Nelson Dias (ORG.)

HOPE FOR DEMOCRACY

30 Years of Participatory Budgeting Worldwide

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Participlaying: a reflection on gamification techniques from the standpoint of Participatory Budgeting

Marco Meloni, Giovanni Allegretti & Sofia Antunes

Introduction

Can *gamification* support the dissemination of participatory budgeting (PB)? And, more generally, to what extent can games help promote democratic values and citizen participation in the real world? This chapter aims at contributing to answers to these questions starting from the analysis of the well-established experience of the role-playing game Empaville, recently created within a wide inter-European project for simulating a gamified participatory budgeting process in an imaginary city. The reflection seeks to highlight some of the opportunities and challenges of using *gamification* techniques and specific games in citizen participation settings, particularly in renewing the way in which participatory budgeting is envisaged and promoted.

As Allegretti (2012) and Cunha et al. (2010) underlined, PB – as a specific "technology of participation" (Nunes, 2006) – often has proved to have tense relations when dialoguing with other technologies, which (in the perception of its participants) tend to encumber it with stiff rules driven more by technological constraints than by leading visions of democratic potentials. But it also showed interest for cou-

pling with other tools that aim at mobilising practical know-how and the building up of a form of knowledge guided by prudence and by attention to the consequences of the action. Under this perspective, it is worth clarifying here that the term *gamification* we will be using from now on, has initial roots in the digital media industry, particularly in the context of video games. Specifically, Deterding (2014a) defined it as the use of game design elements in *non-game* contexts. Thus, the dynamic entails *gameful* elements (such as rules, competition and conflict features) executed by the users towards an end goal, which allow participants to be rewarded for specific activities and their general engagement, paving the way for a revival in "playful desire behaviours and mindsets" (Deterding et al. 2011, pp. 9-15). Consequently, *gamification* aims at creating a common space for an enjoyable user experience, expanding his or her commitment into something conceived for more than solely entertainment purposes.

In such a perspective, democratic participation could be imagined as one of the most interesting ongoing fields of use of *gamified techniques*, not only in terms of a tool that can provide practical training and simulate the effects and impacts of procedures and power-relations, but also for promoting reflections on values and rights within a limited time-frame. If, in contrast to a Schumpeterian notion of democracy (1942), citizens – in the modernisation of politics – must be imagined as more than mere consumers (Pateman, 2012), the *introduction of gamified* elements in democracy could also count on an active role of citizens as co-developers instead of simple consumer (Gee, 2003). Thus, citizens can be imagined as co-creators of the gaming setting in which they are involved in order to better identify and help to understand which components and dimensions of *gaming* could better optimize the process of intensification of democracy through playing.

The present chapter will reflect on *gamification* in the decision-making process of citizen participation, questioning if and how games can foster or enhance the direct interaction between citizens and governmental players, alongside promoting community collaboration and direct action. In this framework, Participatory Budgeting appears as a very interesting tool, being that – since its first experiences – it contains an important element of competition for resources among participants. Therefore, it includes in its ontology a gamified dimension,

which constitutes an important attractor for its participants, provided that it does not overshadow principles of solidarity and constructive cooperation among inhabitants and with their local institutions. The text begins with an attempt at defining what *gamification* means and which declinations of the concept are more interesting when it comes to discussing participatory processes of decision-making. This part is followed by a more specific section focusing on the relation between *gamification* and democracy. The third section examines the role-playing game Empaville and other experiences that preceded and accompanied it. The fourth part analyses the version of Empaville for schools, focusing on some of the Empaville for School sessions carried out in Portugal. This constitutes a sort of "case study" for the chapter, examined through a survey and in the light of participant observation by authors. Finally, the conclusion highlights opportunities and challenges for future developments.

1. What is *gamification* about?

To better understand the meaning of the word *"gamification,"* an analysis of the use of such terminology in literature is due. Caillois (2001) conceptualized *gamification* in relation to two distinguishable fields: *ludus* (gaming) and *paidia* (playing), the latter of which entails the creation of a playing-space, and is more creative, open, probing and free. This general definition does not help much to go beyond an intersecting and blurred conceptualization of the *gamification* concept. Nonetheless, the reflection of gamification as complement of playfulness (Deterding et al., 2011) paved the way to depict a space for a societal approach rather than a technical one. Under this perspective, *gamification* is a multiverse, strictly related to the context and demographic of users, and should not be scrutinised as a "one size fits all" model.

What mainly interests the authors here is describing gamification as a process that increases users' motivation and enjoyment while encouraging them to come back to (and to involve themselves more permanently into) the game. Deterding (2014a), Mahnic (2014) and Thiel (2016) defined this dynamic as "engaging experience," which can be better perceived through *interface design patterns* such as badges, levels, or leaderboards, that play a valuable role towards communi-

ty recognition, which may also include non-game contexts. Together with the above-mentioned elements, Thiel (2016) also points out the important role played by the status that users can acquire by reaching certain levels of the game. Each achievement is recognized within the community, turning their engagement into a sort of social reward. Other elements could concur with *gamification*, such as feedbacks, challenges and competition among the leader boards, and such features could be framed by time constraints. The articulation between these elements drive the user to a more enjoyable and engaging experience. The success of gamification is intertwined with how much the users' interaction can be more appealing and rewarding, i.e. how they can be more motivated to maintain their engagement.

To summarize, in a *gamified* experience, it is possible to recognize two sides of behavioral motivation: one intrinsic and one extrinsic. Some authors such as Manhic (2014), Sanchez-Franco (2009), Thiel (2016) and Hassan (2017) pointed out that intrinsic motivations are consequently rooted around pleasure and amusement on performing the activity. The extrinsic motivations are translated by the mechanisms/elements that are rooted in the game design through a reward-based approach. Therefore, *gamification* tends to be more successfully achieved when the emotional responses and its intrinsic positive effects can be balanced or completed with a utilitarian/extrinsic way of being motivated to continue to take part in the game.

2. *Gamification* and democracy

Given the definitions suggested above, one can ask to what extent citizens' participation can be more enjoyable and how *gamification* can have a positive impact on Participatory Budgeting and, more in general, participatory democracy practices. Several authors, such as Pateman (2012), Crouch (2004) Santos (2005) and Lerner (2014) pointed out the decrease of political participation and its risks. In particular, Lerner affirmed that the democracy is "turning what once were social

processes into individualized tasks with little human interaction" (p. 8). The possibility of participation has been diminished, transforming the decision-making process into one becoming alienated from citizens, ruled and owned by elites and/or technocratic procedures. Considering this, can *gamification* be seen as a viable piece of a mosaic of actions which can enhance democracy by promoting participation? As argued by Lerner in his essay *"Making Democracy Fun"* (2014), which dedicates a central part to participatory budgeting, games are "inherently democratic", as they invite people to participate, implying deliberation and even influencing the decision-making. The emphasis on the deliberation dimension could help to shape the concept of *gamified* democracy: playing together could be viewed as a first step to allow discussion and deliberation among citizens and institutions.

Thiel (2016) has categorized and analysed some e-participation platforms in order to examine to what extent deliberation can be promoted by a *gamified* democracy. The results pointed out a very limited and narrow deliberation dimension of the majority of participatory projects. They also underlined the prevalence of a passive approach to the promotion of citizen engagement, which tends to limit deliberation to prescriptive agendas, often previously established. Thiel (id.) remarks that even when public deliberation processes allow citizens to emphasize and give a central space to the topics they are interested in, interaction among different actors and positions remains limited, as it happens to the capacity to produce and compare alternative solutions to the same problem. Although partial (because of the specific universe of samples chosen by the author), this evaluation constitutes a seminal reference to highlight some widespread limitations within many platforms created to promote e-participation of citizens around public policies. Two appear to be the strongest common limits: (1) the reduced commitment of public officials and stakeholders to giving feedback to each other and actively "interact" in the process; (2) the limited number of citizens actively engaged in taking part in the deliberation and decision-making process through the platforms. Under this perspective, redefining *gamification* in a way that could largely contribute to the common good becomes pivotal to intensify participatory processes and making them more attractive to citizens. As Mahnic (2014) argued, *gamification* can also help the decrease of citizen alienation from politics and society in general, as – through its crowdsourcing dimension – individuals could better perceive their role within the community, "outsourcing a job to the crowd", for the common good. Wikipedia is an illustrative example of how working for the community can provide effective involvement. As stated by Macintosh (2004), a gamified setting can allow citizens to see how they can give their contribution – according to their own knowledge and skills – to take part in a broader policy-making life cycle.

Additionally, it is worthwhile to underline that the literature on the topic of *gamification* in public participation also contains very critical accents, especially when focussing on negative effects of models which do not aim at empowering free and complex thinking, but instrumentally use elements of competition and stiff features of game settings to indoctrinate large audiences, weaken citizens' autonomy or simply reduce participation to mere tokenism. For example, Sgueo (2018) critically approaches several games shaped and experimented on by international institutions (as NATO or the World Bank) to transmit to young generations exclusively positive visions of neoliberal mainstream doctrines. Under this perspective, Mahnic (2014) argues that *gamification* is also a "slippery terrain", stigmatizing its impoverishing role every time it tries to reduce serious debates to the mere *"homo ludens"* component, and to promote a semblance of a democratic way of living based only on pleasure rather than on a complex articulation of satisfactions and efforts or struggles for social improvement. A similar distortion can be harmful also because it extremes a vision of social environments based on "meritocracy" more than democracy values. Under this perspective, *gamification* is a failure (in democratic terms) every time that it tends to encourage citizens to spend their energy in the games, without questioning who established the rules or criticising the real socio-political system that frames the *gamified* settings.

2.1 A large diversification of settings and tools

Local governance has been a fruitful field to implement new ways of citizen engagement through the use of e-participation tools and *gamification* techniques. Sgueo (2018) proves it, collecting various experiences of *gamification* implemented by institutions of different political-administrative levels, spread all over the world and which promoted games related to democracy and interactions among powers, with a diverse range of aims and strategies. Tools used to gamify interactions between inhabitants and their representative institutions can be very diverse and use multimedia devices in creative ways. In United States, for example, interesting cases are those of Santa Monica (California), where the residents can evaluate the municipal council's proposals by a Tinder-like website, or of Boston (Massachusetts), where citizens and the Mayor's office "share information on traffic, criminality, Wi-Fi availability and waste management" (id: 7-8). In Peru, during the COP20 climate change summit held in Lima in 2014, a program called "Gallinazo Avisa" ("Vultures Warn") was launched, allowing citizens to "track vultures trained to seek out illegal garbage dumps via GoPro cameras and GPS devices fitted to their bodies" (id: 52). In Europe, among many experiences, it could be worth to point out the case of Dublin, where citizens "receive up to 200 euros in vouchers by helping the city council to monitor public toilets and fountains located in the city parks" or that of Madrid,

where the residents share ideas online by a dedicated platform and express "likes" to the proposals in order to give them priority in the municipal council vote (id: 8). Similar cases of so-called "continuous ideation" exist in Barcelona, Lisbon and Moscow. In the Portuguese city of Cascais, the APP "City Points"[1] allows citizens to be rewarded (with discounts, transportation bonus and other benefits) for behaviours inspired to best practices in domains like the environment, mobility, social cohesion and active civic engagement, thus recognizing the latter as an important component of the intensification of local democracy (Dias & Duarte de Sousa, 2017). Similarly, in some Japanese cases of participatory budgeting (Matsubara, 2013), no-tax payers can take part to the voting of priorities to be funded with 1% of the municipal budget thanks to the scores they can gain and accumulate through voluntary activities in charities and NGOs which work in the socio-environmental domain. While in China, the city of Suining offers an even more impressive example: the citizens receive score-points according to their social behaviour and – based on the total score – they gain benefits, such as access to certain social services or priority in employment lists (Sgueo, 2018: 8).

As Bogost (2011) claimed, these types of tools will never offer enough to satisfy and strengthen participation if not all the contributors (organized stakeholders, citizens, civil servants, public official) wish to cooperate and actively take part in the decision-making process. Participation – conceived as an equal arena of dialogue among peers, where governments and citizens can assume a partnership of equal standing on decision making process (Macintosh, 2004; OECD 2001) – represents the most desirable space for a *gamification* process that could have the characteristic of a "serious game" (or applied game). This category includes games designed for a primary purpose other than pure entertainment, which can be imagined as a subgenre of serious storytelling (Lugmayr et al., 2016) and related to the way in which simulation is generally used in sectors such as aviation or medical cares, providing that "the added pedagogi-

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1   See https://www.cascais.pt/sites/default/files/anexos/gerais/new/cascais_citypoints_pt_0.pdf

cal value of fun and competition"[2] could be explicitly emphasized.

The current experiences of *gamification for serious purposes* – including those mentioned in the last paragraphs – represent a discontinuity of tools (especially for the use of internet-based devices) in a substantial continuity of goals with a tradition of use of games in educational circles that dates back to – at least – the beginning of the twentieth century (Abt, 1970; Anderson et al., 2009), and that acquired a special importance with the so-called Back to Basics teaching movement in the '70s. Today, the fast evolution of *gamification* through ICTs has transformed such field almost in a sort of complex disciplinary domain, which has tried to shape its community of learning game technologists, and its own tools for promoting and diffusing case studies and comparative analysis.[3]

3. Gaming in PB: from "Vila Planetário" to "Empaville"

Paraphrasing what Archon Fung wrote (2011), when he imagined two differentiated macro-categories of participatory processes based on how the implementers might "interpret" their mission, we could apply a similar approach to the role of *serious gamification* within participatory processes. Thus, we could talk of (1) *deontological* and (2) *consequentialist* processes of *gamification*. The (1) *deontological* family would represent experiences which value games because they make democratic processes more attractive and marketable and facilitate easier relationships among citizens and between citizens and the state. Hence, they are worthwhile because they fluidify a greater citizen participation and stimulate a new image of deliberative experiments, "quite apart from any other effects that these innovations have" (Fung, 2011). This perspective tends to suggest that it is sufficient to offer citizens elements of *gamification* to foster a larger participation (which does not necessarily mean a deeper engagement),

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2   See: https://en.wikipedia.org/wiki/Serious_game, where it is explained that the "serious" adjective is generally referred to "video games used by industries like defence, education, scientific exploration, health care, emergency management, city planning, engineering, and politics", so "outside the context of entertainment, where the narration progresses as a sequence of patterns impressive in quality...and is part of a thoughtful progress".

3   Examples of this trend are The International Journal on Serious Games or think tanks such as the Danish Digital Learning Game Agency or Serious Games Interactive. See: http://www.seriousgames.net

without the need for wider goals. The (2) *consequentialist* perspective, instead, could consider game-based innovations to be valuable based on the extent to which they would secure additional values, including learning by doing, simulations aimed at building more collaborative environments, responsive to citizens' interests and inspired to solidarity, social justice, and so on. Hence, *consequentialist gamification* in participatory processes focuses on translating wider and stronger objectives into actions, using specific tools to guarantee consequentiality and coherence between motivations, aims and targeted results, and evaluating them accordingly. In such a perspective, consequentialist gamified processes are, in essence, a better representative of a *'serious games'* approach, because their additional 'serious' agenda (about training, empowerment and development of players and relations among them) appears clearer and more coherent.

Rather, participatory budgeting can be seen – in itself – as a "serious game" whose components of competition for resources between different ideas and groups that elaborate and support them represent an attractive "motivator" for citizens to engage in participation, having the "serious" target of incising in decision-making about policies and projects. However, the attractiveness naturally exerted by competition represents only a first level of stimuli to citizens' engagement. It can be potentially reinforced by sharing with them opportunities of co-writing the rules of the PB process, distributing bonus and rewards for specific typologies of proposals, involving inhabitants in evaluating the feasibility (and improve the quality) of proposals, but also monitoring the implementation of the co-decided investments, and even the performance, transparency and accountability of the whole participatory process and its promoting institutions. These characteristics turn PB into a *multi-level gamified* process, but absolutely not into a game, being that it does not provide a risk-free environment to practice essential skills. In fact, decisions taken have real consequences on actors, governance systems, policies and the urban space. However, the risks of such a non-game application can be studied, imagined and even partially prevented through the use of games – not necessarily restricted to increase the PB learning dimensions.

Actually, the first well-known role-games related to the construction of PB models appeared around 2000-2001, when several Europe-

an grassroots organizations were trying to "import" and "emulate" participatory budgeting into the Old Continent, trying to adapt the Latin American formulas to very different socio-institutional contexts. Among the first simulation-games of a PB there was "Vila Planetário". It was created by some members of the French-based network "Démocratiser Radicalement la Démocracie" together with the World Social Agenda of Padua, in Italy, with the goal of imagining an extreme-situation – the final co-decision about the future relocation of the inhabitants of a slum area – and stimulate decision-makers and elected official to engage with a democratic innovation that could help to face difficult urban conflicts and tense power-relations. The idea of this paper-game[4] was mainly that of creating a safe-space to test what PB is about, especially for the sake of public officials that had shown interest in the innovation coming from Brazil, but needed to better understand and discuss if and how it could be reshaped in other environments and countries. In parallel, in 2002, another interesting role-game about PB was shaped by some English NGOs coordinated under the umbrella of the Community Pride Initiative in Manchester, and made famous by the PB-Unit created as an important space of consultancies and support for UK-based PBs[5] (Sintomer & Allegretti, 2009). The new roleplay-game, freely circulating on the Internet thanks to the PB-Unit website,[6] has been translated into several languages and adapted to different cultural/national environments, mainly for supporting inductive-approaches in order to raise awareness about participatory budgeting during training sessions. In order to visualize the possibility of PB taking its decision on the base of complex "matrixes" of problems and dimensions related to the characteristic of the places where decisions are shaped, the roleplay-game included paper-based features (such as cards imagining a diverse range of characters simulating different citizens involved in PB and cards describing the peculiarities of different neighbourhoods) and some files in Excel format that allow one to quickly calcu-

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4 It has been translated into 6 languages and experimented in several training events in Italy, France, Greece, Spain, Portugal, Australia and New Zealand.

5 Thanks to an active engagement of the national government guided by the Labour Party, especially after the approval of the Green Paper on citizens' participation promoted by the Ministry of Communities and Local Government

6 Today, many of the materials and resources have been transferred to the website: https://pbnetwork.org.uk

late scores and systems for voting priorities during a PB simulated-cycle.

The main goal of the first roleplay-games inspired by participatory budgeting was to unpack and demystify the complexity of its mechanisms of functioning, making clear what PB is about, and how it relies on simple ideas, beyond its apparent complexity. That is why such games were mainly used in learning environments set up to facilitate understanding and dissemination of the PB concept. A different direction was chosen in Belo Horizonte, where – in 2006 – the first Digital PB was accompanied by an online small game (organized in quality levels but without any other rewarding) called "Do you really know your city?", directed especially to young people to self-test their knowledge about the urban territory before voting on PB priorities. The latter has been one of the first gamified elements to accompany a digital PB online, in a panorama where (as demonstrated by Nitzsche et al., 2012) even PBs mainly based on ICT platforms proved incapable of using the multiple potentials offered by the Web 2.0 revolution that after 2006 started interconnecting online tools of e-government and e-governance with the new dimension of social network explosion.

On the base of the simulation-game conceived by the Community Pride Initiative, in 2010, the Centre for Social Studies of Coimbra University re-elaborated an off-line game in collaboration with the OPTAR project, funded by the Foundation for Science and Technology of Portugal, and tested it in several schools within the "CES goes to schools" series of events, aimed at socializing research in Portuguese educational environments. Later on, in 2016, this game was transformed by the consortium that coordinated the project "EMPATIA-Enabling Multichannel Participation Through ICT Adaptations," which structured a new role-playing game called Empaville[7], imagined as a simulator to experiment with participatory systems in a safe environment. This tool was initially conceived as a sort of Beta-test for several functions (like formulating proposals, casting votes, building instant-reports of public meetings with statistics on participants, etc.) of a new web-based platform created by the EMPATIA consortium, a joint-venture between different actors coming from different disciplinary backgrounds in five different European countries[8] – funded by the CAPS programme within the Horizon 2020 scheme. Therefore, it was initially conceived as a by-product for validation tests during the construction of the main deliverable of the project. Nevertheless, it gradually became an independent deliverable, gaining autonomy as a pedagogic tool. Indeed – simulating a gamified PB process in the imaginary city of Empaville

7   See: www.empaville.org

8   See www.empatia-project.eu The countries directly involved where Portugal, Italy, Germany, Czech Republic and the UK.

– it could integrate spaces of in-person deliberation (as those existing in the roleplaying game of Community Pride Initiative) with digital voting, being useful to expose participants to critical issues common to the participatory budgeting and to discuss with them the nature and specific features of the process in both methodological and practical terms.

Empaville can be described as a game that mimics the flow of a hybrid (i.e. online and offline) participatory budgeting with a particular focus on login, voting, and data visualization. Empaville is shaped as a "guided experience" that starts with small group discussion on the problems of the city, followed by project proposal and voting, to end with a collective reflection based on the voting results, facilitated by the existence of pre-prepared statistics and data visualization aimed at reflecting on the effects of demo-diversity and organizational rules on the achieved results. The structure of the game – supported by a dedicated website linked to EMPATIA UX (User Experience) digital platform.

Such an originally unplanned product was shaped by bottom-up requests to adapt previous game to the need of testing also some ICT dimensions meanwhile acquired by real processes of participatory budgeting. During more than 35 tests in different international training environments and in several schools in partner countries, Empaville ended up as a package of training opportunities, shaped in different versions that could adapt the original simple

concept to the need of the different communities which requested to make use of it. Therefore, although the game can be defined as *gamification* of a public participation activity and the related research focuses on that topic, it has been interacting mainly with learning environments.

During the game, the participants are requested to interpret roles, which oblige them to enter in the shoes of local inhabitants with specific characters, and are invited to discuss and elaborate project proposals for the City of Empaville. It is a fictitious city designed to simulate the typical conflicts of a modern city, such as the asymmetric distribution of equipment and infrastructures, the social polarization of different groups in the territory, and the existence of gentrified and touristic zones. The characters-cards distributed to participants provide personal data of the character i.e. age, gender, citizenship, profession, place of residence, workplace, interests, motivations to participate and behaviour during the PB process. Each card traces the profiles that participants will have to perform throughout the game, which stimulate two gaming dynamics: 1) At the individual level, participants are motivated to empathize with social actors that have different personal and social characteristics from their own. They also are given tips on how to behave, so that shy persons can find energy in the duty of playing different characters. 2) At the collective level, the game benefits from a virtually varied group, which carries different interests that could potentially be in conflict.

In the game, a specific proportion of the public budget for civic projects will be democratically decided after project proposals have been developed on the web-platform. The number of participants can vary from a minimum of 12 to a maximum (currently) of around 60 people. Groups of players are small (from 3 to 15 persons each) in order to be more at ease during interaction, and they could have (or not have) trained facilitators for conducting the group activities (when is not possible, a written guide help to follow step-by-step the timeline of the game). Players are asked to describe the proposals and indicate their geographical location, budget range and category chosen from a predefined selection of policies. After being uploaded in the platform, the proposals are presented and voted individually. The game is designed to generate conflict within and across neighbourhoods to showcase how a participatory process deals with such conflicts. The simulation apparently ends with the announcement of the winning proposals. Then, the data analysis and debriefing take place, giving the opportunity to examine the process in detail from outside the game. This is important to highlight critical issues and discuss the process in both methodological and practical terms.

In each game session, a team of facilitators guides the activities, both at the level of plenary session, as (if possible) in the smaller groups that represent the different neighbourhoods. Facilitation focuses on the deliberative phase and digital support, with the possibility of taking confederate actions within the group, in order to encourage realistically distorted dynamics that can be analysed at the final stage. As the above-mentioned description suggests, the main goal of Empaville role-play is to promote a deeper culture of participatory budgeting dynamics, and to foster digital evolution of public participation, thus providing critical tools to the participants in order to reveal benefits and challenges on the use of technologies in public participation. For these reasons, the tools created allow positive and negative voting (so, to vote in favour or against a proposal presented) and provide a detailed disaggregation and visualization of voting results (by age group, by gender, by residence place etc.) so to improve the pedagogic potential of the game sessions.

Lastly, Empaville was conceived to address three different targets: practitioners (such as politicians, civil servants and public officers),

citizens involved or to be involved in real participatory processes, and young school-students (and their professors). For the first two groups, Empaville maintain the same structure, but – in the case of practitioners – the emphasis is put on the simulation: experiencing a participatory budgeting process as participants and not just as organizers; testing a digital platform for participation; experimenting with the dynamics of digital voting; and scrutinizing the game process and data analysis at the end of the process, focusing on topics such as safety, timing and possible distortions. For citizens and social organizations, the game serves mainly for understanding the dynamics of a participatory budgeting process; familiarizing themselves with online participation platforms; reflecting on the limits and potential of digital democracy; and empathizing with other social categories. For facilitating appraisal to the third category, a simplified version of the game for young citizens (under 15) has been developed with the name of Empaville for Schools. The authors of this chapter opted to briefly analyse the latter version as a sort of "case study" due to the interesting insights offered by the experiments carried out, particularly on advantages and disadvantages of *gamification* applied to public participation, in context of prevalence of young people.

4. Empaville for Schools

As a simplified version specifically designed for very young people, Empaville for School is based on deeply different group dynamics and requires less (and different) technological equipment. During the game (lasting around 90 minutes), the participants are invited to a mini-Participatory Budgeting aiming to improve a park of the imaginary city of Empaville, by discussing, elaborating and voting project proposals. The number of participants can vary from a minimum of 18 to a maximum (currently) of 90 young people.

The story-telling is developed using a video, which places the participants directly in the park and allows them to discuss its problems with a facilitator, who impersonates the mayor of the city. After this stage, the mayor declares that, considering the needs that have become evident, a specific proportion of the public budget will be allocated for projects within the park, democratically prioritized among the proposals that will be developed and presented by the partic-

ipants. The participants are asked to prepare a poster for each proposal with cropped images, writings and drawings in order to describe it by pointing out its main features (e.g. goals, targets, approximate costs etc.). The proposals are, then, photographed and uploaded online, where they can be voted through electronic ballot boxes.

The participants are divided in six different team of Empaville citizens who frequently use the park, according to cards distributed before starting: lovers of traditional sports (football, volleyball and basketball); skaters/rollers derby (lovers of unconventional sports); dog owners (with environmental awareness); elderly residents; youngsters (who want to have fun and organize parties); park staff; and businessmen/women. Group cards are made with a layout similar to that of Facebook and provide information about the members for each group: i.e. age, gender, profession, profile friend (generally imaginary groups thematically linked to each other), *like* and *dislike* topics, and if they live near the park. The entire game is shaped around group dynamics, showcasing how a participatory process deals with conflicts within and across the groups and trying to stimulate co-design, collaboration, and co-decision. Each group is also asked to nominate one or two representatives for presenting their proposals to the plenary and to vote on behalf of the group, choosing between all the proposals. Each group can express three votes in total – two positive and one negative. The simulation ends with the announcement of the winning proposals and the awards ceremony. Afterwards, a debriefing takes place to give participants the opportunity to examine the process from outside the game. In this space, players could highlight critical issues and offer an opportunity to explain the game dynamics and to transform it into a tool for consideration.

Empaville for Schools has been mainly tested in Portugal within the activities of the *CES goes to school* project, coordinated by the Centre for Social Studies of Coimbra University aimed to connect research to the territory, especially dialoguing with public schools, in a framework of dissemination of (and debate on) knowledge, in the areas of Social Sciences and Humanities.[9] The experiments – which involved almost 200 students around the country – allowed to continuously update the game, both by including

9   The EMPATIA team has embraced this project by cooperating with several schools from the 2nd and 3rd cycles of basic and secondary education located in the central region (Caldas da Rainha, Pereira, Coimbra) and north region (Porto) of Portugal. Empaville for School sessions took place in January and February 2017, involving students up 10 to 18 years old.

some specific contents to bridge the needs of each school and by adapting the discussion for each level of educational experience. Indeed, the research team followed a tailor-made approach, considering the differences and needs of the contexts in order to better motivate the users and personalize the game experiences. In some cases, the simulation sessions were requested by professors concerned about the obligation of applying the new national Law of Portugal that obliges schools to spend a small part of Ministerial transfers through a PB methodology, without being able to prepare before their students to the implementation of the real process.[10]

The Portuguese experiment used different materials and online and offline tools (computers, cards, videos, flipcharts, clipboards, pencils, photos, newspaper and magazines clippings) to both facilitate the game and foster the story-telling. Rules and settings were explained by stages to avoid overwhelming the players and to stimulate curiosity and surprises. Students were encouraged to master every step of the game while the facilitators acted as *dynamizers*. In particular, the role of the mayor was prepared as almost a theatrical performance to project the participants into the situation. The reaction of students to these dynamics have always been very active and engagement often overcame expectations, allowing face-offs with the mayor, through contradicting him/her and developing diverse forms of counter-power. It is worth to underline that – compared with previous experiments done in the field of PB games between 2013 and 2015, Empaville for Schools appeared more stimulating for the players. The experimental nature of this process, suggested the Centre for Social Studies to conduct a small research on this *gamified* tool, using a multimethod approach (that could combine the analysis of surveys distributed to teachers and participant observation) inspired to David Collier's idea of *process tracing* (2011).

Teachers' feedback – although quite different depending on the class-levels involved - was profoundly positive about the efficacy of the *gamification* approach, stressing particularly the importance of the deliberative phase to develop different capabilities and favor a critical approach to reality. Many of the teachers pointed out that students who use to be shy or rowdy showed motivation and even exerted leadership for the first time. The

non-formal learning space seemed to result in a more challenging and enjoyable experience especially for the students aged 10-12. Teachers' evaluation mainly highlighted the positive role of three elements of *gamification*, namely: playing roles, the time set provided for each task, and the democratic discussion and presentation of proposals among their peers, which allowed students to raise their voices in the class on equal grounds. In general, professors stated that the game captured the students' attention and raised their motivation much more than traditional lectures. Teachers of older students (13-16) that used the Empaville for Schools game version tended to highlight that – despite the positive impacts of the deliberation phase – time constraints are too oppressive, and possibly the engagement of teenagers needs a gamification with a higher level of attractiveness and involvement that can compete with video-gaming and social networks.

Among the typical dynamics determined by *gamified* techniques, the participant observation conducted by some members of the organizing team underlined the following:

(a) The students exposed to Empaville for Schools showed deep levels of curiosity and attention to the activity from the beginning. Possibly, the key element was the "appeal for something new" which interrupted the normal class-dynamics, being the presence of new objects and unknown people in the school environment symbolic of such a novelty, which pushed professors in an inactive role of mere observers, to minimize their direct influence in the simulations.

(b) The behaviour of some students in terms of leadership, proactivity, and concentration differed from that described by teachers in the everyday lecture-time. Possibly, the simulation fostered new behaviours according to the concept of "projective identity" (Ramirez and Squire 2014) making it possible for students, through playing different characters, to let aside the role of "good/bad student" and feel comfortable of assuming other roles.

(c) Involved students, including the youngest, showed high levels of familiarity with the use of technological devices used for the simulation. Namely, the use of the digital platform to support the game attracted curiosity and collaboration. Apparently, the act of uploading proposals online was considered the only proof of their real existence, and a certain impatience marked the approach to technologies (which sometimes proved slow and imperfect), denoting a habit of rapidity and immediacy, possibly deriving from a typical feature of the latest digital devices and programs.

(d) Competition between groups in the game increased productivity and engagement, but only in the most active classes. However, it had little effect on less participative classes. Although there were visible differences at individual level, such dynamics proved predominantly collective. Possibly, in same case, the initial group attitude affected the way of looking to the activity as a game, or just as a school task with the language of a game.

(e) The tasks with major levels of autonomous action requested of participants have been carried out with more difficulties and less originality. For example, finding an original and explanatory title to each project resulted much more demanding for the participants than organizers had expected. More productive results used to come when students were more guided by facilitators, which lowered the important element of autonomy.

(f) Of the two alternative forms used to introduce the initial story-telling (the projection of a video of the park and the active interaction with the mayor of the city supported by images and theatrical elements) the second – and most interactive – proved to be the most effective and engaging, becoming a part of the game itself.

(g) The final debriefing following the simulation always managed to extrapolate elements of reflection, learning, and

criticism from the experience, proving the importance of integrating gaming with other methodologies to maximize learning (Larsen McClarty et al. 2012) and link the gamified experience with the external reality and share the skills learned. Sessions where debriefing was compressed for time scarcity appeared less effective and memorable.

(h) Although many students declared of having heard about Participatory Budgeting previously, only few proved familiar with its features and methodologies. It will be important for the future to research if experiencing PB in the form of a game had favour the access of young people to this tool, preparing them to use it consciously. In a country like Portugal – where almost 40% of local authorities (and some ministries at national level) experiment with PB – such a study could be easily imaginable.

Some final remarks

A growing number of *gamification* techniques is being applied today to support and integrate democratic innovations for their capacities of attracting larger audiences (with a special attention to digital native citizens), enhancing motivations to participate to public arenas of decision-making, and providing different types of rewards (which are not only those related to the final outputs of the participatory processes in which they are inserted). Although a growing literature has been listing the potential positive benefits and negative constraints of a wider use of games in democratic processes, still few researchers focus on the joint-effects (and especially on mid-long term impacts) produced by the combination of *on-purpose gamified features* and the natural component of gaming which characterizes every participatory process, where competition and final rewarding represent structural components. The explicit and diffuse recognition of a large potential – together with the absence of clarity on real effects and impacts of *gamification*, especially when combined with democratic innovations – possibly explains why the use of *gaming* elements is still shy and disperse in the majority of participatory processes. And maybe also explains why *gamification techniques* are still preferred within training contexts, which precede and prepare the real participatory processes applied to policymaking. Here, in fact, their positive experimental potential tends to be maximized, in constructive settings where real consequences are limited and there is a high possibility of improving incrementally the way in which games are used to produce new effective *forms of learning by doing*. Indeed, it can prepare different types of actors to intervene in real participatory processes with a higher degree of awareness, efficacy and capacity to react to positive surprises and unexpected constraints.

Participatory budgeting constitutes an outstanding example of such a trend. In fact, being that it is related to a complex topic, and having traditionally stiff and articulated cycles, it can strongly benefit from pre-preparing its different organizers and participants, and motivate the latter to invest time and energies in being active part of the process. Despite this, the use of *gamification* in PB is still shy, and it is more inherent to its nature of a competitive process, which aims at reaching a larger set of outputs, than being an explicit goal for improving its fluidity and attractiveness. In this chapter, a small story of *gamified* items used to promote and consolidate the dissemination of PB as a complex device has been presented, with the aim of exemplifying it's still unexplored potentials. Namely, we focussed on the activities carried out through the creation of the role-playing game Empaville, which proved to be a useful metaphor of some limits and challenges of *gamification* for democracy, especially in the context of education and capacity building. Nevertheless, many questions remain open, and only some of them can currently be answered, considering that *gamification* is a fast-evolving process that must still be further analysed, researched, and more critically implemented.

As properly stated by Deterding et al. (2011), *gamification* principles could not be considered inherently positive or negative, but their evaluation is strictly related to their use and consequences. So, even a well-conceived and ethical *gamification* could not constitute a proper tool for all contents and situations, and – especially if used in an educational environment – it needs to be integrated by other spaces of discussion that could play as a bridge between games and reality (Larsen McClarty et al., 2012).

As demonstrated by the observation of Empaville for School, there are always large margins for improvement and growth, even when evaluations of the game performance are substantially positive. For example, if the focus on group dynamics (considered best suited for younger age-groups) risks to partially diminishing the individual capacity in promoting autonomous action and choice-making, future experiments will have to take this into account, and rebalance the relation between collective and individual dynamics in the simulation – as already happens in the Empaville version for adults. The same is valid for the insertion of technological features in the simulation (and the quality of equipment and internet connections used for the online parts of the game). In fact, the familiarity showed by students for technologies and their creative potential, seems to require – for the future – to expand their use in the simulation games, as it is gradually happening in the real world, in many hybrid models of Participatory Budgeting.

Summarizing, as clearly proved by the case of Empaville, the main challenge for any experiences of *gamification* for democracy is – at the moment – the need

to shift from a mere evaluation of pre-set goals and organizational features to a central emphasis posed on the analysis of the performance and the results obtained by each simulation or *gamified* space. Unfortunately, both training and research centres as well as public authorities that try to promote *gamified* spaces for improving the attractiveness and functioning of their participatory innovations, seem still far from accomplishing such a widespread need of evolution. Nevertheless, we are convinced that this shift is indispensable to acquire a better capacity to evaluate the world of *gamification* for democracy and, potentially, to give it the credibility which it deserves.

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