in the neighborhood.

The explicit aim of *Face Your World* was to go beyond those participants (lead users) who have the time and interest to attend meetings and hearings and dare to speak up for themselves. I have met three times with such a lead user: Gerard Kreek. He has been living in Slotervaart for forty years and has witnessed the neighborhood change from a utopian garden city where doctors and lawyers lived side-by-side with working class families to a dilapidated, poor and economically underprivileged borough. He has for more than two decades been actively involved in local initiatives that address the living conditions in Slotervaart and citizen participation in the renewal plans for the Western garden cities. He is 75 years old

and very knowledgeable on the subject of his neighborhood, its residents and goings-on. However, as Rob Hoogeveen, area developer for the De Alliantie, tells me, he is not representative for the neighborhood as a whole (Interview with Hoogeveen, 2007).

Concerning the effectiveness of the participation process, *Face Your World* did indeed involve neighborhood residents that would never be seen in the town hall during conventional meetings or hearings. However, there were some problems as well. For example, to involve both Turkish and Moroccan women, individual meetings and workshops needed to be organized because they would not attend activities together with men. Some meetings or workshops would start with a two-hour women-only session after which the men were welcome as well. This offended some men who felt discriminated against and refused to further participate in *Face Your World* (Interview with Kreek, 2007). Both those working at the ward and the city council questioned this measure (Interview with Hoeve, 2007). Kreek tells me that many senior white neighborhood residents felt left out from the participation process in general because they felt it was targeted mainly at immigrant neighborhood residents (Interview with Kreek, 2007). Consequently, the design of the park does not very much appeal to him. From his point of view, the preset goal to engage those otherwise excluded from participation processes was too successful and the intent to design a park that would be supported by the whole neighborhood not successful enough (ibid). Van Heeswijk explains that such a radical participation project as *Face Your World*, which gives a voice to those otherwise unheard, is a learning process for all those involved (Interview with Heeswijk, 2007). She understands that it must have been difficult for people who are used to be the norm, the standard to become, in such a process, one of many voices (ibid).

There are two sides to the outcome effectiveness of *Face Your World*: the design of the park and the actual construction of the park. The park of 13.500 square meters is designed to appeal to different projected users. There is a sports field that can be used for football, basketball, theatre plays and markets, a play area for little children with a slide and swings, a secluded area for teenage girls and benches for elderly people or parents accompanying their children. The ultimate design tries to cater to as many wishes of the park's future users as possible. One of the critiques on the definitive design for the park is that it is too conventional, standard and uninspired (Interview with Broekhuizen, 2007; Hoogeveen, 2007; Lentz, 2007). It is a design based on compromises and as such not an inventive or challenging design. The uniqueness of the park lies in its details, a colorful fountain, a lowered area where teenage girls can talk and hang out, the trees with their multiple functions and so on. As said, three of these special elements fall outside of the budgetary limitations of the ward. Meaning that it is not certain that these elements will be realized. Compromise-based and co-designed plans will easily turn into detail-based designs because that is a practical way to tackle and integrate various and diverging wishes into one and the same design. Moreover, the working of the Interactor as a participation *and* design tool was detail-based. One cannot have 50 or even more different children working on the same canvas, deleting each other's work and overwriting it with their own ideas. In order to steer the participation between the children and at the same time guide the design of the park, the children focused on details and certain parts of the park rather than the overall design.

The construction of the park should have started in 2006 and have been finished in 2007. However, the construction of the park has been postponed till 2010. Wien explains that a school from

the region was looking for housing. The school building that had to be demolished in order to build the park was suited for this school. 'It is impossible to deny a request from a school to be temporally housed in a building that is still useable' (Interview with Wien, 2007). For the neighborhood children and citizens who contributed to the design of the park, the gap between participation and realization is rather long. Abdi told me we would not find her in the park because she is growing older and less interested in hanging out in a park (Interview with Abdi, 2007). What Wien and his team at the ward feared, that this intensive participation project would widen the gap between ward and citizens instead of closing it, became reality although in a different way then he could have foreseen. Many of the neighborhood citizens feel betrayed by the ward and the *Face Your World* team that after all this energy they put into the park, there is still no sign of it. The *Face Your World* team works hard to keep the Slotervaart residents involved in their neighborhood in a positive and constructive way. They engage them in the design of the special elements for the park, organize discussions and meetings and they still have an office close to where the Lab used to be which is open to the general public.

The postponed realization of the park illustrates Anique Hommels' theory concerning the obduracy of cities.[117] In *Unbuilding Cities*, Hommels

[117] Bijker has also discussed the obduracy of technological artifacts. According to Bijker, the impact of technology on society can be conceptualized through the hardness or obduracy of technology, a technological artifact or a technological frame. One can either experience closed-in hardness when having "a high inclusion in the associated technological frame" or closing-out obduracy when having a 'low inclusion in the technological frame' (2001, p. 15526). To be sure, technological artifacts or a technological frame will have "different shades of obduracy for actors with different degrees of inclusion" (1995, p. 285). Actors can go from experiencing closing-out obduracy (for example when not having a car in Los Angeles and simply having no choice but to take public transport, walk or bike) to closed-in hardness (when having been able to buy a car). When "the boundary of a technological frame is passed, the character of this

discusses the "confrontation between ongoing attempts to change cities (…) and the obduracy of existing urban structures" (2005, p. 7). Slotervaart has been for years now and undoubtedly for many more years to come, "subjected to 'unbuilding activities'" (p. 11). Often, the "stakes are so high that years of planning, debate, and controversy may result in no changes at all" (p. 7).

Returning to Rowe & Frewer, effectiveness needs to be operationalized (for example through participant interviews and questionnaires) so that the extent to which the effectiveness is achieved can be measured (2004, p. 542-548). At the presentation of the design of the park, people could fill in a questionnaire concerning the design of the park. Also, Den Hartoog asked the participating children at the end of the project to write about their experiences with *Face Your World*. The results of this evaluation then need to be interpreted (p. 548-552). Although some data has been accumulated on the process and outcome effectiveness of *Face Your World*, this has not led to a structured assessment of the successes and failures of the project.

Daniel Fiorino from the U.S. Environmental Protection Agency provides us with four other "criteria for evaluating institutional mechanism as democratic processes" (1990, p. 229). First of all, direct participation of amateurs (and not only of citizens in their role as professional) in decision-making should be allowed (p. 229). Concerning the two SUGs discussed here, we can deduct some interesting differences. Since *The Harbour Game* was a confrontational game, the players were all professionals. The makers of the game wanted to show these professionals the importance of

obduracy changes fundamentally" (p. 285). As an actor in the technological frame of motorism in Los Angeles the change from being car-less to owning a car also means a change from experiencing this obduracy as inflexibly and as a mechanism of closing-out to experiencing the differentiation within that obduracy.

public participation in large scale urban planning projects. *Face Your World* on the other hand involved children and adult amateurs in the design process, collaborated with citizens in their professional roles (through local organizations for example) and consulted many interest groups (for Turkish education and sport facilities in the neighborhood for example).

Second, Fiorino stresses that the level of participation should be more than "therapeutic, oppositional, or pleading" but should allow citizens instead to share in decision authority and policy-making (p. 229). *The Harbour Game* was an oppositional game and as such did not succeed in allowing citizens to codetermine policy. But then again, that was not the initial goal of the makers of *The Harbour Game*. As said, the makers of *Face Your World* had on beforehand negotiated that the results of their project would be implemented to avoid being merely a therapeutic participation project.

The third and fourth criteria by Fiorino are connected. He states that the structure of participation should allow for face-to-face discussion over some period of time and citizens should be offered the opportunity to participate on the basis of equality with both administrative officials and technical experts (p. 229-230). *The Harbour Game* was created exactly because both things had been lacking in the creation of the plans to change the harbor of Århus. The game did not succeed in overcoming these two points because it was created and used as an 'educational' game for professionals. Although face-to-face discussion was facilitated over the course of the day when *The Harbour Game* was played, this discussion took mainly place among the participating experts. The public, consisting mainly of experts but also of a group of interested citizens of Århus, did not engage in this discussion although this had been intended by the organizers (Interview with Delman et al., 2007). *Face*

Your World provided ample time for face-to-face discussion during its many workshops, meetings, presentations and the Lab's public hours. During many of these face-to-face sessions, experts in urban planning, architecture and park design as well as policy-makers from the ward Slotervaart and the housing corporation De Alliantie were present.

Besides questions on the effectiveness of citizen participation in urban planning, there is also the issue of democracy and empowerment. Certain participatory tools are therapeutic rather than empowering, others might, albeit unintentionally, create a divide between those having access to the participation tool and those not, or the tool itself might be ingrained with specific biases that will exclude certain users from taking part in the participatory project.[118] And there are of course always people who cannot or will not participate: the non-users or non-participants. Hans Harbers argues for example in *Politics of Technology* that not everyone wants to participate in direct democracy exercises (1996, p. 313). In a representational democracy people have voted for professional representatives and should thus be exempted from having to spend time and energy on familiarizing themselves with the issues at stake (p. 313). Harbers argues that consulting the public is not necessarily a sign of democracy, it might just as well be a sign of political incompetence (p. 314).[119] Whatever the case, non-users – either by choice or by other forms of exclusion – should be taken serious in public participation efforts. As Wyatt ascertains, not

[118] For a literature overview and an analysis on how GIS (geographic information system) was shaped through societal and technological influences in such a way that GIS as a participatory tool 'represents certain groups poorly', see Nancy Obermeyer (1998, p. 65).

[119] See Joseph Wachelder *Democratizing Science: Various Routes and Visions of Dutch Science Shops* (2003) for more information on participation and democracy.

only "the powerful actors" should be followed but the non-actors as well (2003, p. 78).

PURPOSEFUL PLAY

Not only needs the participation project *Face Your World* be assessed from the perspective of public participation in urban planning, for our case it is important to look at what happens, in terms of *playability*, within a geography of Serious play. For this, the core/periphery model of differentiation will be used to analyze the Interactor.

Face Your World is a mixed media participation trajectory with the Interactor, a photorealistic 3D design software application, at its core. The Interactor is created for children aged 8 to 12. The Interactor software is a game-like environment that guides the players through the different stages of a design process: exploration, sketching, discussion and designing. Throughout the process of playing with the Interactor, the participating children were 'guided by a group of experts in the fields of urban planning, design and landscape architecture' (Heeswijk, Kaspori, & Mosterd, 2005-2006 weblog). The computers on which the Interactor was played were installed in the Stedelijk Lab.

Serious Games, persuasive games or Serious Urban Games might stretch an essentialist's definition of 'play' or 'game'. There are, for example, no winners or losers amongst the users of the Interactor, no handbook explaining complex rules, no increasing levels of difficulty and no 'boss fights'.[120] However,

[120] A boss fight is a type of battle in a computer game against a powerful enemy. Typically, boss fights take place at the end of a game level and the

some distinctive game-like features characterize the Interactor. Within a rule-based, programmed and designed environment, players are represented by an onscreen character and encouraged to explore, build and construct. They can 'drag and drop', 'pick and choose' from the extensive library and add their user-generated content to this library. The basic rule of the Interactor is that players have to participate, communicate, cooperate and collaborate if they want to make progress. The four phases of the game do represent to a certain extent levels, although these levels do not demand an ever-increasing finger twitching and button pressing capacity of the player but accumulating insight into urban planning and design. Although not all the mechanisms or ingredients of an essentialist definition of entertainment games are present in the Interactor, the software is built upon a game-like engine and looks and operates like many entertainment games. Furthermore, it knows implicit (e.g. courtesy towards other players) and explicit (e.g. design a park that is supported by the whole neighborhood, cooperate with other participants) rules, it involves many different 'players', it is progressive and invites the children, to a certain extent, to role-play.

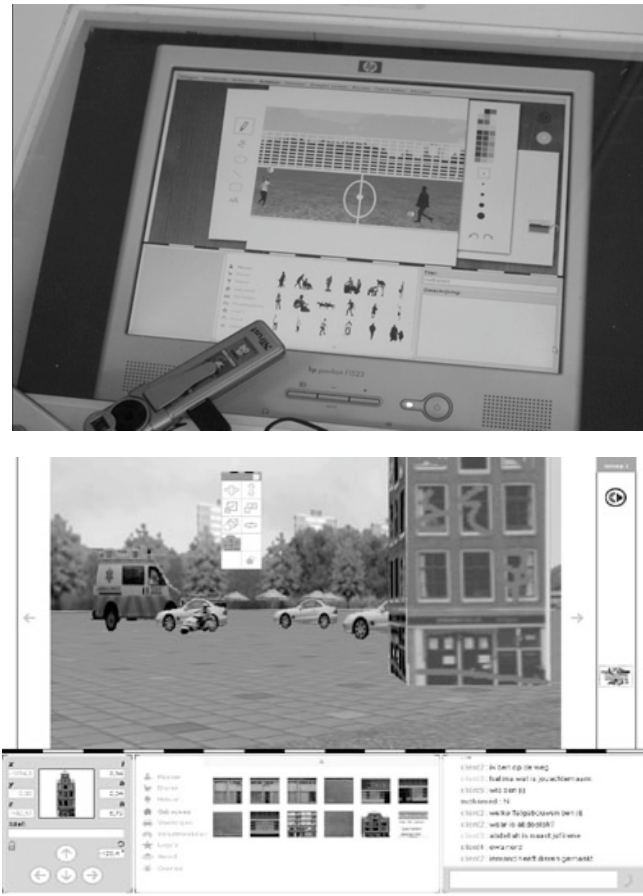
During the first phase of the Interactor, children enter their digitalized neighborhood and start exploring the controls of the game. They are represented in the game by a standard onscreen character. A picture of the player's face can be mounted on this standard onscreen character.

When the participants have familiarized themselves with the workings of the Interactor, they are asked to take a picture in the game of the area they would like to work on. This picture serves as their

player needs to win this battle in order to move on to the next level. Boss fights are difficult and will need many retries.

canvas on which they can experiment, explore their ideas and try out different solutions. In this second stage of the game – the sketching phase – children work individually. They can draw on their picture and add objects from the library to this sketch. This library consists of more than 400 digital pictures categorized as nature, people, animals, buildings, vehicles, street furniture, logos, ground and miscellaneous. Importantly, children can also add elements to this library. They can take pictures of real-life objects they find important and add these to the library. They can design objects themselves within the game or alter existing objects from the library. During *Face Your World* Slotervaart 1207 objects were added to the standard library consisting of original drawings, adaptations of existing objects and pictures taken by the children of their neighborhood. Through this feature, children can, to a certain extent, add to the facilitated core of the geography of Serious play. In adding items to the library, children expand the tools with which they can design the park. This form of fast centripetal appropriation whereby objects made in the periphery become part of the core is a way in which the participants can co-configure the user, can co-determine the designed artifact and their own tools for participation and design. The children participating in *Face Your World* Slotervaart made a total of 1216 sketches in this phase of the planning project and Kaspori considers this the most creative phase of the process (Interview with Kaspori, 2007).

Third, children discuss each other's sketches, vote for the best sketch and write down why they have voted for that particular sketch. Lastly, children enter the multi-player mode and have to start designing. The designing phase is directed at cooperation between the children, they have to agree on how to design the park and work together to realize their ideas (Interview with Heeswijk, 2007). In this fourth phase, the objects from



Illustrations 63 & 64: The top image shows the Interactor during the sketching phase. At the left and right side of the picture on the monitor we see tools and colors for manipulations and sketching. The digital camera at the children's' disposal is seen at the bottom (image courtesy of Van Heeswijk). The second image is a screenshot of the designing phase of the Interactor. We see in the left-hand corner the controls to rotate and scale objects, in the middle we see the library and on the right-hand we see the chat screen (Heeswijk et al., 2005-2006 weblog).

the library can be scaled and rotated and the objects that were added to the library by the participants, can be used. To realize their ideas, players need to communicate and cooperate. The discussion option of the game is facilitated through a chat function. But in practice, children will also communicate verbally about what is going on in the game.

The core of the Interactor is shaped by the design of the game in combination with the discourse on the game. The Interactor facilitates experimenting with design options for a public park. This experimentation is guided by elements such as the size of the game canvas, the objects in the library, the embedded tools for manipulation and personal design, the municipal restrictions and requirements for the park. Besides these design characteristics of the Interactor, the discourse surrounding *Face Your World* influenced how the children would use the Interactor. The meetings, workshops, excursions, specialists and experts who guided the children in the design process shaped this discourse. For example, what sorts of images were shown to the children during the workshops or what types of parks were visited during the excursions and served as good or bad examples of public parks? Broekhuizen hinted in the interview that the discourse communicated to the participating children (e.g. through showing them specific pictures of parks and not others) was rather biased (Interview with Broekhuizen, 2007).

The important question is what happens with or to the periphery of a geography of Serious play. The *Face Your World* team was relying heavily on divergent activities, on unforeseen design solutions and creative input from the participating children. Kaspori considers *Face Your World* Slotervaart a success because he could never have come up with this particular design himself (Interview with Kaspori, 2007). When a game becomes Serious and its aim lies

outside of the realm of entertainment, the periphery becomes highly important and looses part of its autonomy and inconsequentiality. Designing a park was the ultimate goal of *Face Your World* and deviating from that goal was therefore not an option. *The Sims* fans might come up with outrageous and unforeseen additions to the game, as long as they are commercially feasible, sustain the brand and work with and not against the user communities, they are applauded and welcomed. Participants of *Face Your World* see these freedoms restricted by the goal of designing a park that will have to be supported by the various age and ethnic groups in the community, the preset conditions of the municipality and the design tools they are offered to work with. Much of the basic layout (green, entryways, pathways) of the park was already determined in the municipal list of requirements for the park. Inside these predetermined parameters the area for both facilitated and peripheral play activities and traffic between the two areas was limited.

Within SUGs, participation between the players, the many-to-many culture, is not an anticipated and hoped for or carefully orchestrated and sustained effect of a successful game, as in entertainment computer games for example, but the very *raison d'être* of these games. As such, it moves from the periphery to the core. Participation and 'by us for us' activities transforms from divergent player behavior in the periphery of a 'healthy' geography of play to an embedded and facilitated core activity. The Interactor is about creating and designing a park together – for 'us' and by 'us'. The previous chapters indicated the increasing tendency of both toy and computer game companies to tap into the many-to-many community and commodify divergent player activities. In Serious geographies of play, the many-to-many culture and its activities are not so much

commodified as they are instrumentalized: the many-to-many paradigm is facilitated in the core and its results are put to use.

Because of this purposefulness of SUGs, their instrumental character and nature, the periphery shrinks and the core is relatively large and takes up most of the geography. The shrinking periphery in the geography of Serious play looses both its ludic inconsequentiality and autonomy and its relative power over the core. The outcome of public participation projects is of such importance to so many different stakeholders that there is little room for divergent play activities. Peripheral activities will only be incorporated within the core when useful to the projected outcome of Serious play. As such, the core of the geography of Serious play is a strong and coercive one, as in Strassoldo's first model of core/periphery relations (1980, p. 39). In this model, 'commands flow from the centre to the periphery' (in the form of the preset process and outcome effectiveness of *Face Your World*) 'while information travels in the reverse direction' (the neighborhood's wishes, hopes and ideas for the park as well as the objects added to the library by the participating children) (p. 39).

In this there is an interesting parallel to draw between garden cities and *Face Your World*. Both are designed to solve urban problems. While the historical garden city was an attempt at solving problems of urbanization (such as population density and pollution), *Face Your World* was organized as an attempt to solve some of the problems that pester contemporary garden cities (such as dilapidated public spaces and feelings of threat in these public spaces). Both adhere to a strong core. Garden cities are often mistaken for yet another form of suburbanization, but they are, as historian of science and technology Lewis Mumford stresses, "the antithesis of a suburb" (1965, p. 35). Howard did not want to 'break down the dis-

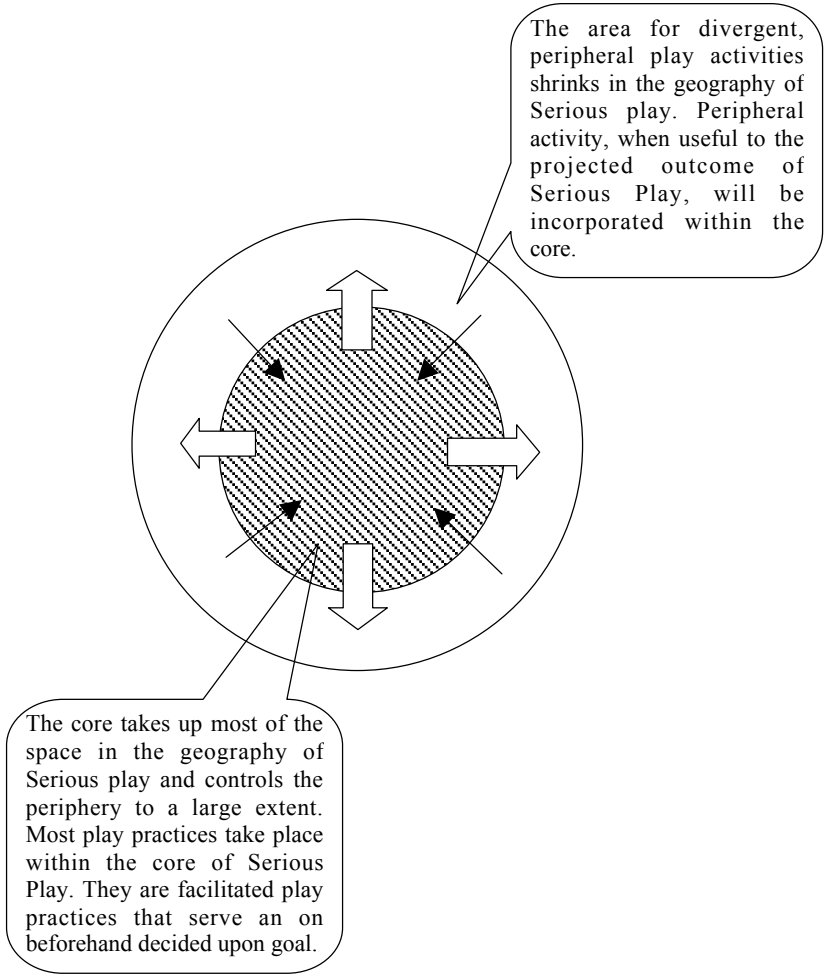


Figure 8: Geography of Serious play with a small periphery and an outsized core. 'Commands' travel from the core into the periphery and information travels from the periphery into the core.

tinctions of town and country, turning them into an amorphous suburban mass' (p. 34). On the contrary, the garden city "is a rather compact, rigorously confined urban grouping" (p. 34). Likewise, the geography of Serious play is compact and rigorously confined because the outcome of play is anything but trivial or ludic but highly significant and serious in terms of individual careers, financial commitments and stakeholder relationships. Within the geography of Serious play, both core and peripheral play practices are closely monitored and studied.

In the shrinking periphery of Serious play, the space for playing *against* the design or designers decreases. The game facilitates the playing *with* the design. Anarchistic play practices are neither facilitated (although this might sound like an oxymoron, computer game companies will often facilitate anarchistic play) nor does the periphery provide enough space for players to manifest such practices of play.[121] The option to add objects to the library of the Interactor is the only way in which users can appropriate this designed artifact.

We have seen in relation to the many-to-many model in geographies of entertainment play how the periphery gains in importance while at the same time losing some of its autonomy. With SUGs that are created and used for public participation and public co-design in urban planning, the stakes are high and the outcome of the interplay between core and periphery loses its ludic inconsequentiality. As such, the nature and goal of traffic between core and periphery changes from commercial success, strong brand image and vital user communities in entertainment games to trust- and community building, education and design in SUGs.

[121] An interesting example in this case is the hacking function that was programmed in the *Enter the Matrix* (2003) game. Hacking this game is not a subversive, anarchistic ploy because the designers have embedded the hacking function in the code of the game.

SUGs push the masking of work as play (De Certeau's upended *perruque*) further because play becomes utilitarian, purposeful and outcome-oriented. SUGs take the many-to-many model to the streets and maximize the tapping into the can culture of users.

This brings about changes for both players (who are now playing 'for real' and involved in Serious play) and designers (who need to examine play practices in order to generate useful content). Both these stakeholder positions change within a Serious geography and both parties will need to readjust to these changes. Broekhuizen, for example, had a hard time adjusting to the fact that his role and function changed from the one designing the park to the one monitoring children designing the park (Interview with Broekhuizen, 2007; Hoeve, 2007).

In chapter three we saw how in the geography of LEGO play not only play practices were on the move between core and periphery but also types of players. While in the LEGO geography adults are becoming more important, in the Serious geography, children can become lead users. Since SUGs are participatory games meant to engage citizens in urban (re-) development, it is difficult to speak about lead users. The goal of SUGs is to involve exactly those users who are otherwise and commonly left out. However, the school classes participating in *Face Your World* as part of their school curriculum formed the core group of participants. They used the Interactor most often and they had to incorporate the wishes, ideas and suggestions of other children and adults that came up during public hours or special activities, into their design. By appointing children as mediators between the neighborhood's wishes and the actual design of the park, these children became in a way lead-users. While the LEGO Company increasingly turns towards adult fans for product development and brand support, policy makers and urban planners

sometimes turn toward children for urban (re-) design and community building. *Face Your World* as a participation process tapped into the can culture of children.

SERIOUS GEOGRAPHIES OF PLAY

This chapter has served a double purpose. On the one hand it has addressed, through the analysis of a SUG by means of the core/periphery model of differentiation, characteristics of geographies of Serious play. On the other hand, it has lifted the many-to-many approach outside of the context of entertainment games. This chapter has taken one 'Serious' field in which the many-to-many approach is utilized as its main focus: public participation in urban planning. More specifically, this chapter has looked into computer game-based approaches to public participation in urban planning. The attractions of new media tools and their many-to-many potentials are manifold and their application has been steadily increasing. By zooming in on the large-scale participation trajectory *Face Your World,* this chapter has taken a closer look at some of the advantages and disadvantages of SUGs and addressed aspects of the nature, characteristics, mechanisms and problems of the many-to-many paradigm.

With SUGs, crucial aspects of a 'healthy' geography of play, such as a vibrant and expansive periphery for divergent play, easy transfer between core and periphery of play, a certain amount of influence of the periphery over the core, the triviality or purposelessness of the ludic, are compromised. With the increasing commodification of the many-to-many

model within toy- and game industry, we have seen how the periphery at once gains in influence over the core and looses in autonomy. The fact that SUGs are Serious further erodes the autonomy of the periphery without increasing its influence over the core. The core takes up most of the space within the geography of Serious play because the outcome of playing these games will be put to use. The many-to-many culture is not commodified so much as instrumentalized in this Serious context.

Public participation in urban planning through game-based new media applications intends to maximize the many-to-many approach. In the previous two chapters we have seen how players increasingly become (co-) producers and (co-) designers of the next consumer product, thereby partaking in the cycle of production>marketing>consumption on various levels and at different stages. With SUGs, players become (co-) producers and (co-) designers of their neighborhood and built environment. Through SUGs, players can enter the cycle of policy-making>design> implementation. SUGs are intended to open not only the black-boxed, obdurate city but also the equally black-boxed processes of policy-making. However, as we have seen, SUGs are themselves black-boxed systems in that they do not facilitate the participating public to design their own tools for urban (re-) design.

From assessing *Face Your World* along the lines of the media and tools used for public participation and the participation trajectory as a whole, we have been able to identify what makes this project unique and successful. Both the intended process (involving remote stakeholders) and outcome (community supported park design) effectiveness were realized in as far as they were within the control of the *Face Your World* team. The participation trajectory was designed to involve different ethnic communities and different age groups, to go beyond tapping into

lead user knowledge. Indeed, many people participated who would never have been found in the city hall during a conventional meeting or hearing on urban renewal plans for Slotervaart. The outcome is the design of a neighborhood park supported by the ethnically diverse residents of Slotervaart that contains their wishes and requests (e.g. a fence around the park, benches, a picnic area). The different forms of participation and media (non-digital and digital) that were used explain, in part, this success.

In considering a participation project such as *Face Your World* in the context of democratizing participation and policy-making, it is important to keep the intended effectiveness in mind. Process (involving remote stakeholders) and outcome (community supported park design) effectiveness of *Face Your World* were decided before the neighborhood residents became involved. Participation thus fell within these parameters or boundaries. The suggestion of many teenage girls to build a shopping mall on the piece of land that would be made available for the park, was therefore not a feasible option nor a suggestion the *Face Your World* team could act upon (Interview with Hartoog, 2007; Heeswijk, 2007). Nevertheless, within the given parameters of participation and the intended process and outcome effectiveness, *Face Your World* can be considered as a process that effectively democratizes a particular aspect of the design phase of an urban renewal plan. Remote stakeholders in general and children in particular were given the chance to become part of urban redevelopment plans. Kaspori made the final drawing of the park but he did not alter or translate the design made by the children with the Interactor (Interview with Kaspori, 2007).

In the same sense that the many-to-many approach within consumerist practices is not the ultimate empowerment of the consumer because power is in the hands of the companies who choose to blur the

lines between player, consumer and producer and to tap into the user-driven can culture; the many-to-many approach within policy-making is not to the ultimate form of e-democracy. The largest chunk of power is in the hands of those designing policies and tools for exercising e-democracy and deciding when, under what terms and conditions and in which format to involve the public. However, in consumerist and participative practices, a window of opportunity for making-do opens when stakeholder positions implode and users are invited to partake in the design of consumer goods or urban renewal plans.

The shift within this chapter from entertainment toys and play to Serious games and play alerts us to 21st century aspects of the interaction between the individual and the processes of commodification, domestication and urbanization. The attractions of the many-to-many model reach far beyond the world of computer games. This model of user-involvement that has been so successfully used within many commercial domains, has caught the attention from and been experimented with by more 'Serious' domains such as journalism, politics and policy-making.

Face Your World literally takes the many-to-many approach to the streets and utilizes it to facilitate public participation in the design of a new neighborhood park. Although *Face Your World* took children out of their private rooms and private homes, the goal was the very domestication of the outdoors through the design of a neighborhood park with safe and child-friendly play facilities. Through participating in *Face Your World* by means of the Interactor, the city or outside world was presented to the children in a containable version emptied of all the real life problems pestering the neighborhood. For once, their neighborhood was tamed and domesticated and could be manipulated. Also, it gave children a 'passport' into

their neighborhood. They had to make pictures and talk to local residents, they had to take stock and gather information for their project.

In general, this game mediates, as did the construction toy towns and *SimCity*, between the city and the child. It actively attempted at reestablishing a working community and a positive relationship between city and citizen through the participation in the design of a new neighborhood park. More specifically, SUGs mediate between urban change or unbuilding practices and the public. SUGs are aimed at generating discussion, (re-) creating relationships, generate a common purpose amongst neighborhood inhabitants and re-establish some of the social glue that has been lost in ever-expanding urban areas.[122] Historically, the city was the core, the rural area the periphery. With the increase in suburbanization in the course of the second half of the 19th century, we see a shift in the relationship between the city as core and what constitutes the periphery to that core. Would rural areas constitute the periphery of the early urban centers, the suburb becomes the 19th century periphery of the city. The white-collar, middle class families who had first inhabited the city or the core would leave and settle in the suburb. Immigrants and newcomers from rural areas would settle in the city (Wade, 1971, p. 75-76). Gradually, the suburb became the periphery and then, when both urbanization and suburbanization increased, many built environments lost all reference to either core or periphery. Los Angeles, Tokyo, Mexico City and Sao Paolo are notable examples of the resulting urban sprawl. Public participation projects such as *Face Your World* try to reestablish a meaningful relationship between city and citizen through the creation of a core within urban sprawl.

[122] In 2008, more than half of the world's population (3.3 billion people) will be living in urban areas the United Nations Population Fund reports (UNFPA, 2007).