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► **To cite this version:**

Petra Marguc. Game boards and turning tables. Play and Game in transversal design.. CA<sup>2</sup>RE (Conference for Artistic and Architectural (Doctoral) Research), KU Leuven Faculty of Architecture, Apr 2017, Ghent, Belgium. pp.136-145. hal-04447674

**HAL Id: hal-04447674**

**<https://hal.science/hal-04447674>**

Submitted on 8 Feb 2024

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## Game boards and turning tables

### *Play and Game in transversal design*

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**Abstract.** The urban game TabulaRosa was developed by Polimorph as support structure to stimulate the invention of possible futures together with a variety of actors towards the transformation of our living environment. Looking back at seven productions of the urban game either as cultural event or within urban planning and architectural design projects, this presentation will explicate why distinguishing play and game is relevant for transversal design and what opportunities and risks do occur when applied to participative design processes. What kind of transformative power do play and game have on our living environment? What is the impact of the gaming environment on pleasure, for socially robust knowledge and abuse of power? How do player mechanics anchor visions in a place and stimulate the imagination of new worlds? Play and game as a framework for collaborative design processes raise questions about collective decision taking and the empowerment of stakeholders who are usually further away from decision taking and action. Game boards frame the conditions for how to play. Can they become turning tables to alter the relationship between the players, to create a better equilibrium between the powerful and the powerless?

**Keywords.** urban games; play and game; storytelling; knowledge; participation.

### **Interaction games for the city**

In autumn 2016, I attended a European workshop on games for cities. I was among some thirty researchers (game designers, urban planners, architects, philosophers, policy-makers and political actors...), exploring the potential of games to make Amsterdam a circular city, a more systemic, more sustainable city with more performative exchange. The idea is that the more we appeal to the crowd, that is to say to each one, to contribute to feeding the system, with time, data, and ideas, the more we facilitate exchange, the more we increase the performativity of the system. The game can be an incentive for that.

I discovered a joyous field. I also discovered on this occasion that after several years of producing games in the city, I have acquired some implicit skills. In fact, my professional practice as an architect, urban designer and teacher has already evolved as a result of these experiences of urban games. Today many things go without saying for me. For instance, (1) mixing different parties around a support system that puts them at equal distances to the field, regardless of their initial status, regardless of their backgrounds and their opposite desires, despite the fact that they do not have the same power, expertise or legitimacy; (2) intertwining the real and the play by injecting play when transforming the real world and anchoring games in the real world when conceiving a framework for play; (3) restoring the "outcomes of the game" as one possible interpretation of many to all players, in order to transpose them out of the play and to enable collective deliberation.

### *To play or to be played*

Moreover I have found that in the emerging field of City Games, background issues such as "are we going to play or are we being played" or the goal of the game remain

entirely open for debate. The purpose of urban games and the position of players, for example, is not self-evident: Is it a game of leisure, a game to collect data, an educational game, a negotiation game, a teambuilding game, a game for invention, a strategic game or a game of power? Between getting a person playfully to behave in a certain way, or stimulate a person's imagination through playfulness, encouraging exploration without serious damage, without imposing loss of credibility or legitimacy, in short, allowing the drift despite an uncertain outcome, there, it is not the same type of game at play.

### *The game for city making or the city as playground*

Beyond game designers who use the city as a playground, there are urban cultures, often artistic or borderline, which use the city as a playground, exploring by seemingly off the wall forms of practice our daily relationship to the living environment ([www.polau.org](http://www.polau.org)). There are entire cities for thousands of people emerging literally out of the desert for the time of a fest, like Black Rock City during the Burning Man Festival in the Nevada desert. There are projects that slide into the very process of urban production, and playfully shift the relationship between the making, the form and the actors, such as the project Trans 305 by Stephan Shankland ([www.trans305.org](http://www.trans305.org)). The Giants spectacular by Royal de Luxe in Nantes transform the entire city into a stage of spectacle inhabited by characters as large as five-story buildings, who live and move in town just as we do, we humans become Lilliputian servants to the Giants ([www.royal-de-luxe.com/fr/les-creations/saga-des-geants](http://www.royal-de-luxe.com/fr/les-creations/saga-des-geants)).

Personally I am fascinated by the relationship between territory, things and people. Everybody practices space, hence everybody has some implicit knowledge about space. As an architect and urban designer, I am fascinated by the embodied know-how that already exists in a territory, and about building within that knowledge. Perceiving and conceiving the relationship between things, people and their environment is at the very foundation of my professional practice called Polimorph. If a configuration of people leads to the production of an object, can the creation of an object lead to a reconfiguration between people? The material territory would be the anchor and common ground of both. This interest in exploring relations is reflected in the three strands of Polimorph activities: (1) developing support structures, instruments and approaches for an integrative design processes, (2) applying those in spatial design projects and (3) sharing these experiences publicly.

In order to explore the nature of the knowledge acquired, I chose to revisit one single project, the urban game TabulaRosa, which Polimorph produced seven times in six years. TabulaRosa, which is also the first project that Polimorph produced, aroused much interest and reactions and it is also the project that has been most widely published.

### **"Play" and "Game", between futile and utile**

What is the potential of Play and Game in the design process, what is the transformative power of urban games on our environment, between enchanting individual and collective imaginary on one side and ethical risks and abuse of power on the other side? What is the place of the player between game boards and turning tables? At present I'll retain three definitions of play which provide a different angle to look at space and time in design processes.

“Play” can refer to:

- the choreography of movements, for example between people on a stage in a theater play, or the play that refers to a performance, of a musician for example.
- the space between two parts that ensures a possible adjustment under tension, in the field of mechanics or the expansion joint in construction.

the safety margin in being ahead; Having a reserve of time or money makes it easier to take risks, take a different path, test a different configuration, to see what would happen if I'd do something new or differently than usual.

Although dictionary definitions are close, transposing “game” and “play” between French, English and German is not entirely possible, because the concepts refer to distinguished cultural contexts. In English, the distinction between the two terms "play" and "game" enunciates two opposite concepts of playing. "Play", rather refers to a playful activity, with no precise goal, strolling, such as a child's play, being carried away by what happens, aspired by the instant, playing freely from one moment to the next. “Game”, on the other end of the spectrum, refers to an activity with a goal, an objective to be reached, according to rules, in a constrained space. Sometimes there is a mixture of the two. This distinction can also be found in game theories. “In his expansions of Johan Huizinga’s game theories (1956) the French ludologist Roger Caillois postulates an essential differentiation between play (*paidia*) and game (*ludus*) (cf. Caillois 2001/1958 in Mitgutsch K., 2008: Digital Play-Based Learning, Human IT 9.3, p.28)

Whether it is a game with a specific goal, or whether it is playing in "stroller" mode, what is common to both is that in "player" mode, we do things differently, we take cross-roads, explore new relationships, put on other perspectives than usually. Another characteristic of “playing” is the uncertainty about the outcome. For a design process, it is the quality of drifting, drifting with others, which interests me, being receptive towards the uncertainty of the outcome of the game, as well as the capacity to make new configurations apparent. However, when meandering playfully or playing target oriented games, when playing in the city, the stakes may not be the same, what is played can be more or less serious.

Examining the different configurations in which TabulaRosa was produced, I will lay down the relationships between participants, instruments and territories, see how the game environment and player mechanics impact the ability to play, and in reverse what could motivate the use of play and game for transforming a territory. I will also look at the enjoyment aspect, I am intrigued about. How come that after playing TabulaRosa, the majority of participants describe the pleasure they experienced? For the first productions this feedback was received in informal conversations, then we recalled more consciously the players’ experiences in form of sound or video recordings and questionnaires. The concepts of Game and Play to which I would add Joy are useful filters to understand the dynamics happening through TabulaRosa.

This work is part of my research by design PhD on "Middle Margins, the art of generating a dynamic balance in transversal design". I have previously treated the subject of transversal design processes and the catalytic role of action protocols and relational objects to set them in motion. I have also spoken about the lure of considering the material world as an objective reality, for depending on our angle of view we don't see the same thing, the same thing does not have the same meaning depending on who is looking (“Middle Margins Matter, Protocols of action and relational objects to nurture shared presentations and to move forward in transversal design”, ADAPTr Practice Research Symposium London, November 2016; “Transversal design processes, Potentials and challenges”, ADAPTr Practice Research Symposium Ghent, April 2016). As an architect, in charge to transform the material world, it is therefore a challenge to put a socially shared “truth” together.

### **TabulaRosa, an urban game in the context of seven productions**

Between 1998 and 2002, I have been experimenting scenario game techniques with Raoul Bunschoten and Tak Hoshino in Chora and with our students at the Architectural Association in London. I wanted to take these explorations out of an academic

environment and confront them within a professional practice on the ground and see how that would evolve.

TabulaRosa began there. With my colleagues at Polimorph, we worked on the game environment, simplified rules, improved the user experience, worked on a more explicit and shareable restitution of the game's outcomes.

Since 2004 we have produced TabulaRosa seven times: three times as a cultural commission on public space and the city (Festival des Architectures Vives, Festival Rayon Frais, Printemps de la Démocratie), two productions were in view of large scale urban renewal projects (Pari Passu Paris, PLU/PADD Tours), another two TabulaRosa were produced within architectural and urban design commissions (Medico-Social Center Saint Martin for Mentally Disabled People, l'écohomeau du Champ Foulon). Although the game environment, the preparations and postproductions differ depending on the type of command, the structure of the game remains the same.

TabulaRosa is played around a game board. The goal is to redesign a situation, the city, a territory, by four people together and to see what emerges from this interaction. Let us suppose that ideas pre-exist among the people within a territory. The interactive structure of the game provides the framework to bring out the peculiarities that already exist and to weave them into a common vision, a vision that remains palpable and rooted, because imagined with elements from reality and by real people. Ideas, desires, needs are brought on the table and played out in form of a polyphonic narrative. Sometimes these scenarios generate unexpected configurations and project ideas.



Figure 1  
TabulaRosa produced PLU/PADD 2009 Tours.



Figure 2  
Game environments production FAV 2004 Paris.

### *What does one do when playing? Between game, play and pleasure dynamics*

Decrypting what one does when playing TabulaRosa, using the distinction between game, play and joy, one can identify four levels of play in which the participants evolve and interact. These four levels coexist as game boards and projection screens at the same time.

Real territory: the first level is the real territory that one wants to put into play. There are real stakes, interests and needs that are often opposed, "real plays of actors". We know that there are games, and at the same time we often do not know what is being played and according to which rules.

Frame of the game: the second level is a map, a representation of this territory, augmented by a few extra elements to transform it into a game board. The real territory is hoisted within the framework of the game: then we know that this is a game with shared implicit or explicit rules. Around the game board, four people of different backgrounds (resident, professional, decision-maker, politician, artist, etc.)

and an animator begin to play. The animator can be part of the four players (for beginners) or can animate the player group from the outside (for more confirmed players). He or she is a stirring character with some expertise of the real stakes at play, he can be a member from the community of stakeholders, a member of Polimorph or an invited external person. Starting from a real situation within this perimeter, and according to some simple rules, the players construct a story together, similar to the game of consequences, a magic story written by a group. The first player adds a sentence to the observed situation by stating "who is doing what where". He draws the sentence on the game board. By adding one sentence to another, the group constructs a story. After a few rounds, the players receive a stake that they must integrate into their stories. (example). Progressively the initial situation evolves towards a fiction written by several voices.

Scenarios: The third level is the reconfiguration of the territory as played out in the polyphonic narratives. It is in this fictitious narratives that the group provokes transformations of the territory and in which are negotiated postures and ideas of the players, but via the avatars they place in the story. A kind of real utopia, in the sense that it is a fiction, based on the reconfiguration of real elements brought into play by real players. Bonds to the territory are maintained via the game board. These stories have to do with a kind of automatic writing: although the animator invites each player to introduce the will of his avatars and to bring about changes in the territory via the game, no player can control alone by himself the thread of the story, as in reality. The interest of the story lies in its double bound, being fictitious and anchored at a time: the players put their actions in the thread of the narrative and imagine situations of cause and effect between their words; by drawing the action on the game board players exemplify each act. This avoids generalizing expressions and urges each participant to transpose an experience that came from elsewhere into the narrative of a shared context within a territory at stake.

Imaginary landscapes: The fourth level reveals fragments of ideas, objects, situations, that emerge from the interaction during the scenario. All of a sudden we see things we have not seen before. Often these figures are perceived as sudden illuminations, like momentary resolutions of forces. These figures carry in them the desires, the constraints, the fears, the dreams of the avatar characters created by the players.

#### *How to enter the game? Game environment*

For the first commissions at festivals, the production of the games was of the order of an event. We felt it necessary to create a gaming environment that gives people a desire to participate, which provides satisfaction and gives meaning after the event. We have designed a spatial setting that exposed all the stages of the game, including possible outcomes, in order to help imagining what a participation in the game TabulaRosa could lead to. The more embedded the framework in which the game is produced, the less it is necessary to set up a gaming environment.

For the Medico-social Center Saint-Martin or for the extension of a village in the Vexin, participants were motivated to play because TabulaRosa was part of the overall project development and they wanted to test via this technique several development hypotheses of a project in progress: What if the village of one hundred houses would expand by another fifty houses, how would village life evolve? What if the Medico-social Center Saint-Martin would replace some single rooms by apartments for couples with mental disabilities, and what if babies were born into the institution as a consequence?

These are substantial issues that can often lead to dead ends between stakeholders on the ground. Opposite worldviews may seem irreconcilable, the stakes seem so important for each party that there is little room for other solutions to emerge. Stakeholders often do not dare to advance on unfamiliar ground, to allow speculation that may prove meaningless. Superimposing a game framework on a real situation changes the modes of exchange between actors. From one level of play to another, relationships can relax, thought and expression free.

It is the producers of the game who have the responsibility to contextualize the game and create an environment that puts the players at ease. In the upcoming stages of my research I will explore what kind of public behaviour can be used to overpass professional jargon, create desire and nurture constituting inter subjectivity, what techniques of communication including multisensorial experiences foster shared language among actors.

### *Why juggling multiple identities is constructive? Player mechanics*

The game takes on its full meaning when one plays with several players and when one plays with real actors. These are two key aspects that make for strong links between reality and fiction. The more players come from different backgrounds, with different interests, different views on the issues that occupy the territory, the more relevant the interacting play. I observed this aspect for the first time when we moved with the development of scenario game techniques from an academic environment playing with students only to a real territory with real stakes and playing with real actors. This first observation grew gradually into insights when evolving with TabulaRosa productions from cultural events to productions within design commissions. The fact that playing with real actors becomes more pertinent, may seem obvious, yet even in projects guided by a willingness to collaborate on the part of the clients, we often have to negotiate with the powerful actors so that the people representing different sectors and legitimacies mix with each other. To play can be fearful, as it means forgetting for a time the real role of each actor, to overthrow for a time, as during carnival periods, the relations of power that prevail in reality.

To play, we start from a real territory with real actors. From the moment he or she decides to participate in the game and sits down at the gaming table, the actor becomes a player. The rule of the game of saying a phrase in turn to construct a scenario with several voices makes him become a narrator. The player is not supposed to play his or her own role in the story, but to project a character, an avatar. Each participant is therefore several identities in one: a field actor, a player, a narrator and an avatar.

These player mechanics represent a double interest: the structure of the game loosens the actor from his representations, the speech becomes freer. The mayor, for example, is no longer obliged to speak as mayor. Through his avatar he can make express a character of father for example or criminal or anyone else. The narrator has the freedom to grant his character powers and capacities different from those in reality. At the same time, I observed that while taking the freedom to choose characters, participants draw on their real experiences, their skills and their knowledge of the territories and the problems that arise. Implicitly, the fiction remains anchored in the real territory, through the participation of the real actors.

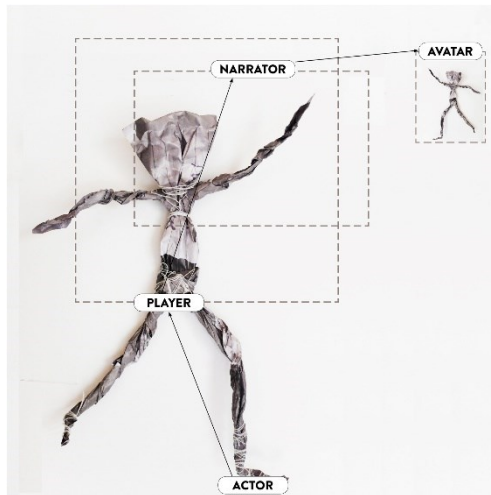


Figure 3  
Player mechanics.

### *How to exit the game? Reconnecting game and play to urban dynamics*

To get into the game and stimulate the group of actors to think the unthinkable, to go beyond the "reasonable", (which can be of the order of feasibility, self-censorship, representation), there are facilitating elements described before, such as the game environment and the animator. What about the reverse path? How to exit the game and reconnect the experience back with real territory and everyday life? Where is the benefit of the game for the urban fabric, for the participants, for the future project, for the professionals?

The figures (fragments of ideas, objects, situations) that appear from the interaction during the scenario on the level of imaginary landscapes, are interpreted, edited and transposed back into the field by programmatic, strategic and social spin-offs, design principles, project partnerships. They are presented publically for debate and deliberation by a procedure of gradual stepping out of the game and stepping back into the real territory. According to returns on the seven productions, playing TabulaRosa has an impact on the participants as a type of collective learning anew, it is utile for crowdsourcing and testing design reconfigurations, it provides joy. It also proved valid for preparing multiple actors for collective deliberation, to evaluate projects and choose directions for further development. Each time a range of project proposals resulting from the playful interaction was presented for debate, the public choose design priorities which were in coherence with the experts positions. However, a direct transposal of the imagined projects coming out of a collaborative interaction towards their realization within the conventional construction framework meets obstacles. The restructuring of a housing pavilion, which resulted out of the study for the Center for the mentally handicapped people, where we have used game techniques such as TabulaRosa, stopped after an obtained building permit and tender. Gilles Brougère remarks that "as long as we remain in the confrontation of contents and finalities, one has to note the tension that opposes them and the dead end we find ourselves wanting to reconcile them." (translation from Delory-Momberger, Ch.: 2006, G.Brougère, Jouer/Apprendre, L'orientation scolaire et professionnelle, 35(3), pp.479-481). Still, what aspects can be assessed for this form of design would need further explicitation. Can we assess the process, the result of a process, or something else? How can we translate all the objects which are produced in the process, which are in a way a testimony of the actions that were involved in a process like playing games in a real territory? How to collect these materials?



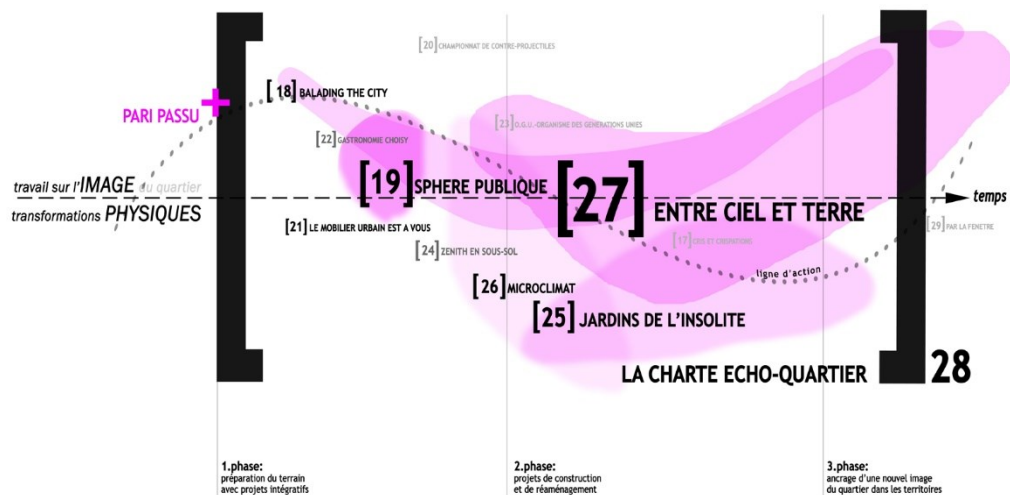


Figure 4  
Development strategy orchestrating urban prototypes in time, Villa d'Este, Place de Vénétie, Paris, 2006.

### Informal learning anew

Including a variety of actors in playing out development hypothesis together is not a question of replacing the expert knowledge with the knowledge of the field, but of crossing the knowledge of the professionals and enriching it with the know-how practices produced by users on a daily basis and by stirring outsiders. Based on the feedback we receive, the participants testify to their unexpected learning, in spite of the non-professional aspect that some can lend to the game and despite the fact that it takes a little time to 'play well'. Often participants ask to play a second time. According to Gilles Brougère, "the game refers both to a singular individual experience and a form of collective participation, to a culture. The second degree in relation to the same activities of ordinary life is sought. (I know this is a game). The game itself has educational potential as it transforms external elements by giving them new meanings, and as a process that affects a change in knowledge and received ideas. Play is not a matter of objective characteristics of the activity that are not specific, but of how this activity takes on meaning for an individual or in the communication between two or more individuals."(translation from Delory-Momberger, Ch.: 2006, G.Brougère, *Jouer/Apprendre, L'orientation scolaire et professionnelle*, 35(3), pp.479-481, URL :<http://osp.rvue.org/1033>). The framework of the game provides modalities to think the present and to test hypotheses of future development, re-learning can be done in situations that are not intentionally built for.

### When to play games in design processes

This form of interaction is not useful for all projects. It is of interest for projects looking for innovation, going beyond the beaten track, and for project situations with a certain complexity, or a conflict as a starting point. There are commissioners who deliberately ask for new ways of project development, like the village extension project which was intended by the client as a pilot-project transforming territorial development. There all the partners are entirely supporting such a design approach. For example, for the extension of the village of Saint-Cyr-en-Arthies, the games inspired a project that reconciled two opposed postures between expanding the village considerably in order to sustain and revitalize it and not widening the village too brutally so as not to disturb the environmental and social ecosystem of the place. The common denominator became to turn the wastewater treatment in a project driver which shapes the urban form and

creates a win-win situation for existing and future inhabitants and the milieu. From the question of building apartments for handicapped couples and accepting that babies are born in the institution, emerged a project that would be opening up the enclosed 35 hectare domain of the Medico-social Center towards the city and projecting public services and facilities on its territory. Both of the development strategies emerged as an in-between of crossing initial visions of the actors. There might be commissioner who demand such a working method, but it turns out they use it for legitimacy as they don't take any risk to make their own position evolve, like for the railway station project.

There are increasingly projects where no expert could say in beforehand which would be precisely the way to move forward, projects where people desire innovation, territories with strong oppositions amongst actors and stakeholders. Reflecting upon the dynamics generated during the urban games we produced, it became evident that playing opens up momentary space for participants being able to take a risk without serious damage and project another vision which unthinkable otherwise.

### *Combining material and knowledge economy*

The motivation for experimenting with game and play in the design process, was not for turning top-down working procedures into bottom-up participatory projects. It was rather the question of how to reveal knowledge that exists in a territory and add it to expert knowledge. After a certain amount of productions Polimorph's work was considered 'innovative participation'. To my understanding, it is more about participation as a transformative means increasing knowledge and reflexivity rather than about grassroots democratic events. For assessing the outcomes of playing games in design processes, we might have to look at a combination of material and knowledge creation.

### **The role of the architect in face of polyphonic interaction**

Projecting in action with the ground and among people, incorporating multiple voices in a design process is a consequence of the fact that with present digital technologies permanent interaction already happens. We all can immediately feedback on TV, through the social media. This communication revolution is comparable to the paradigmatic shift which happened in the beginning of the 20th century when with radio and mass diffusion, all of a sudden a message could be sent out disconnected from the territory and from time, and a message could also be repeated endlessly. This technological invention of being able to commercially and cheaply defuse the message changed 20th century. At the turn of 21 century, there is a new component to it, which is that the receiver can immediately respond and become a messenger as well, in a minimal time laps which is nearly perceived as zero. We are already experiencing an interaction where everybody can exchange with everybody, however this does not mean that communication and reciprocal understanding is better. Learning about how to distinguish noise and to make sense out multiple expressions, for that an intensified exchange does contribute to a territory and create benefit in a situation becomes a stake for everyone. There I think linking knowledge that exists amongst many and mine, opening up a public space between stimulation and response, presents a challenge to explore.

### **References**

Amsterdam University of Applied Sciences, Lectorate of Play & Civic Media, Play the City Foundation, Cyberparks Project: 2016, Games for Cities Training School Report COST TU 1306 Cyberparks, Amsterdam.

- Auzolle J. :2004, Tabula Rosa, medium des idées sur la ville. Un jeu interactif à l'écoute des transformations urbaines, Archicool 10.
- Blondiaux, L., Goetschel, P., Silva J. : 2017, Politique participative et citoyenneté, Centre Pompidou, Paris.
- Bourseiller C., Raynal J. (ed.) : 2017, Les Situationnistes, Les Editions du Lombard, Brussels.
- Burger-Helmchen, Th., Pénin J. : 2011, Crowdsourcing : définition, enjeux, typologie, Management & Avenir 2011/1 (n° 41), p. 254-269.
- Calvez, D.: 2006, Pari Passu – du travail d'artiste pour la ville future, Traits urbains n°10.
- Cassin, B.(ed) 2016, Après Babel, traduire, Actes Sud Mucem, Arles, Marseille.
- Chambras A. : 2006, Pari Passu, Quartier (r)animé, Territoires n°09.
- Chora: 2000, Folds, in Open Spaces/Offene Raume: Strategies in Public Spaces, Edition Axel Menges, Stuttgart, London, pp.89-91.
- Delory-Momberger, Ch.: 2006, G.Brougère, Jouer/Apprendre, L'orientation scolaire et professionnelle, 35(3), pp.479-481, URL :<http://osp.rvue.org/1033>.
- Delpyroux H., Marguc, P: 2013, La ville comme terrain de jeu, l'efficace du ludique dans les démarches de participation des habitants; Fédération nationale des CAUE, Paris.
- DeHaro S.: 2007, Tabula Rosa, une nouvelle forme de concertation, [www.paris.fr](http://www.paris.fr).
- Dhoquois A.: 2005, Gros plan Tabula Rosa, [www.place-publique.fr](http://www.place-publique.fr), 07/05.
- Huizinga, J. (ed.) :1949, Homo Ludens, a study of the play-element in culture, Routledge and Kegan Paul Ltd, London.
- Kampmann Walther, B.: 2003, Playing and Gaming, Reflections and Classifications, Game Studies, 3(1).
- La 27me Région : 2010, Tabula Rosa, jouer à imaginer le futur, Documentation Française,Paris, p.52.
- LeFloch, M.:2009, Acteurs de la ville, Strada, n°14, p. 12-16.
- Marguc, P: 2015, Trefoil Mutations, A situ-action about spatial practice, ADAPTr, Aarhus.
- Metra, M.: 2006, Approches théoriques du jeu, IUFM Lyon.
- Mitgutsch, K.: 2008, Digital Play-Based Learning : A Philosophical-Pedagogical Perspective on Learning and Playing in Computer Games, Human It 9(3), pp.18-36.
- Moholy-Nagy, L. (ed.) :1947, The new vision, Wittenborn, Schultz, Inc., New York.
- Nagenborg M.: 2016, To play or to be played, Games for Cities Training School, Cyberparks Project, Amsterdam.
- Polimorph: 2004-2012, TabulaRosa in Festival des Architectures Vives (1st ed. 2004), Paris, Printemps de la démocratie (2nd ed. 2005), Paris, Festival Rayons Frais (3rd ed. 2005), Tours, Pari Passu (4th ed. 2006), Paris, Mise en situation PLU / PADD (5th ed. 2009), Tours, Architecture et Handicap, Que les histoires s'écrivent avant que les murs ne se lèvent (6th ed. 2009) Etrepagny, Eco-hameau Le Champ Foulon (7th ed. 2011), Saint-Cyr-en-Arthies.
- Rouzé V., Dujarier M.A.: 2017, Economie de la participation, Centre Pompidou, Paris.