

Activation – Self-Management – Overload
Political Participation beyond the Post-democratic Turn



Gamification, Participatory Democracy and Engaged Public(s)

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The use of game-design elements – a phenomenon known as ‘gamification’ – features prominently within on-going processes of innovation of governance. According to the research and advisory firm Gartner, 2,000 of the top public organizations worldwide have at least one gamified application and/or process in place. Examples of gamification in public governance include “Run that town” (ideated by the Australian Bureau of Statistics to raise citizens’ awareness of the national census), the “Red Balloon Challenge” (initiated by the United States’ Defence Advanced Research Project Agency to test systems for improving cooperation among soldiers, experts and diplomatic officers overseas), and “Manor Labs” (a web platform that awarded “Innobucks”, a type of virtual commodity, to residents of the City of Manor, in Texas, for proposing ideas related with urban development).

The purpose of this paper is threefold: *first*, to determine who is actually participating in public policy processes via gamification; *second*, to weigh the impact that the public(s) engaged by gamification has on democratic governance; *third*, to assess the societal environment within which gamification might flourish or establish plausibly. The paper is structured in four sections. The *first* section of the paper sets off by briefly introducing and discussing the decreased interest in political and civic life in Western democracies. It then describes the use of gamified strategies from public administrations as an attempt to foster civic engagement. The *second* section of the paper attempts to classify and describe the three typologies of citizens that are (re-)activated by gamified public policies: self-conscious public (‘policy-entrepreneurs’), citizens who use the gamified mechanisms to leverage policy-making in their favour (‘citizen-lobbyists’), and ‘citizens-activists’ – *i.e.* socially engaged citizens advocating towards public decision makers. The *third* section of the paper analyses the potential impact that public(s) participating in gamified policy-making have on democratic governance. This impact is assessed through three conceptual tools: ‘prosumerism’ (prosumers of public policies contribute to the “creation” of policies, the same policies which effects will affect their individual spheres), ‘collective intelligence’ (the one that develops from the aggregation of a large groups’ preferences), and network theory (*i.e.* networks of cooperation, of collaboration, and of innovation). The *fourth* section of this paper briefly examines the societal environments that may offer the best opportunity to establish gamification as a practice in policy-making. The paper argues that public regulators experimenting with gamification should nurture diversified audiences, or ‘mini publics’. At the same time, public regulators should be prepared to face three challenges brought by gamified governance, namely: the dominance of elites, increased costs and the public perception.

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SECTION I – *THE GAMIFICATION OF GOVERNANCE*

1. *Gamification of Governance and Active Citizenship*

This paper begins with the assumption that a link exists between citizens’ disaffection with politics, a phenomenon at high levels throughout Western democratic systems, and the increased usage of gamification gimmicks – i.e. the use of game-design elements in non-game contexts, with the former aimed at making the latter more fun¹ – by governments. Innovative – or “experimentalist”, to borrow the definition coined by Charles Sabel and Jonathan Zeitlin² – forms of governance (including gamified governance) are credited with legitimizing institutional practices and counterweighting

¹ At one count, a Google search for the term “gamification” produced more than 6,3 million results – with more than 15,000 appearing in Google scholar alone. Notwithstanding some ambiguities in its meaning, and the lack of broad agreement with respect to what exactly it encompasses, the term ‘gamification’ is the most appropriate to portray a large number of experiences, promoted by different public administrators, in distant geographical locations at different times. This conceptual broadness is beneficial to elide issues of variance (and instead focus on the commonalities) among the case studies discussed in this paper. Further, the notion of gamification has a sufficiently ‘neutral’ meaning that consent to avoid misleading – i.e. ideologically charged – interpretations. By contrast – and this is a third reason for using the term gamification – it is contended here that the term is sufficiently provocative to define avenues of experimentation in governance by public powers. Gamification is similar – albeit not entirely equivalent – to three concepts. First are “games with a purpose” – i.e. systems that call individuals to collaborate in performing tasks that require skills that humans possess better than computers (as for instance with the practice known as “image recognition”). Second are “serious games” – i.e. games aimed at teaching or training individuals to carry out particular performances, possibly with the inclusion of game-like enjoyable features. Third are “loyalty programs” – i.e. economic incentives adopted in business practices, typically in the case of stamp collections. Each of these concepts differ somewhat from the others, but all share in common the argument that games may well be used beyond the boundaries of fun and entertainment.

² See C. SABEL, J. ZEITLIN, Learning from Difference: The New Architecture of Experimentalist Governance in the European Union, 14 European Law Journal, 271 (2008). Typical is the case of the Open Method of Coordination whose common features are its legal non-bindingness and its dependence on the will of national governments to comply with it. On this point See S. KROGER, The End of Democracy as We Know it? The Legitimacy Deficits of Bureaucratic Social Policy Governance, 29 European Integration, 565 (2007). Experimentalist governance has expanded within and across international and global legal theorists. See, for instance, C. ARMENI, Global Experimentalist Governance, International Law and Climate Change Technologies, 64 International and Comparative Law Quarterly, 2015.

institutional fragility,³ thus contributing to a reduction in political disaffection,⁴ and actually fostering civic engagement.

Gamification is on the verge of becoming a major trend in public governance – yet its legal, societal, political and cultural challenges remain unexplored. Almost no empirical testing has been done to determine how many legal regimes are interested in this phenomenon, determine if and how gamification strategies differentiate across policy areas and, above all, to prove that gamified governance fosters civic engagement.

The paper is divided in four sections. The present Section (*SECTION I*) aims at introducing and debating the concept of gamification in public governance. It starts by briefly introducing and discussing the decreased interest in political and civic life within Western democracies. The steady erosion of confidence in representatives has become one of the major political issues of our time. Yet, this paper argues, diffuse political disaffection and civic disengagement do not necessarily imply that citizens have lost interest in participating in public decision-making. The opposite is true. We live in an age extraordinary for the opportunities available to contribute to decision-making processes. The fact is that, while many citizens are willing to engage and impact on policies, they often feel neglected by public powers, and thus give up on exercising their participatory rights. Gamification is described in this paper as an attempt by public administrators to make decision-making more attractive for citizens, and in consequence more participatory. *SECTION II* classifies and describes the three main typologies of citizens – namely: ‘policy-entrepreneurs’, ‘citizen-activists’ and ‘citizen-lobbyists’ – that are (potentially) engaged through gamified public policies. Depending on the typology of participants in gamified public policies, public regulators may experience benefits or drawbacks. To simplify a complex argument, gamification may impact on the quality of public policies, benefiting from the interactions established between policy-makers and citizens-players. Drawbacks, in turn, may include the “capture” of the regulators by dominant interest groups, or issues commonly associated with collective deliberation. *SECTION III* moves to assessing the impact that the public(s) engaged with gamified policy-making may have on the transformations of democratic governance. It does so through three conceptual frameworks: prosumerism, collective intelligence and network theory. These concepts offer different perspectives to shed light on the actual impact that gamified governance may have on democratic governance. *SECTION IV* concludes by assessing the societal environment within which gamification might flourish or plausibly establish. Drawing from John Dryzek’s research on the ‘mini publics’ in deliberative processes, the paper argues that gamification is nurturing diverse typologies of public at

³ See, inter alia, G. SMITH, *Democratic Innovations: Designing Institutions for Citizen Participation*, Cambridge 2009, and A. FUNG, E.O. WRIGHT, *Deepening Democracy: Institutional Innovations in Empowered Participatory Governance*, Verso 2003.

⁴ Political disaffection is defined here with the words of Giuseppe Di Palma: “the subjective feeling of powerlessness, cynicism, and lack of confidence in the political process, politicians and democratic institutions, but with no questioning of the political regime” (See G. DI PALMA, *Apathy and Participation. Mass Politics in Western Societies*, New York 1970). See also M. TORCAL, *Political Disaffection and Democratization History in New Democracies*, The Helen Kellogg Institute for International Studies, Working Paper #308, October 2003.

the same time, and suggests that it should continue this way. The quest for inclusiveness through gamification, however, is challenged by three risks. First is the nurturing of an elite concept of participatory democracy, second is related with costs, and third consists of the distorted perception of the public.

2. *The Decline of Civic Engagement and the use of Gamification*

Confucius once remarked that rulers need three resources: weapons, food and trust. If a ruler can't hold to all three, he should give up the weapons first and the food next, but should hold on to trust to the end. "Without trust" – explained Confucius – "we cannot stand". Today, data on political participation and engagement show a worrying trend of decreased trust in political and (interest in) civic life. Approval ratings for democratic institutions are at near-record lows in several countries. Analysts consider this "democratic recession", as Larry Diamond named it,⁵ the new reality of democracies, rather than a momentary disruption of existing patterns. Already in the 1940s, researchers at Columbia University and the University of Michigan published worrying results about the average citizens' knowledge of politics. Since 1970, voter turnout in Organisation for Economic Co-Operation and Development (OECD) countries has decreased an average of eight percent. In 1995 Sidney Verba, Lehman Scholzman and Henry Brady published a book that quantified a trend that many had only known intuitively: civic participation in the United States had taken a declining pattern, and this decline was especially pronounced among young and educated people.⁶ According to the Economist Intelligence Unit's Democracy Index, in 2014 and 2016 the highest levels of disengagement occurred in 16 out of 20 countries that are classified as 'full democracies'. The same applies to governmental institutions. Governments are elected on an increasingly narrow share of the population, raising questions about their mandate to rule.⁷ According to Ilya Somin (who studies ignorance of politics) the majority of citizens

⁵ See L. DIAMOND, Facing Up to Democratic Recession, 26 Journal of Democracy, 2015.

⁶ See S. VERBA, K. LEHMAN SCHLOZMAN, H.E. BRADY, Voice and Equality: Civic Voluntarism in American Politics, Harvard University Press 1995. Robert Putnam in his 'Bowling Alone' reached the same conclusions: the declines in civic activities were greatest among the better educated (See R. PUTNAM, Bowling Alone: The Collapse and Revival of American Community, Simon & Schuster 1995). See also the report published in 1995 by the Institute for Democracy and Electoral Assistance, an intergovernmental organization supporting sustainable democracy worldwide, analysed statistics from 1,400 parliamentary and presidential elections held between 1945 and 1997 in over 170 countries. The report found out that since 1990 turnout among those aged between 18 and 29 had decreased not only in developed, but also in emerging democracies (INSTITUTE FOR DEMOCRACY AND ELECTORAL ASSISTANCE, Youth Voter Participation: Involving Today's Young in Tomorrow's Democracy (1999), available at <http://www.idea.int/publications/catalogue/youth-voter-participation-involving-todays-young-tomorrows-democracy>). A research conducted by the Harvard's Institute of Politics in 2014 found that young Americans (18-29 years old) exhibit record-low levels of trust in public institutions (See HARVARD INSTITUTE OF POLITICS, Low Midterm Turnout Likely, Conservatives More Enthusiastic, Harvard Youth Poll Finds, 2014, available at <http://iop.harvard.edu/low-midterm-turnout-likely-conservatives-more-enthusiastic-harvard-youth-poll-finds>).

⁷ See THE ECONOMIST INTELLIGENCE UNIT, Democracy Index: Democracy in an age of Anxiety', New York, London 2014. The World Value Survey reports that, from 1990 to 2006, those who reported having a "great

today could be defined “know-nothings” of politics.⁸ In the opinion of Colin Hay, the word politics is so underestimated that it is often used as a term of derision.⁹ Traditional political establishments have been rejected with the 2017 election of Syriza in Greece, with the victory of the Leave campaign in the Brexit 2016 referendum, and more generally with the rise of post-fascism in several European countries.

In spite of diverging explanations of the disengagement from politics and civic life, scholars seem to share the belief that citizens have decreased their interest in political and civic participation as a consequence of the decrease in attractiveness of politics and democratic institutions. A paradox exacerbated by the multiplication of the opportunities provided by new technologies for public institutions to communicate with their constituencies. Some authors believe that decreased political/civic participation has partially turned into forms of “unconventional participation”. While the former involves political processes, the latter refers to non-institutionalized actions, e.g. protests and demonstrations.¹⁰ Pierre Rosanvallon and Arthur Goldhammer, for instance, admit that the steady erosion of confidence in representatives has become one of the major political issues of our time. Yet they oppose the idea that the world has entered a phase of general political apathy, and refer to the spread of activism in the streets, in cities across the globe and on the Internet.¹¹ Others explain how the decline in trust in democratic institutions is breeding a new form of citizenship: the “quiet citizens” – i.e. individuals that contribute positively on their communities, often without recognition or reward of their work.¹² According to Ethan Zuckerman, the contemporary “participatory civics” tend to disengage from governments institutions to (re-) engage into individual and collective use of media, markets and codes to advocate for change.¹³ These “Autonomous citizens”, to

deal” or “quite a lot” of confidence in political parties across the world dropped from 49% to 27% (See WORLD VALUES SURVEY (2014), available at <http://www.worldvaluessurvey.org>).

⁸ See I. SOMIN, *Democracy and Political Ignorance. Why Smaller Government is Better*, Stanford 2013

⁹ See C. HAY, *Why We Hate Politics*, Cambridge, 2007.

¹⁰ See V. MEMOLI, *Unconventional Participation in Time of Crisis: How Ideology Shapes Citizens’ Political Actions*, 9 *Partecipazione e Conflitto*, 127 (2016); R. INGLEHART, G. CATTERBERG, *Trends in Political Action: The Developmental Trend and the Post-Honeymoon Decline*, 43 *International Journal of Comparative Sociology*, 300 (2002). As a guide, we can look to the numerous political protest movements and parties that have tried to promote technology-enabled experiences of direct democracy. The examples of Podemos in Spain and the 5 Stars Movements in Italy are telling: while being great at gathering people at protests, they have struggled in building stable political organizations. It is evident that simply turning to new means of communication does not necessarily increase participation, neither it automatically shifts the exercise of participatory rights to the digital realm. Many studies on political participation explain that decreased political participation has partially turned into forms of “unconventional participation”. While the former involves political processes, the latter refer to non-institutionalized actions, e.g. protests and demonstrations,

¹¹ See P. ROSANVALLON, A. GOLDHAMMER, *Counter-Democracy: Politics in an Age of Distrust*, Cambridge 2008.

¹² See WOOLF INSTITUTE, *Trust in Crisis: The Emergence of the Quiet Citizen*, Cambridge 2017. The study explores the practical implications of individual placing trust in organisations based on their effectiveness, as well as a broader change in behaviour and attitudes among those acting as both staff and service users.

¹³ See E. ZUCKERMAN, *New Media, New Civics?*, 6(2) *Policy & Internet*, 151 (2014). Zuckerman moves from observing the shift occurred in media production and consumption over the last decade. From a world

use Stephen Coleman's words, not only contribute to problem solving, but increasingly call for creative avenues for engaging in policy-making.¹⁴ They interact via networks, reciprocate favors, build trust and eventually turn into "communities of practice"¹⁵ or "trust communities".¹⁶

3.1 Gamified Governance and Civic Engagement

The problem remains. Citizens might be organising in communities and engage in non-conventional forms of participation, willing to produce social change at grassroots level, but they remain distant from conventional channels of participation. This paper argues that gamified governance could represent an attempt by public administrators to attract more citizens into public life and make decision-making more participatory.

Let us be clear: there is no straightforward connection between the diffuse political/civic disengagement experienced by Western democracies and the increased use of gamification by public regulators. There are other, perhaps more convincing, reasons that may explain the interest shown by public administrators in gamification. Three are particularly important. First: the profound impact that new technologies have had on the relations and connections between citizens and public administrations. Consider, for a moment, how technologies have altered how citizens and interest groups locate and access information, communicate and learn from each other, and interact with public powers.¹⁷ Thanks to the spread of electronic devices, the costs of social interaction have lowered radically, and audience numbers have become potentially unlimited. As a consequence, governments operate under fierce media spotlight, buttressed by rising citizens' expectations. Innovation might be thus seen as the outcome of that evolutionary path followed by regulatory institutions that Arthur Stinchcombe described already fifty

composed of small professional producers of news we have shifted to a world where a broader set of population is directly involved in making and sharing the media. Zuckerman posits that this shift may cause another important change in public participation: a shift in "civics", that becomes more participatory and inclusive, but also less predictable. In other words, Zuckerman theorizes a world in which participation in the public sphere is less about engagement with government institutions and more about individuals using media, markets and code to seek change. See also E. ZUCKERMAN, *Mistrust, efficacy and the new civics: Understanding the deep roots of the crisis of faith in journalism*, Knight Commission Workshop on Trust, Media and American Democracy, Aspen Institute, 2017.

¹⁴ See S. COLEMAN, *Doing IT for Themselves: Management versus Autonomy in Youth E-Citizenship*, in W.L. BENNETT (ed.), *Civic Life Online: Learning How Digital Media Can Engage Youth*, MIT Press, 2008

¹⁵ As Jean Lave and Etienne Wenger explain, communities of practice identify the common social situation around which people collaborate to develop ideas. See J. LAVE, E. WENGER, *Situated Learning: Legitimate Peripheral Participation*, Cambridge 1991.

¹⁶ Irene Wu explains that, progressively, the information and ideas exchanged through the Internet by members of trust communities become key sources of power. Trust communities convey different ideas and information that, in a latter stage, are advocated towards established powers. See I. WU, *Forging Trust Communities. How Technology Changes Politics*, Johns Hopkins University Press, 2015.

¹⁷ This is known, in jargon, as the shift from Web 1.0 to Web 2.0. The latter term was coined in 1999 to describe the new websites: easy to use and interoperable with other products, systems of devices. See D. DINUCCI, *Fragmented Future*, 1999.

years ago.¹⁸ Fiscal austerity and budgetary pressures, with public sector's staff capacity at a historic low, may also explain why innovative tools of governance are replacing outdated existing resource-intensive models. A third reason relies in the increased complexity of regulatory issues. Urban, demographic and digital megatrends rendered many of the old regulatory practices obsolete, and forced public regulators to experiment innovative forms of governance. As demonstrated by the "institutional performance model" theorized by Kenneth Newton and Pippa Norris, lack of innovation in governance corresponds to decline in trust and engagement from citizens.¹⁹

With this in mind, it cannot be excluded that public regulators look at the re-design of participatory processes in a way that makes it look more captivating (and the related promise that participants may become architects of their collective life and transcend their ordinary roles) as a way to foster civil society engagement, confront the decline of trust in the public sphere, revive democratic legitimacy, and possibly overcome the disruptive populist political offers that are flourishing across Western democracies.. The "participatory makeover", as Carolyn Hendricks and Adrian Kay name it, is a common trend among many legislatures around the world.²⁰ Think about the behavioural insights teams and "labs" that have been formed in many countries around the world²¹ – and more recently inside supranational regulators such as the European Union, the World Bank and the International Monetary Fund – to advise policy-makers on using nudges and winks to improve society. Although some have criticised the idea that the legitimacy of democracies depends on real links between the public and public policies,²² a strong body of academic work points out at the benefit that friendly and captivating designs may bring to civic engagement.²³ With regard to gamification, Juho Hamari and Jonna Koivisto select three: one is "utilitarianistic" (i.e. users have an external goal and the purpose of the gamified service is to make the goal more efficiently attainable); one is "hedonistic" (i.e. users are intrinsically motivated because they feel stimulated in their autonomy, competence and relatedness); and one consists of harnessing the "social

¹⁸ See A.L. STINCHCOMBE, *Social Structure and Organization*, in J.C. MARCH (ed.), *Handbook of Organizations*, Routledge, 1965.

¹⁹ See K. NEWTON, P. NORRIS, *Confidence in Public Institutions: Faith, Culture or Performance?* Harvard Kennedy School, 1999. According to Newton and Norris it is primarily government performance that determines the level of citizens confidence in public institutions. Once this trust is lost, it takes a long time to regain.

²⁰ See C. HENDRICKS, A. KAY, *From 'Opening Up' to Democratic Renewal: Deepening Public Engagement in Legislative Committees*, 1 *Government and Opposition*, 2017. The article focuses on legislative committees as a public activity to make parliaments more informative and accessible, and foster meaningful democratic renewal.

²¹ Examples include United Kingdom, United States, Australia, Canada, Germany, Colombia, Denmark and Italy. The variety of digital tools to engage with constituents ranges from Social Media campaigns, to web forums and platforms.

²² See C.H. ACHEN, L.M. BARTELS, *Democracy for Realists: Why Elections Do Not Produce Responsive Government*, Princeton 2015.

²³ See in particular BOAVENTURA DE SOUSA SANTOS (ed.), *Democratizing Democracy: Beyond the Liberal Democratic Canon*, London 2005.

benefits” that are produced by interactions among users.²⁴ Henry Jenkins, a digital media scholar, highlighted the capacity of video games to foster participatory culture already in 2006. In 2009, a study published by the MacArthur Foundation investigated the correlation between videogames and their capacity to stimulate civic and political engagement. The report identified a direct correlation between the civic potential of videogames and further engagement in civic life, especially from young citizens.²⁵ Other examples of increased citizens’ engagement through innovative/gamified participatory processes have been debated at the national and municipal levels.²⁶ Several scientific reports reach the same conclusions. The 2017 ‘Governance Report’ published by the Hertie School of Government focuses on democratic innovations that governments around the world are using to make democracies “resilient” from anti-democratic threats. These include the innovations that are aimed at fostering citizens’ engagement, comprising all forms of co-governance.²⁷ According to another established think-tank, the Centre for Public Impact, three things are fundamental to foster the impact of public policies, namely: legitimacy, policy and action. In the context of legitimacy – described by the Centre as the underlying support for a policy and the attempts to achieve it – the “stakeholder engagement” is one of particular importance.²⁸

3.2 Gamification, Crowdsourcing and Civic Tech

The records show a dramatic expansion of gamification within the public sector. When Gartner acknowledged it for the first time in 2012, it forecasted that, within the next two years, more than 70% of the top 2,000 public organizations worldwide would have at least one gamified application in place.²⁹ Since 2013, the company has included gamification among their top-ranking prospects in the “Digital Government Hype Cycle” – a cycle that identifies promising technologies for future social innovations.

In order to understand what type of innovation is produced by gamification in public governance, one should look at the similarities between gamification, “crowdsourcing” and “civic technology”. A recent term,³⁰ crowdsourcing describes a model of distributed problem solving and production that leverages the collective efforts of online communities for specific purposes set forth by a crowdsourcing organization,

²⁴ See J. HAMARI, J. KOIVISTO, *Why Do People Use Gamification Services?* 35 *International Journal of Information Management*, 2015.

²⁵ See J. KAHNE, E. MIDDAUGH, C. EVANS, *The Civic Potential of Video Games*, MacArthur Foundation, 2009.

²⁶ For the national level See G. SGUEO, *Web-Based Participatory Democracy*, in G. REDDICK, L. ANTHOPOULOS (eds.), *Information and Communication Technologies in Public Administration: Innovations from Developed Countries*, CRC Press, 2015. For the municipal level See J. LERNER, *Making Democracy Fun. How Game Design Can Empower Citizens and Transform Politics*, MIT Press 2014.

²⁷ See HERTIE SCHOOL OF GOVERNANCE, *The Governance Report 2017*, Oxford 2017.

²⁸ See CENTRE FOR PUBLIC IMPACT, *The Public Impact Fundamentals. Helping Governments Progress From Idea to Impact*, Boston 2016

²⁹ See B. BURKE, *Gamification 2020: What Is the Future of Gamification?*, Gartner 2012.

³⁰ See J. HOWE, *The Rise of Crowdsourcing*, 14 *Wired Magazine* (2006).

being it public or private.³¹ The primary general goals of crowdsourcing are cost-savings and efficiency. Put it simply: crowdsourcing helps organisations to handle tasks that would be difficult to perform without collective support. With specific regard to the use of crowdsourcing in the public sector, existing studies describe four different types of crowdsourcing, each corresponding to the function that is crowd-sourced.³² The first is information generation (exemplified by the NASA asteroid challenge, to be discussed later); the second is service coproduction, like in the case of “Peer to Patent”, an initiative aimed at involving stakeholders in the research and review of patent applications in the United States; the third type of crowdsourcing goes as “creation”, and it is exemplified by initiatives like Challenge.gov (See next Paragraph); the fourth type of crowdsourcing is known as “policy-making”. Examples of the latter include “*Future Melbourne*” in Australia and the “*e-Rulemaking Initiative*” in the United States.³³ Both gamification and crowdsourcing combine a bottom-up, open, creative process with top-down organizational goals. Public institutions that experiment in crowdsourcing, as well as those experimenting in gamification, rely on the incentives that collective participation can produce. Interestingly, gamified crowdsourcing systems are increasing, as an attempt to redirect the motivations of crowd-sources from rational gain-seeking to self-purposeful and intrinsically motivating.³⁴ SECTION III will return to this point when discussing the concept of collective intelligence.

With regard to civic technology, bearing in mind that the usage and meaning of this term can vary, it is most frequently defined as the whole of technologies that are implemented by social designers and technologists to empower citizens to develop public goods and to share resources, or more generally to help to make public institutions more accessible and effective.³⁵ A proto-civic-tech organization is

³¹ See D.C BRABHAM, *Crowdsourcing as a Model for Problem-Solving. An Introduction and Cases*, 14 *Convergence: The International Journal of Research into New Media Technologies*, 75 (2008).

³² For a comprehensive summary of the literature on the use of crowdsourcing in the public sector, See H.K. LIU, *Crowdsourcing Government: Lessons from Multiple Disciplines*, *Public Administration Review*, 2017.

³³ “*Future Melbourne*” was launched in 2008 by the City of Melbourne with the aim of outlining the city’s values and goals on the long term. In 2015 the City Council decided to refresh the plan, taking into account the changes and developments that had happened since 2008. An extensive community engagement process started in 2016. The process was divided in three phases (sharing ideas, bringing ideas together, deliberation) and concluded with the decision of a citizens’ jury. The “*eRulemaking Initiative*” was developed by Cornell University to create an online public participation platform, named “*Regulation Room*”, to offer citizens selected an area for policy discussion. The aim was to foster citizens’ participation in decision-making processes. For further details See D. EPSTEIN, M.J. NEWHART, R. VERNON, *Not by Technology Alone: The “Analog” Aspects of Online Public Engagement in Policymaking*, Cornell e-Rulemaking Initiative Publications, paper 18, 2012.

³⁴ See B. MORSCHHEUSER, J. HAMARI, J. KOVISTO, A. MAEDCHE, *Gamified Crowdsourcing: Conceptualization Literature Reveiw, and Future Agenda*, 106 *International Journal of Human-Computer Studies*, 2017.

³⁵ Terminological variations, however, exist. The United States Government, for instance, uses the broader definition “open innovation” to characterize efforts by agencies and public bodies to use technologies to access the skills and contributions of citizens and other external stakeholders. See, for instance, EXECUTIVE OFFICE OF THE PRESIDENT, NATIONAL SCIENCE AND TECHNOLOGY COUNCIL, *Winning the Future Through Open Innovation – A Progress Report on Our Open Government Initiative*, Washington

“MySociety”, a non-profit organization aimed at building online technologies to foster participation in public decision-making. Thousands of experiments focused on campaigning, petitioning or monitoring the actions of parliamentarians, or on crowdsourcing solutions to produce social change now exist all over the world.³⁶ A well-known classification of civic tech experiments distinguishes between “conformist”, “reformist” and “transformist” projects.³⁷ Conformist projects conform to existing power dynamics, and simply digitize the existing world. Civic tech projects that improve the status quo may be considered reformists. Finally, a transformist civic tech project is the one that helps shifting power relationships from the few to the many. Experiments in gamification by public administrators may be included in the second category, and occasionally in the third one. Public powers may be interested in reforming existing procedures, and will therefore introduce gamified elements to such aim; or may be concerned with enhancing participation into policy-making, and will consequently attempt to use gamified elements to attract participants and gather their knowledge and expertise. Another categorization of civic tech was made in a 2016 report published by the philanthropic firm Omidyar Network.³⁸ The report identified three types of civic tech. The first is “Citizen to Citizen” and concerns technologies aimed at improving citizen mobilization or improving connections between citizens. A well-known example of this category is ‘vTaiwan’. Ideated and developed by a group of activists in the aftermath of the Sunflower Movement of 2014, it consists of a mix of online and offline activities aimed at encouraging participants to reach consensus on specific issues. The second is “Citizen to Government” and includes technologies aimed at improving the frequency or quality of interaction between citizens and government. For example, ‘Parlement et Citoyens’, launched in 2013 by the French civil society organization Cap Collectif, and aimed at bringing together representatives and citizens to discuss policy issues and crowd-source legislation. The third is “Government Technology” and labels all innovative technology solutions that make governments more efficient and effective at service delivery. Current gamification strategies implemented by governments may fall within the second and third categories ideated by the Omidyar Network. Gamification, in fact, is aimed at offering citizens the opportunity to become co-producers of public policies.

2011; EXECUTIVE OFFICE OF THE PRESIDENT, Third Open Government Action Plan for the United States of America, 2015. See also GOVERNMENT ACCOUNTABILITY OFFICE – UNITED STATES, Report GAO-17-14: Open Innovation. Practices to Engage Citizens and Effectively Implement Federal Initiatives, 2016.

³⁶ Notable examples of civic-tech include the petitioning platform “Change.org”, “Socrata” (a company aimed at promoting government data availability and transparency), “Localocracy” and “SeeClickFix” (online tools aimed at encouraging civic participation in local decision-making).

³⁷ See M. STEMPECK, Towards a Taxonomy of Civic Technology, 2016, available at <http://blogs.microsoft.com/on-the-issues/2016/04/27/towards-taxonomy-civic-technology/#sm.0000p1uccywuddxxvc922puxz90gz>

³⁸ See OMIDYAR NETWORK, Engines of Change. What Civic Tech Can Learn From Social Movements, 2016, available here <http://enginesofchange.omidyar.com>.

4. A cursory analysis of gamified governance

Globally, there is a plethora of examples where public institutions have employed methods of gamification. Take, for instance, the Australian “*Run that town*” – built by the Australian Bureau of Statistics and aimed at making citizens more aware of the national census.³⁹ In the German city of Hamburg, the initiative named “*B3-Design your marketplace!*” engaged participants in re-designing the marketplace of Billstedt. Players could explore the virtual marketplace, add urban furniture using a drag and drop function, and rate other users’ design. The game led to an improvement in communication in a complex policy decision environment and achieved consensus on a policy position.⁴⁰ “*Decide Madrid*” – a web platform aimed at engaging the residents of Madrid in local decision-making through direct and binding mechanisms⁴¹ – in 2017 started a partnership with the Participa Lab, a joint public/common initiative acting as a bridge between citizens and the local government. The scope of the partnership is to implement gamification in the platform, in order to engage a larger and more varied number of citizens. Other gamification exemplars are “*MMOWGLI*” and the “*Red Balloon Challenge*”. “*MMOWGLI*” (Massive Multiplayer Online War-game Leveraging the Internet) was developed by the Office for Naval Research of the United States and let players create action plans to respond to piracy in international waters. In 2009, the United States’ Defence Advanced Research Project Agency initiated the “*Red Balloon Challenge*”. The game involved locating big red balloons placed in undisclosed locations around the United States. Players, rewarded with cash prizes, helped the Agency in testing systems for improving cooperation among soldiers, experts and diplomatic officers overseas.

Also interesting is the case of “*Challenge.gov*”, a website launched in 2010 by the United States federal government and aimed at crowdsourcing solutions to problems of public policy.⁴² The website reports that since 2010 agencies in the United States have conducted more than 700 distinct prize competitions attracting nearly five million visits from 180 congressional districts and over 11,000 US cities. For example, the platform was successfully used from the United States Air Force to ask users to suggest solutions on

³⁹ Similar in scope, “*Idea Street*”, introduced in 2010 by the British Work and Pensions Department, encouraged its employees to suggest ideas for changes in the workplace.

⁴⁰ See A. POPLIN, *Digital Serious Game for Urban Planning: “B3—Design Your Marketplace!”*, 41 *Environment and Planning B: Urban Analytics and City Science*, 2014.

⁴¹ In 2017 *Decide Madrid* devoted € 100 millions to participatory budget. Since February 2016 the platform has made operational a system of online voting to let residents decide about issues of local relevance, e.g. urban transport or waste recycling.

⁴² *Challenge.gov* was designed to help federal and national agencies to find participants for prize competitions and challenges by providing a centralized list of all competitions sponsored by federal agencies. In fact, the America COMPETES Reauthorization Act authorizes federal agencies to conduct prize competitions. In 2011 the Office of Budget Management issued guidelines to help agencies to conduct these competitions. See K. DESOUZA, *Challenge.gov: Using Competitions and Awards to Spur Innovation*, IBM Center for the Business of Government Using Technology Series, Washington, 2012; I. MERGEL, K. DESOUZA, *Implementing Open Innovation in the Public Sector: The Case of Challenge.gov*, 73 *Public Administration Review*, 882 (2013).

how to halt an uncooperative vehicle at a military checkpoint without hurting bystanders. The National Aeronautics and Space Administration (NASA) in 2013 used Challenge.gov to launch the “*Asteroid Grand Challenge*”, a large-scale effort to use collaboration to find all asteroid threats to human populations. According to the 2015 report on the implementation of federal prize competitions and challenges, over 1,200 participants submitted 700 potential solutions throughout the ten-months duration of the challenge. This helped the NASA officials to develop a new algorithm and software package to detect asteroids. When analysed by NASA and Planetary Resources Inc. – a private-sector company also involved in the initiative – the improved algorithm resulted in a 15% increase in the positive identification of new asteroids in the main belt of asteroids that orbit between Mars and Jupiter.⁴³ Other notable cases of gamified competitions launched on Challenge.gov include the “*Visualizing Nutrients Challenge*” (led by the Environmental Protection Agency, and aimed at inviting contributions to design innovative web applications to help individuals to understand the causes and consequences of nutrient pollution) and the “*Nutrient Sensor Challenge*” (led by the Environmental Protection Agency with the support of the National Oceanic and Atmospheric Administration, and aimed at accelerating the commercial development of accurate and reliable devices – rewards offered to participants included visibility in emerging markets and access to testing services).⁴⁴

The list of examples of gamification in public governance could go on indefinitely. The following table serves the scope to summarise the relationship between a selected number of relevant cases of gamified governance, the typologies of publics that are attracted by these cases (to be described in SECTION II) and the institutional design of gamification – i.e. “structural gamification” in case that public administrations add the game elements to an existing policy structure in order to propel the participatory processes; or “content gamification”, when game-thinking entails the policy-making process from the beginning

⁴³ NASA officials remarked that these results were possible at reasonable costs. The whole project cost 200,000 dollars, less than the fully loaded cost of employing an engineer for the same time period.

⁴⁴ It goes beyond the scope of this paper, but it is worth noting that supranational regulators have also a track of experimentation with gamification. Typical is the case of the European Union. Take the “European Social Innovation Competition”, a challenge sponsored every year by the European Commission to award financial support to the best social innovation projects from all over Europe (See generally http://ec.europa.eu/growth/industry/innovation/policy/social/competition_en). Many other supranational regulators have recently begun to experiment with gamified elements in their policy-making. The World Bank, for instance, created “Evoke”, a graphic novel game developed by the World Bank, let players impersonate the participants in the “Evoke Network” – a network of the best scientists and thinkers worldwide – and challenge them with real issues of cooperation for development. The International Labour Organisation has created a “Business Game” with the aim of building up participants’ understanding about starting and managing a successful business. In the case of “Draw-the-World” – ideated by the Council of Europe to spread knowledge of the Universal Declaration of Human Rights – players have to draw creatively to depict a word relating to human rights.

CASE	PUBLICS			INSTITUTIONAL DESIGN
	Policy Entrepreneurs	Citizen Lobbyists	Citizen Activists	
Run That Town	X			Content
B3-Design your marketplace!		X	X	Content
MMOGWLI	X			Content
The Red Balloon Challenge	X	X		Structural
Smartpune	X			Content
Manor Labs	X	X	X	Content
Decide Madrid	X	X	X	Structural

SECTION II – THE PUBLIC(S)

5.1 Active Citizenship and Gamification. The ‘Policy-Entrepreneurs’

As theorized by Roberto Unger, in a contemporary democracy it is crucial that people are enabled to see themselves as individuals capable of escaping their confined roles.⁴⁵ Yet, when observing gamification in public governance, it is unclear which kind of citizenship is nurtured by it.

Arguably, not all users of gamified experiments have the same interests and goals. This paper escapes the classic separation between “hard-core participants” (*i.e.* people who participate a lot, become extraordinary experts and therefore dominate participation) and “unqualified masses” (people who only participate occasionally)⁴⁶ and identifies three main typologies of participants in the framework of gamified governance. The first type, to be analysed shortly, includes the ‘policy-entrepreneurs’, *i.e.* self-conscious citizens who choose to participate because they share an interest at tailoring public policies for their and common interests. The second type, analysed in the following Paragraph, is described as ‘citizens-lobbyists’ and includes all citizens who use gamified mechanisms to leverage policy-making in their favour. The third and last type, to be analysed in Paragraph 5.3, involves the ‘citizens-activists’ – *i.e.* socially engaged citizens advocating towards public decision makers.

Before proceeding with a description of these three typologies, however, a brief note is required. The proposed taxonomy is used exclusively for gaining a better knowledge of the types of stakeholders that are attracted by gamification. The taxonomy

⁴⁵ See R. UNGER, *Democracy Realized: The Progressive Alternative*, London 1998

⁴⁶ See, for instance, J. LERNER, *Making Democracy Fun. How Game Design Can Empower Citizens and Transform Politics*, MIT Press 2014.

has no ambition to be exhaustive. It is actually true the opposite. Irrespective of the typology of gamification experiments introduced by public regulators, in fact, participants to gamified processes may be involved in performing activities that involve the three typologies of public. They might be required to do something at a particular time or place, or they may enjoy the possibility to affect the actions of other individuals; alternatively, they may be required to attain a sequence of goals, that are typically ordered at higher levels of complexity and difficulty; they may also be expected to coordinate with other individuals in order to solve a challenge; finally, they may experience a combination of these features. In other words, gamified governance (potentially) engages all the three typologies of citizens, at the same time or in different stages. SECTION IV will return to this point when using the theory of ‘mini-publics’ to understand in which societal environment gamification may establish as a practice.

The first ideal-type of citizen attracted by gamified governance is named policy-entrepreneur. There is a vast academic production aimed at describing policy-entrepreneurs. John Kingdon was one of the first scholars, in 1984, to use this expression. He named policy-entrepreneurs those actors who make use of their knowledge of political processes to further their own policy-ends. These may be elected politicians or leaders of interest groups whose main interest is to exploit windows of opportunity to promote their solutions to policymakers.⁴⁷ Similarly to Kingdon, in 1999 Peter John described policy-entrepreneurs focusing on their ability to try out a combination of ideas to influence policy-making.⁴⁸ More recently, Mark Zupan has described the vulnerability of governments from ‘government insiders’. These can be found in both autocratic and democratic political systems, and have the motive and means to co-opt political power in their benefit and at the expense of national well-being.⁴⁹

The definition of policy-entrepreneur used in this paper separates from these negative connotations, as well as from those descriptions of policy entrepreneurs as civil servants that bring new policy ideas into the open and promote policy change.⁵⁰ Policy-entrepreneurs in the context of gamified public governance are described as highly skilled citizens who are capable of mobilizing expertise, intervene in the gamified processes, and eventually benefit from it. A definition that combines policy transfer theory – where entrepreneurs are civic actors who promote best practices across legal systems – with rational choice theory, where ‘entrepreneur’ is used to define individuals who seek to provide public services or form interest groups (indirectly benefiting from it). In this regard, the research of Satish and Parya Nambisan on co-creation of public services is particularly interesting.⁵¹ According to Nambisans, citizens who contribute to civic

⁴⁷ See J.W. KINGDON, *Agendas, Alternatives, and Public Policies*, Boston 1984

⁴⁸ See P. JOHN, *Is there life after policy streams, advocacy coalitions, and punctuations: using evolutionary theory to explain policy change?*, 31(4) *Policy Studies Journal*, 2003

⁴⁹ See M.A. ZUPAN, *Inside Job. How Government Insiders Subvert the Public Interest*, Cambridge 2017

⁵⁰ See, for instance, T. KALLIL, *Policy Entrepreneurship at the White House. Getting Things Done in Large Organizations*, 11 *Innovations*, 2017.

⁵¹ See S. NAMBISAN, P. NAMBISAN, *Engaging Citizens in Co-Creation in Public Services. Lessons Learned and Best Practices*, IBM Centre for The Business of Government – Collaboration Across Boundaries Series, 2013. The thesis of Satish and Parya Nambisan is that any government – or public body interested in engaging

problem solving may assume four different roles. The first role is the ‘citizen-explorer’ – i.e. citizens who are active in discovering, identifying, defining and circulating civic problems that need to be solved. Typically, citizens-explorers are those engaged in using apps like “*Street Bump*” or “*FixMyStreet*”, where users are asked to activate to detect issues in the neighbourhood streets. The second role is the ‘citizen-ideator’. Citizens-ideators are those capable of envisioning solutions to civic problems. Usually these citizens come up with innovative ideas to solve problems that are already known. The public challenges launched by the US government, and more generally all crowdsourcing initiatives driven by public administrations, are based on this idea: to offer users the opportunity to suggest innovative ideas. In the case of policy-entrepreneurs gamified public challenges might sound attractive for three reasons. First, participating to such challenges is demanding in terms of expertise and skills; second, participants to challenges bear costs (both in terms of participating fees and time); third, gamified challenges attract participants who have personal interests at stake – e.g. the need of visibility in the reference market, or the necessity to get credited. When the Indian Government launched “*Smartpune*”, a gamified public challenge aimed at providing support for the municipality of Pune, 40,000 innovators presented their solutions for ameliorating the lives of citizens. Finally, the third and fourth categories of citizens identified by the Nambisans are the ‘citizens-designers’ (those capable of designing solutions to civic problems) and the ‘citizens-diffusers’ (those who support and diffuse public services innovations among the population).

5.2 The ‘Citizen-Lobbyists’

The world citizen-lobbyist has come back into fashion very recently. In his last book, Alberto Alemanno optimistically depicts citizen-lobbyists as the present and future of civic engagement.⁵² Alemanno moves from the same crucial assumption made at the outset of this paper – i.e. civil society is experiencing a crisis of faith, feeling increasingly disconnected from governing institutions. In spite of what populist movements argue, referenda and direct democracy have not provided citizens with the right tools to shape and change policies. After all, he continues, civil society groups can no longer compete (if they ever could) with corporate counterparts. Alemanno sketches a process to turn citizens into lobbyists, capable of advance in cause they care about, from saving a local library to tacking action against fracking. Amanda Knief depicts citizen-lobbyists in a similar fashion. She also moves from the assumption that more citizen involvement is needed in governmental processes; she thus explains how citizens could become more engaged grassroots activists and influence policy-making.⁵³ Many other authors follow on

citizens in the construction of public services, should neglect the quantity of inputs provided by participants, and should focus on the quality of the contribution that each participant can provide.

⁵² See A. ALEMANNNO, *Lobbying for Change. Find Your Voice to Create a Better Society*, Icon 2017

⁵³ See A. KNIEF, *The Citizen Lobbyist: A How-To Manual for Making Your Voice Heard in the Government*, Pitchstone 2013

the same path. Manuel Arriaga's pamphlet argues for five measures to "reboot democracies", all of which revolving around common citizens.⁵⁴

This paper does not engage directly with theories promoting the role of actively engaged citizens who represent their interests, as if they were operating as professional lobbyists. It rather borrows this definition because it perfectly describes those citizens who envisage in gamified governance a channel to leverage policy-making in their favour. Are citizens-lobbyists comparable to citizens-entrepreneurs? Yes and no. The former share with latter the same drive: to gain benefits from engaging into gamified governance. After all, the sample used in this paper shows that in three out of the four cases in which citizen-lobbyists were involved, policy-entrepreneurs were also engaged. Yet citizens-lobbyists, differently from citizens-entrepreneurs, have a direct and personal interest in becoming directly engaged in policy-making. For this reason, they are similar to Joel Penney's 'citizens-marketers'.⁵⁵ The citizen marketer, explains Penney, is guided by the logics of marketing practice. He/she actively circulates persuasive media to advance political interests (including the use of protest symbols in social media profile pictures, strategic tweets of links to news articles to raise awareness about select issues, or displaying mass-produced T-shirts, buttons, and bumper stickers that promote a favoured electoral candidate or cause). Penney's citizens view participation in political activities not only in terms of how it may produce a collective benefit, but also in terms of how it may shape or influence the outcomes, and as a statement of their own identity.

Having clarified the difference between policy-entrepreneurs and citizens-lobbyists, another question comes in place. Should we apply the public choice theory's of the "capture of the regulator" to citizens-lobbyists?⁵⁶ To answer or not in the affirmative is not without practical consequences. A positive answer may lead to the opinion that, to avoid the risk of capture, public regulators should avoid (or limit) using gamification practices too intensely. The opposite, however, is also true. Gamification may be used to respond to what David Easton termed "authoritative allocations of values", meaning the formulation and implementation of policies that are closely associated with those who hold positions of authority in a political system (and that, in consequence, set the goals towards which that system may be directed).⁵⁷ In reality, this paper argues that it is unlikely that citizens-lobbyists may end up capturing the regulator. It suffices to observe off-line participatory practices. With very few exceptions, business interests are predominant compared to civil society interests. On average, out of the 100 organizations that spend the most on lobbying in developed countries, 95 represent business.⁵⁸ In the European Union, reports the not-for profit Lobbyfacts, business accounts for roughly 90%

⁵⁴ See M. ARRIAGA, *Rebooting Democracy. A citizen's Guide to Reinventing Politics*, London 2014.

⁵⁵ See J. PENNEY, *The Citizen Marketer. Promoting Political Opinion in the Social Media Age*, Oxford 2017.

⁵⁶ See G. STIGLER, *The Theory of Economic Regulation*, 2 *The Bell Journal of Economic Regulation and Science*, 1971.

⁵⁷ See D. EASTON, *A System Analysis of Political Life*, New York: John Wiley 1965

⁵⁸ See L. DRUTMAN, *The Business of America is Lobbying: How Corporations Became Politicized and Politics Became More Corporate*, Oxford University Press, 2015.

of all reported lobbying expenditure.⁵⁹ In the United States, another not-for-profit, the Centre for Responsive Politics, calculated that the 2.6 billion dollars reportedly spent on lobbying by the corporate sector in 2015 adds up to more than the combined budgets of the Senate (860 million dollars) and the House of Representatives (1.18 billion dollars).

5.3 The 'Citizen-Activists'

Admittedly, even if we combine the number of citizens-entrepreneurs with that of citizens-lobbyists, we only reach a narrow part of the citizenry in Western democracies. The quality, quantity and scopes of their engagement into policy-making may certainly differ, yet both (citizens-) entrepreneurs/lobbyists share a mature knowledge and appreciation of the benefits that might arise from their direct participation in public decision-making. This is, however, a condition that clashes with the original assumption of this paper. Once we accept that, given the overspread political disaffection and civic disengagement, the majority of citizens do not fall within the two former categories, then we should conclude that public administrations have an easy game in engaging them, with or without the use of gamified strategies. So our original question remains: what about the rest – the actual majority – of citizens? In answering this question, we might be forced to conclude that points, badges, and other forms of extrinsic rewards might not provide an adequate leverage to induce individuals to do activities that they do not want (or care) to do. "Chocolate covered broccoli", to borrow from Janaki Kumar and Mario Herger,⁶⁰ – or "pointsfication", in the words of Margaret Robertson⁶¹ – may have no impact on citizens' engagement.⁶² Before accepting the validity of this conclusion, however, one should consider the last type of citizens that are attracted by gamified governance, namely: citizens-activists.

⁵⁹ As a result, explain the campaigners of Transparency International, 75% of declared lobbying meetings between lobbyists and public authorities in the first half of 2015 were with corporate companies/consultancy firms. Only 18% were with civil society organizations. See TRANSPARENCY INTERNATIONAL (2015), Lobby Meetings with EU Policy-Makers Dominated by Corporate Interests.

⁶⁰ See J.M. KUMAR, M. HERGER, *Gamification at Work: Designing Engaging Business Software*, Interactive Design Foundation, 2015.

⁶¹ See M. ROBERTSON, *Can't play, won't play*, 2010, available here <https://kotaku.com/5686393/cant-play-wont-play>

⁶² This, after all, is not a problem that could be associated with any participatory practice, and not just innovative ones like gamification. Don Elliott – former general counsel of the Environmental Protection Agency of the United States – once compared notice and comment to Kabuki theatre: "a highly stylized process for displaying in a formal way the essence of something which in real life takes place in other venues" – See E.D. ELLIOTT, *Re-Inventing Rulemaking*, 41 *Duke Law Journal*, 1490 (1992). Also Cass Sunstein, borrowing the term made famous by Albert Hirschman (See A. HIRSHMAN, *The Rhetoric of Reaction*, Cambridge MA, 1991), admits that nudging may be "futile", meaning that the consequences of choice architecture on citizens' choices might have little or no impact at all. This might happen, for instance, when the chooser has already a strong defined preference that happens to be contrary to that promoted by the regulator. An alternative hypothesis is that futility may be even an intentional outcome for the public regulator. Strategies of gamification, in other words, could be undertaken by public administrations as a way to preserve their decisional autonomy and minimize the possibility of having their decisions reversed or opposed.

Who are the citizens-activists? There is a word – “Citizenization” – that captures the core meaning of this definition. Citizenization was coined by the American activist Pedja Stojicic, who uses it to describe an intentional process of creating the conditions for professionals (and other community members) to “flex their civic muscle”, as for instance developing and practicing social responsibility and becoming active agents in system transformation.⁶³ To exemplify citizenization, Stojicic uses the example of health professionals: whether those would intentionally use 10% of their time to create a culture of health in the interest of community health. Citizens-activists do not envisage nor they search for benefits from participation in policy-making – a situation that separates them from (citizens-) entrepreneurs/lobbyists. Citizens-activists ‘engage’ themselves in participation when they perceive that their voice may produce social impact. A glance at the news headlines can shed some light to this concept. The surge of street protests from 2015 to 2017 in Brussels against the Transatlantic Trade Partnership, in Poland against the ban on abortion, in Romania to urge the government to reverse a decision on corruption investigation against officials, or shortly thereafter in Budapest to protest Prime Minister Viktor Orban’s attacks on civil-society institutions, were all motivated by the desire to counteract decisions that were going to affect their sphere of values, whether it was the environment, civil rights or transparency.

Having established the existence of a broad public (or, at least, broader than the former two) that may be attracted by gamified governance, the question is no longer about whether citizens could be engaged, but rather if gamification could replicate the positive results achieved elsewhere, for instance in climate change activism.⁶⁴ Gamified activism on climate change has attracted wide audiences, and has helped to overcome some of the obstacles that hinder popular support for civic action.⁶⁵ The sample used in this paper shows that citizen-activists were activated in three cases. Not accidentally, in all these case some controversial aspect were involved: city budgeting, urban planning or environmental issues.

SECTION III – *THE IMPACT OF GAMIFIED GOVERNANCE*

6.1 *Gamified Publics and the Influence on Democratic Governance. Prosumerism*

How does the public(s) engaged with gamified policy-making influence the transformations of current democratic governance? To answer this question, the present

⁶³ See P. STOJICIC, Let’s Help Health Professionals Build Their Civic Muscle, ReThink Health, June 2017, available at <https://www.rethinkhealth.org/the-rethinkers-blog/helping-health-professionals-build-their-civic-muscles/?platform=hootsuite>

⁶⁴ “Gamified Activism” is described as the use of digital applications or websites designed for the purpose of raising awareness on climate-change related issues, asking for donations, and ultimately increasing the engagement of citizens. For further analysis See G. SGUEO, Gamification and Climate Change Activism – Beneficial or Detrimental?, position paper, New York University Global Faculty Symposium, Paris 2017, available here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2924095

⁶⁵ In the filed of climate change activism the most recurrent issues are eco-detachment, and the perception of environmental sustainability as complex and boring.

Section makes use of three conceptual lenses: prosumerism, collective intelligence and network theory, respectively

Coined in 1980,⁶⁶ prosumerism describes a market in which basic needs of consumers are already satisfied by mass production and companies initiate processes of mass personalisation, *i.e.* mass-producing highly personalised products. Prosumers participate both in the design (as producers) and in the consumption (as consumers) of products through mass customisation. All things being equal, prosumers of public policies contribute to the “creation” of policies, the same policies which effects will affect their individual spheres.

Take the case of the Australian *Run That Town*. The immediate aim of the game was to create awareness among Australian citizens of the role of the census in shaping the direction of policy and its impacts on daily life. In the long run, however, the Australian Census Bureau aimed at producing a positive impact on the engagement of citizens in the decisions concerning the Australian population at large. As reported by the chief creative officer of the company that developed the app: “*we’re not just telling people about the data – we’re giving them a chance to use it for themselves. It’s an innovative way to make those numbers really mean something to the people using them, and to get the community more involved in Census data*”.⁶⁷

6.2 Collective Intelligence

In Section I, gamification in public governance was compared to crowdsourcing: both combine a bottom-up, open, creative process with top-down organizational goals. An alternative way to answer the question concerning the impact that the public(s) engaged by gamified governance may have on democratic governance is precisely through the lens of “collective intelligence”⁶⁸ – a concept that is strictly related with crowdsourcing. Public institutions that experiment in crowdsourcing, in fact, rely on the collective intelligence of participants to those experiments. The same phenomenon is also known as “wisdom of the crowd”. This, explains James Surowiecki,⁶⁹ is the type of wisdom that originates from the aggregation of a crowd’s preference. Large groups of contributors that are appropriately independent, motivated and informed can collectively make better judgments than of the individuals that make them up. The phenomenon was first observed in 1907 from Sir Francis Galton. Galton described a competition at a carnival in which participants could guess the weight of an ox. As people made their

⁶⁶ See A. TOFFLER, *The Third Wave*, Bantam 1984.

⁶⁷ The interview is available here: <http://www.campaignbrief.com/2013/05/the-australian-bureau-of-stati.html>.

⁶⁸ On collective intelligence See J.B. SMITH, *Collective Intelligence in Computer-Based Collaboration*, Laurence Erlbaum Associates, 1994; C.R. SUNSTEIN, *Infotopia. How Many Minds Produce Knowledge*, Oxford University Press 2006

⁶⁹ See J. SUROWIECKI, *The Wisdom of Crowds*, Doubleday 2004.

estimates, Galton recorded them and observed that the median – which at the time he described as *Vox Populi* – was remarkably close to the correct answer.⁷⁰

A number of empirical studies have assessed the idea of collective intelligence (or wisdom of the crowd) in deliberative processes. John Dryzek, for instance, writes of “citizen competence” in his studies on citizen deliberation.⁷¹ James Fishkin described individuals composing citizens’ panels as “better informed and good at taking decisions”.⁷² To similar conclusions lead the research conducted by John Gastil.⁷³ Another author, Pierre Lévy, describes collective intelligence as an alternative source of power.⁷⁴ Collective intelligence, according to Levy, allows grassroots communities to respond effectively to public powers. In collective intelligence, explains Lévy, everyone knows something and nobody knows everything, thus it is the group as a whole that can tap what any one person knows.

“Clickworkers” is an interesting case of practical application of the wisdom of the crowd from a public institution. Initiated as a pilot study in 2000 by NASA to determine whether or not online volunteers would be interested in contributing, and if they could produce good data that can be used to answer interesting science questions, it asked users to identify craters or asteroids. The project helped scientists and researchers to build an extensive database of landforms from data captured by Mars Reconnaissance Orbiter's (MRO) High Resolution Science Experiment (HiRISE).

Collective intelligence, however, carries a number of risks that public institutions should not neglect. In a famous article published few years ago, Brinton Milward and Keith Provan analysed the progressive replacement of the public sector with a network of third-party providers and services. The “hollowing of the state”, as they named it, raised an issue on the (perceived) legitimacy of the public sectors.⁷⁵ It might be argued that a legitimacy risk exists for public administrations when collective intelligence substitutes collective decision-making. Not by chance, Beth Noveck considers design the greatest challenge – in terms of marshalling convincing evidence for the adoption of new technologies, identifying and targeting the right publics, and including the right motivational incentives – in crowdsourcing in the public sector.⁷⁶ Other risks to consider are those that are normally associated to collective intelligence, and have been subsumed

⁷⁰ See F. GALTON, Letters to the Editor: The Ballot-Box, 75 *Nature*, 1952. Over the years scholars have attempted to find the wisdom of the crowd through scaling up or scaling down group interactions in deliberative processes. See for instance A. GOEL, D.T. LEE, Large-scale deliberation via small group interactions, and the importance of triads, University of Stanford Research Paper, 2010.

⁷¹ See J.S. DRYZEK, A. BACHTIGER, K. MILEWICZ, Toward a Deliberative Global Citizens’ Assembly, 2 *Global Policy*, 2011.

⁷² See J.S. FISHKIN, *When the People Speak. Deliberative Democracy and Public Consultation*, Oxford 2011.

⁷³ See J. GASTIL, *By Popular Demand: Revitalizing Representative Democracy Through Deliberative Elections*, University of California Press 2000

⁷⁴ See P. LEVY, *Collective Intelligence: Man’s Emerging World in Cyberspace*, New York 2000

⁷⁵ See H.B. MILWARD, K.G. PROVAN, Governing the Hollow State, 10 *Journal of Public Administration Research and Theory*, 2000.

⁷⁶ See B.S. NOVECK, *Wiki Government: How Technology Can Make Government Better, Democracy Stronger, and Citizens More Powerful*, Washington 2009.

under the definition of “groupthink” to challenge the idea that deliberation always lead to better decisions – groups may well promote unthinking uniformity and dangerous self-censorship, thus failing to combine information and enlarge the range of arguments.⁷⁷ The majority of Americans, for instance, think that 33% of their population are immigrants, when in fact it is just 14%. There is widespread belief among Brazilians that the average age in their country is 56, when it’s actually 31. Examples like this, as shown in the Ipsos Views report of 2015, abound.⁷⁸

Risks connected to groupthink are of three types. First is pluralistic ignorance – *i.e.* the danger that arises when each decision-maker in a group has too little information to solve a given problem, and instead of scrutinizing the issue, further observes others in the hope of becoming wiser. But when everyone else does the same, everyone simply observes the lack of reaction, and therefore based on this very lack of reaction easily makes a wrong inference.⁷⁹ Second risk is that of the “informational cascade”. This happens when people one by one adopt the opinions and actions of passers-by as valid examples of what to think or do. Just like pluralistic ignorance, the outcome of this may turn out to be rather petrifying. As a result, whole crowds may behave in a stupid way and cause damage. A third risk is that of “polarization”. Polarization happens when people’s attitudinal agreement is strengthened when further processing the available information in terms of deliberation or debate. Therefore if a group is in agreement on a certain topic, whether political, religious, cultural or otherwise, they have a tendency to only view and consider information which endorses their already established opinions.

One final point before moving to network theory. A number of studies suggests methods to counterweight the risks of collective intelligence. These studies share the belief that the right incentives provided to participants in crowdsourcing initiatives could further their engagement and motivation. The Open Government Directive issued in 2009 by the United States Office of Management and Budget, for instance, included a brief guideline for federal agencies, inviting them to consider offering different types of prizes to participants to open challenges. The guideline did not only mention cash prizes, but also exemplar prizes and point solution prizes. The same year the City of Manor, in Texas, partnered with the University of Stanford to foster the use of persuasive social and mobile technologies to increase constructive collaboration and participation between citizens and the local government. The project – named “Manor Labs” – received input from over 800 participants on their ideation platform, evaluated 80 ideas and implemented 5. Participants to Manor Labs were awarded with “Innobucks”, a type of virtual commodity, and could use them to receive discounts from local shops and restaurants.

⁷⁷ See J.L. IRVING, *Victims of Groupthink*. Houghton Mifflin 1972, and *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*, Houghton Mifflin 1982.

⁷⁸ See IPSOS KNOWLEDGE CENTRE, *Ipsos Views: The Perils of Perception*, 2015, available at <https://www.ipsos-mori.com/researchpublications/publications/1817/Ipsos-Views-The-Perils-of-Perception.aspx>.

⁷⁹ See D. PRENTICE, *Pluralistic ignorance*, in *Encyclopedia of Social Psychology*, Sage, 2007.

6.3 Network Theory

A third way to interpret gamification is through the lens of network theory. In her last book, Anne Marie Slaughter distinguishes three types of networks, according to the quality and density of linkages of the individuals that populate those networks.⁸⁰ The first type is described in terms of “cooperation” – i.e. when a linked group of individuals working together carry out a prescribed task in a prescribed way. Cooperation networks can evolve into “collaboration networks”: when a linked group of individuals figure out together the best ways to carry out a prescribed task that itself may evolve. Slaughter exemplifies this typology of networks with the US military command that in 2004 was tasked with defeating al-Qaeda in Iraq. The concept of “collaborative governance” has received attention in legal doctrine. John Donahue and Richard Zeckhauser defined it as “structured arrangements that interweave public and private capabilities on terms of shared discretion”.⁸¹ Beth Noveck classifies collaborative governance as a distinctive feature of “wiki governments”.⁸² The third type of network described by Slaughter is bound to involve the former twos. “Innovation networks”, as Slaughter names them, are linked groups of individuals tasked with generating new ideas, processes, and products in the service of a prescribed general goal.

SECTION IV – CONCLUSIONS

7. Societal Environments and Gamification

This Section deals with the question concerning the societal environment that may offer the best chances to establish gamification as a practice. To answer this question, this paper suggests to start from the theory of “mini-publics” developed, *inter alia*, by John Dryzek.⁸³ The basic rationale for the mini-public approach is that a relative small groups of citizens, usually recruited through random sampling, could deliver effective decisions and overcome the issues commonly faced by democratic decision-making. Thus the root notion of the mini-publics is that democracy requires a balance between diverging arguments in a context of mutually civic and diverse discussion. Dryzek envisages in the mini-publics a solution to the risk of anti-democratic representation. He explains that deliberative processes involve mechanisms for driving and supporting interactions within and between governance networks. These networks, however, are often populated by society’s elites. Hence the risk of anti-democratic representation, that could narrow the context for deliberation.⁸⁴ Dyzeck proposes as a solution the formation of small groups of

⁸⁰ See A.M. SLAUGHTER, *The Chessboard & the Web*, Yale 2017.

⁸¹ See J.D. DONAHUE, R.J. ZECKHAUSER, *Collaborative Governance: Private Roles for Public Goals* in *Turbulent Times*, Princeton 2011.

⁸² See B.S. NOVECK, *Wiki Government: How Technology Can Make Government Better, Democracy Stronger, and Citizens More Powerful*, Washington 2009.

⁸³ See S. DRYZEK, *Foundations and Frontiers of Deliberative Governance*, Oxford 2010.

⁸⁴ Even in the case of large scale participation, scholars note, participants are orchestrated by advocacy groups that can generate hundreds of thousands of submissions that are not informative nor reliable indicators of citizens’ informed value preferences.

citizens composed of the non-elite. These mini-publics would involve a more localised or task-specific forum purposed to reach consensus.

The idea of this paper is that gamified decision-making should not address a single societal environment, but rather operate in the logic of mini-publics, designing gamified participatory processes in a way that could attract diversified audiences. Policy-making, in other words, should be responsive to as wide a range of publics as possible to attract (and benefit from) skills (provided by citizen-entrepreneurs), social leverage (from citizen-activists) and personal/direct engagement (citizen-lobbyists).⁸⁵ A number of public regulators that experimented with gamification have already adopted this inclusive approach. Take the case of *"Decide Madrid"*. This is aimed at re-uniting the opinions from all residents of Madrid and channels them into local policy-making. Not only this participatory web platform allows any resident of Madrid to propose new local laws that other residents can vote to support, but it also let registered users to start or to contribute to debates, to vote for or against motions, or to provide additional comments.

There is an additional (potential) benefit for public regulators interested in using gamification to engage different audiences, and it relates to the convergence of different audiences into a single one. James Bohman coined the definition of "distributed public" to describe the characteristics of the public engaged in transnational democracy.⁸⁶ He posited that, in the supranational arena, the distributed public replaces traditional democratic intermediaries. It is unlikely, however, that the distributed public could be transformed into a convergent strong public whose decisions constitute a single normative will. To do so, explains Bohman, would require a public at the same global scale; but this public would lack the interactive dimension of mutual claim that makes public communication an essential feature of democracy. Jacqueline Best and Alexandra Gheciu go even further than the idea of the distributed public and suggest that, in contemporary global governance, we should transcend the view of the public as a separate or distinct entity or social space. Rather, they suggest, we should see the public as a "practice", i.e. as meaningful patterns of activity that enable individuals and communities to reproduce in the world. Hence the conclusion of Vest and Gheciu: by re-conceptualizing the public as a practice forces us to examine how different kinds of actors and activities get counted as public in different contexts.⁸⁷ Whether Bohman's, Best's and Gheciu's assumptions may be valid in the context of supranational governance, this is not necessarily the case at the national level. It could be then posited that gamified

⁸⁵ On inclusive policy-making, See OECD, *Government at a Glance, Inclusive Policy-Making*, 2013: "Open and inclusive policy making strives to include a diverse number of voices and views in the policy-making process, including traditional cultures. To be successful, these elements must be applied at all stages of the design and delivery of public policies and services. While inclusive policy making enhances transparency, accountability and public participation and builds civic capacity, it also offers a way for governments to improve their policy performance by working with citizens, civil society organizations (CSOs), businesses and other stakeholders to deliver concrete improvements in policy outcomes and the quality of public services".

⁸⁶ See J. BOHMAN, *Democracy across Borders. From Demos to Demoj*, MIT University Press, 2007.

⁸⁷ See J. BEST, A. GHECIU (eds.), *The Return of the Public in Global Governance*, Cambridge 2014

governance may favor the convergence of different audiences into a single one, eventually benefiting the inclusiveness of policy-making.

8. *The costs of inclusiveness*

But inclusiveness does not come without costs. To begin with, we should give account to those who criticize the idea that policy-making should strive to include the largest and diversified number of voices and views. Walter Lippmann, for instance, believed that only experts who possess sound information should take public decisions. This is to safeguard the quality of decisions, argued Lippmann. The decisions taken on the basis of public debate, he explained, could be easily manipulated by elites.⁸⁸ Similarly to Lippmann, Cristina Lafont assumes that granting power to mini-publics would equate to give blind deference to “a special version of elite conceptions of democracy”.⁸⁹

A second issue is that of costs. It was posited in the first Section of this paper that innovation in governance is a response to excessive spending of policy-processes. When policy-making processes are innovated, however, the costs (whether monetary or otherwise) may be significant. A rich literature has already analysed this topic. Thomas Bryer, Terry Cooper and Jack Meek, for instance, noted that greater engagement of citizens drain resources from professional administrative work.⁹⁰

A third challenge relates to the perception by the public. There may be claims that gamification actually discourages people from participating. This is especially true in cases where participants in gamified processes experience fall-outs in accessibility to decision-making, or develop the sense that the process itself was aimed at manipulating their conduct. In this sense, gamification reminds closely what theories of “Nudge” and “Think” – both developed in the scholarly field of public policies⁹¹ – have identified as inherent issues. Theorists of “nudge” and “think” postulate that citizens who are provided with social clues or given a direct voice in decision-making will probably increase their willingness to participate and to do positive things for themselves and society. The risk exists, however, that gamified elements may be perceived as the outcome of an authoritarian exercise of power from the moment in which participants perceive that they lack the ultimate control of their decisions. This has been called the “paradox of disincentives”.⁹²

These questions deal with the extent of desirability of the attempt to instill a sense of playfulness in the relationship between citizens and public service providers. It may be posited that governance is not progressing towards more inclusivity and openness, but rather uses gamification as a solution for escaping challenges of legitimacy and

⁸⁸ See W. LIPPMANN, *Public Opinion*, Long Island 1921.

⁸⁹ See C. LAFONT, *Deliberation, Participation, and Democratic Legitimacy: Should Deliberative Mini-publics Shape Public Policy*, 23 *Journal of Political Philosophy*, 2015

⁹⁰ See T.L. COOPER, T.A. BRYER, J.W. MEEK, *Citizen-Centered Collaborative Public Management*, 66 *Public Administration Review*, 2006.

⁹¹ See in particular A. ALEMANNI, A.L. SIBONY, *Nudge and the Law. A European Perspective*, Hart publishing, 2015.

⁹² See C.R. SUNSTEIN, *Why Nudge? The Politics of Libertarian Paternalism*, Yale University Press 2014.

accountability. It is perhaps too early to know if gamified policy-making is more than a short-term response to issues of supranational policy-making. In the short run, we may have to accept that gamification in public governance is in flux.