Playing Politics: The Potential of Video Games for Political Science Research

Description

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Long gone are the days in which video games were merely a niche hobby. The interactive medium is now an established part of popular culture. In recent years, the video game industryâ??s revenues were multiple times larger than music and film industry combined. As they became more and more popular over the last decades, video games were also increasingly used for non-leisure activities. A growing number of educators and researchers used existing video games or designed their own ones as tools for their teaching or their research projects. This article gives a brief overview on why games are so attractive for political scientists and how video games specifically are used by political scientists.

Games are nothing new in political science or the social sciences in general. In fact, multiple generations of scientists have already used games to research human behavior on a fundamental level. These games are called â??ultimatum gamesâ?•, â??trust gamesâ?•, â??solidarity gamesâ?•, â??common goods gamesâ?•, and so on, and are used in a myriad of studies. These games typically involve a specific situation in which participants interact with each other through financial transactions. Researchers typically start by explaining the rules of these transactions to their participants and then let them decide how much or to whom they are willing to give money. This in turn allows researchers to analyze participantsâ?? spending behavior in specific scenarios that represent real-world situations.

Although these setups are referred to as â??gamesâ?• in literature, they have little in common with modern video games like Animal Crossing, Minecraft, or Grand Theft Auto. Or do they? Broken down to their very core, games are environments in which people can freely act according to a specific set of rules. The environment embeds these rules into a context in which people can act on their intents. From this perspective, games are a simplified version of reality that reduces the possible number of playersâ?? actions and interactions according to a specific set of rules. If these rules are formulated in a way that

can represent real-world phenomena, games can be used to explore realistic human behavior in controlled, isolated settings.

This is true for all games, be they abstract decision-making games, tabletop games, or video games. It becomes apparent when we look at games where this link between real-world phenomena and in-game representation is very salient. For example, there are multiple attempts of designing games to explicitly simulate a potential Chinese invasion on Taiwan, both as commercial products or to analyze potential outcomes of such a conflict. These games translate real-life resources and actions available for the conflict parties into a simulated environment with a pre-defined set of mechanics. What makes video games special compared to analog games is that all of this simulation happens automatically, so the researchers or participants do not have to worry about applying the rules manually. Also, they are much easier to scale, as players only need some kind of computer.

Against this backdrop we will explore two ways in which video games are relevant for political scientists. The first way focusses on video games creating virtual environments. These environments can help uncover playersâ?? real-life attitudes by enabling them to behave in ways congruent with their beliefs. The second way in which video games are relevant for political scientists is about the set of rules that they are built upon. Game designers can set up these rules in a way to represent real-world living realities, like job loss or being discriminated against. This then presents an isolated setting in which researchers can observe how such experiences affect peoplesâ?? attitudes and behavior.

Video games are the only medium that can create environments in which people can interact with characters and objects around them with some agency. Those interactive environments often represent certain aspects of the real world. One central question for researchers is, how these virtual environments relate to real world experiences and how playersâ?? in-game behavior relates to their actual attitudes and behavior. A simple example: In the video game *Animal Crossing: New Horizon*, players move into a small town. They built relationships with their neighbors, furnish their house and perform everyday tasks. Additionally, they can interact with nature, by going fishing, catching insects or chopping down trees. Studies show that there is a correlation between how sustainable players behave in this game, e.g., how many trees they cut down, and their real-world attitudes towards environmental protection. This confirms that there is indeed a connection between the virtual and the real world. What is specifically interesting for

political scientists: These games are also used by political actors. For example, in the context of the U.S. election 2020, prominent Democrat politician Alexandria Ocasio-Cortez visited other players to interact with potential voters. Also, Hong Kong protesters used this and other games to digitally protest during the Covid-19 pandemic.

The connection between playersâ?? in-game and real-life behavior and attitudes are not limited to the visual parts of environments: Players also relate the social environment of their in-game experience to the real world. For example, when people play interactive stories as a member of a discriminated ethnic group and take decisions based on this virtual personâ??s experiences, their prejudices against this group decreases, as does their vote intention for far-right parties. These effects are quite sustainable, lasting at least several weeks after the experience.

Interactive environments in video games do certainly not fully represent the real world. But they can convincingly represent a simplified version of it. As the previous examples show, researchers can use this to observe real-world attitudes or to create an environment that serves as a framework for experiences researchers want players to react to. Of course, researchers have to be careful in making claims about how closely playersâ?? behavior in virtual environment mirrors their real-world behavior. Research on this question is ongoing.

Besides the environments, there are also the rules they are built upon. Gameplay in video games is bound by a pre-defined, more or less strict set of rules that structure and limit playersâ?? actions.

Researchers can purposefully define these rules to simulate specific kinds of political scenarios or social interactions. They can create interactive situations in which players act by using pre-defined game mechanics. This behavioral structuring is used in the behavioral economics games mentioned in the beginning, but also in more complex games. Such games are not only able to measure interactions between individuals, like trusting or acts of solidarity, they can also simulate more complex concepts, like unemployment, or public budget allocation. What makes video games unique is that they allow researchers to create fully customizable experiments in which peoplesâ?? behavior in these scenarios can be measured.

Of course, there is a variety of video game genres and a myriad of game mechanics. This articleâ??s purpose is to give an overview over fundamental characteristics of video games that make them attractive for social scientists. Altogether, there is much potential for social scientists to use video games in their research. Video games create immersive environments allowing players to express their attitudes. Researchers can precisely design these environments to represent real-world situations and thus measure or change participantsâ?? real-world attitudes. Additionally, they can specify the rules of their game to structure participantsâ?? behavior in very specific ways, allowing them to directly measuring the effects of complex real-world experiences in a controlled experimental setting.

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Chesney, Thomas, Swee-Hoon Chuah, and Robert Hoffmann. 2009. â??Virtual World Experimentation: An Exploratory Study.â?• *Journal of Economic Behavior & Organization* 72 (1): 618â??35. https://doi.org/10.1016/j.jebo.2009.05.026.

Duffy, John. 2011. â??Trust in Second Life.â?• *Southern Economic Journal* 78 (1): 53â??62. https://doi.org/10.4284/0038-4038-78.1.53.

Fabian, Mark. 2021. â??DevSim: A PowerPoint-Based Choose-YourOwn-Adventure Game for Teaching Economic Development.â?• *Journal of Economics Teaching*, 95â??105. https://doi.org/10.58311/jeconteach/bdfda3147dc90d3efb3848d659e1c0768e0a6558.

Formosa, Paul, Malcolm Ryan, and Dan Staines. 2016. â??Papers, Please and the Systemic Approach to Engaging Ethical Expertise in Videogames.â?• *Ethics and Information Technology* 18 (3): 211â??25. https://doi.org/10.1007/s10676-016-9407-z.

Ho, Manh-Toan, Thanh-Huyen T. Nguyen, Minh-Hoang Nguyen, Viet-Phuong La, and Quan-Hoang Vuong. 2022. â??Good Ethics Cannot Stop Me from Exploiting: The Good and Bad of Anthropocentric Attitudes in a Game Environment.â?• *Ambio* 51 (11):

2294â??2307. https://doi.org/10.1007/s13280-022-01742-y.

Kuliga, S.F., T. Thrash, R.C. Dalton, and C. HÃ¶lscher. 2015. â??Virtual Reality as an Empirical Research Tool â?? Exploring User Experience in a Real Building and a Corresponding Virtual Model.â?• *Computers, Environment and Urban Systems* 54 (November):363â??75. https://doi.org/10.1016/j.compenvurbsys.2015.09.006.

Patterson, Zachary, Javad Mostofi Darbani, Ali Rezaei, John Zacharias, and Ali Yazdizadeh. 2017. â??Comparing Text-Only and Virtual Reality Discrete Choice Experiments of Neighbourhood Choice.â?• *Landscape and Urban Planning* 157 (January):63â??74. https://doi.org/10.1016/j.landurbplan.2016.05.024.

Simonovits, GÃ¡bor, GÃ¡bor KÃ©zdi, and PÃ©ter Kardos. 2018. â??Seeing the World Through the Otherâ??s Eye: An Online Intervention Reducing Ethnic Prejudice.â?• *American Political Science Review* 112 (1): 186â??93. https://doi.org/10.1017/S0003055417000478.

Vuong, Quan-Hoang, Manh-Toan Ho, Viet-Phuong La, Tam-Tri Le, Thanh Huyen T. Nguyen, and Minh-Hoang Nguyen. 2021. â??A Multinational Data Set of Game Playersâ?? Behaviors in a Virtual World and Environmental Perceptions.â?• *Data Intelligence* 3 (4): 606â??30. https://doi.org/10.1162/dint_a_00111.

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