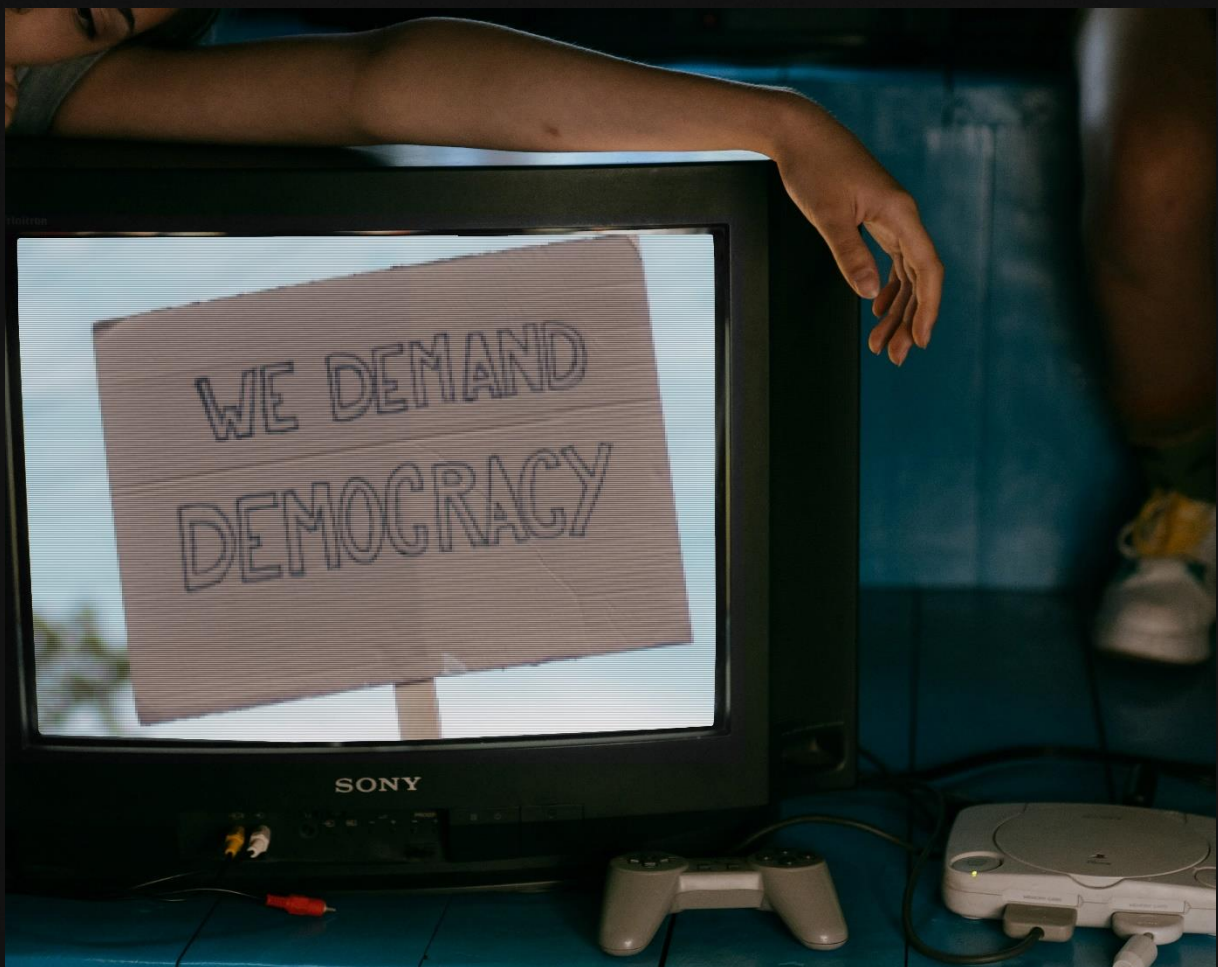


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Special Issue

Democracy Dies Playfully. (Anti-)Democratic Ideas in and Around Video Games

edited by

Eugen Pfister, Tobias Winnerling and Felix Zimmermann



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Projekt CH+ Games for Democracy. User-Friendly Political Self-Education through Entertainment Designⁱ

Sophie Walker

Abstract

Projekt CH+ is a Switzerland-based initiative built on co-design and interdisciplinary exchange. It strives to identify new solutions at the intersection of politics, communication, game design and user experience. Together with voters, political experts and game designers we create an app which uses game mechanics to help users select their ideal candidates during elections. During the 2019 Swiss federal elections, more than 500 people participated in online surveys on feature requests for a gamified solution, which supports users in identifying political candidates that match their personal profile. This data was complemented by 15 testing sessions, where users could interact with a prototype. The received feedback was used to complete the beta-version, which was available as a web-app during cantonal elections in Uri, March 2020. During this first public field test, more than 200 volunteers signed up to test the prototype and 5 school classes participated in an A/B evaluation, where the playful prototype was compared to a traditional electoral support. This report outlines the theoretical framework at the base of the prototype, the most prominent findings of the field research and presents the CH+ Feedback Model, which lies at the centre of the design process. The CH+ app prototype and model are further developed in an iterative process from election to election.

Keywords: Gamification, Co-design, Politics, *Projekt CH+ Games for Democracy*, Communication, Models, Motivational Design, Democracy, Games, Digital Responsibility, gameenvironments

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User experience! Everybody talks about UX, PX, CX and what have you. The context in which we use these terms are usually related to business or design. Come to think of it, has anyone ever asked you about your user experience during political elections?

Since February 2019, I have been working on *Projekt CH+ Games for Democracy*. The goal: Using game mechanics to make political self-education more inviting. In order to achieve this, we are building a Tinder-inspired voting aid that supports voters in finding their political matches during elections. We? Yes, *Projekt CH+* is based on co-design. Until this day, more than 600 people have shaped the voting aid through online surveys, testing sessions and interviews. A democratic approach for a democracy application! In August 2020, I founded the Ommon GmbH, in order to further develop CH+ and to continue working on all kinds of playful educational experiences in the future. But let us take a step back to where it all began: As the master's thesis of an idealistic *Padawan* at the Zurich University of the Arts.

Every country has its own system, its rules and regulations that define the lives of millions. In Switzerland, people get to vote multiple times per year. Everyone has the right to go out and collect signatures until there are enough to have the country vote on a specific topic. Fun fact: This is the reason why in 2018 we had a national vote to decide if cows should keep their horns or not. While Swiss people are used to having votes and elections going on, some feel that it is a bit too much at times. Always having an opinion can get tiring – and was not paradise a lot more pleasing before the fruit of knowledge was dangling from a tree? On a global scale, political tensions are rising as globalisation fuels conflicts and cultural clashes. Meanwhile, it appears to become increasingly simple to access entertainment media: To enjoy, forget, distract. So what happens if dealing with reality keeps on becoming more difficult, while escapism into digital media is facilitated by design?

This text outlines my process and my learnings during my time in the Game Design master's program at the Zurich University of the Arts. Despite all the workshops, paintable walls and abundance of musical and performing events the university

offered, there was only one question on my mind: Can gamification principles applied to political communication motivate Swiss voters to politically educate themselves by supporting them in identifying politicians who accurately represent their views? After a brief literature review, the text introduces two models to illustrate the relation of democracy and games. Based on these frameworks, a first design is drafted. This concept is expanded by qualitative and quantitative feedback collected during the federal elections of parliament in 2019. The concept was then refined and a first functional prototype was tested during local elections in the canton Uri, March 2020. In the final section, I summarise my findings in the *CH+ Feedback Model*, as it is implemented in *Projekt CH+*.

The Uri prototype was developed together with OpinionGames GmbH (www.opiniongames.ch) and the political data featured in the application is provided by smartvote (www.smartvote.ch). Smartvote is an electoral support tool created by politools (www.politools.net). Based on political questionnaires, which are answered by political candidates and voters, voters receive a political diagram and can see how well their views match with those of other candidates. The following text is based on my master's thesis written at the Zurich University of the Arts, the section *Motivational Design Recap* being an excerpt thereof.

Scientific Framework

Before we can start designing anything, we need to understand our problem. Turns out, we are not the first ones wondering why people are not politically active. In most cases, the people asking are political scientists. So, what happens when this question is asked by a game designer?

Political Participation and Media Consumption

Participation rates during Swiss elections have been below 50% since 1979 (Bundesamt für Statistik 2019). Many young people do not feel truly represented by political parties or distrust politicians to act according to the will of the people (Golder & Jans 2019). In 2003, political scientists Bühlmann, Freitag and Vatter began categorising different kinds of non-voters. After further exploration, six non-voter groups were defined: "Content but disinterested," "Incompetent," [sic!] "Socially isolated," "Politically frustrated," "Voting only," (vote on initiatives but do not take part in elections) and "Unconventionally participating" (Fatke and Freitag 2015, 103). Thereof, the largest three groups were "Content but disinterested" (25%), "Incompetent" (20%) and "Socially isolated" (18%) (Fatke and Freitag 2015, 103). This shows us an interesting yet concerning mix between people passively agreeing with the government and people incapable to fully comprehend or interact with it.

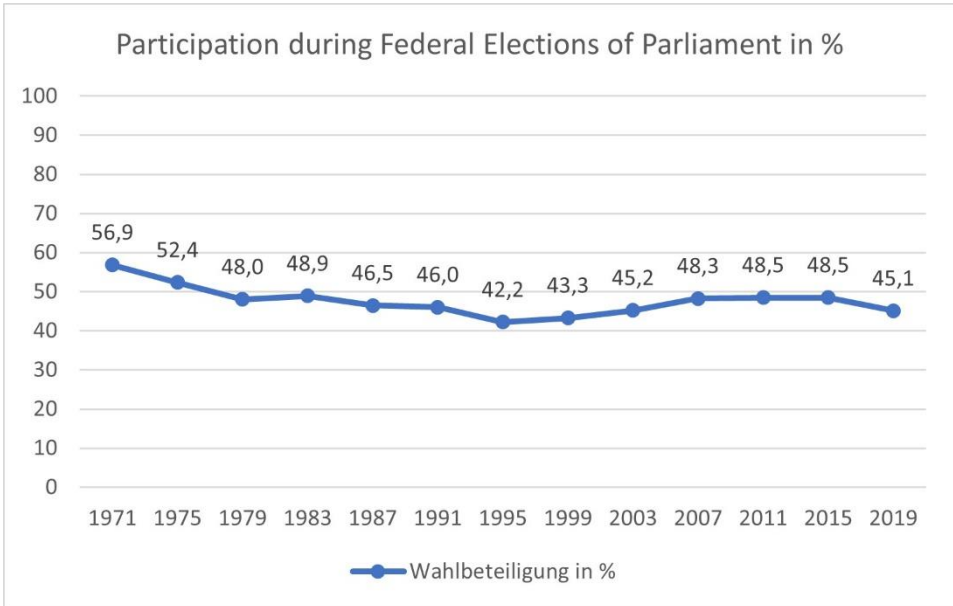


Figure 1. Swiss government agency for statistics (Bundesamt für Statistik 2019).

When looking at modern media consumption, it is no secret that our use of media has significantly increased over the last decades. For *digital natives*, the digital reality appears to be a natural, organic extension of life. In return, young people are exposed to increased levels of “digital stress,” ranging from “approval anxiety” to “fear of missing out” (Steele, Hall and Christofferson 2020, 15). While it is not the end of the world, a social media post with zero likes and interactions just does not feel as good as content which is *publicly approved* by a large number of people. On the other hand, media narratives also allow users to enter an elevated state of mind, an almost *self-transcendent* experience, where users can experience a vast range of externally created emotions, motivations and values (Vorderer and Halfmann 2019). When watching movies, we are emotionally invested in seeing Hollywood heroes conquer *evil*. On social media, we are excited when an influencer shows off their renovated mansion. Through media, we are able to experience feelings of belonging, luxury, standing up for the right things and riding into the sunset happily ever after. Since everybody talks about *digital stress*, I think it is time to consider this *digital bliss*, as I would call it, as well – for all the good and the bad that comes with it.

With regards to political discussions on TV and social media, one might get the impression that extreme opinions get the most resonance. Well, research indicates that our gut feeling appears to be largely correct. Blassnig, Ernst, Engesser and Esser’s (2002) study on the reception of populist political messages shows that politicians who regularly share populist messages are more successful in growing their social media channels. In addition, low quality media outlets are followed more often and receive more interactions than high quality media (Hauptli, Schwaiger and Eisenegger 2020). When analysing the effects of political talk shows on the processing of political information, Roth, Weinmann, Schneider, Hopp, Germann and Vorderer found a curvilinear relationship between systematic processing of information and hedonic

entertainment levels. In other words, systematic processing of political information in political talk shows was highest when the hedonic entertainment levels were at a medium (Roth et al. 2018). This relation would indicate that an entertainment approach could be successful, as long as the content does not get too comical or vulgar. In the end, it is a voting aid, so while it should be appealing, it must also be taken seriously.

Enter. Game Design!

Now, this is where things get interesting. As game designers, we know how to create fascinating concepts, creative challenges and how to involve players. The question of how these theories can be applied for educational purposes has always intrigued me. Merging the spiciness of entertainment games and the complex dryness of politics – all while keeping the political content factual and neutrally formulated – seemed like a nearly impossible feat. Without the focus on neutrally phrased information, the voting aid would turn into a shallow, oversimplified depiction of candidates. This focus on neutrality and context is therefore a non-negotiable requirement. So how do we portray this large amount of complicated information neutrally, without it being boring? Looking for solutions, I dove into game design literature.

In their MDA Framework, Hunicke LeBlanc and Zubek (2004, 2) describe games as dynamic “systems that build behavior via interaction”. The Mechanics, defined by the designer, lead to Dynamics as soon as players interact with the game system. The resulting player experience is defined as Aesthetics (Hunicke et al. 2004). To refine the concept of mechanics, Beat Suter offers the differentiation between macro mechanics, which work in the long-term and micro mechanics, which are more short-term (Suter 2018). What is a democracy if not a system that builds behaviour through interaction? The *Mechanics* are built by rules and legislation. In a direct democracy the *Dynamics*

are especially interesting, since the people can shape the rules, the *Mechanics* that surround them. How individuals feel within their system could be compared with the *Aesthetics*, since every individual introduces a new mix to their own *Dynamics*. On an official level, politics often defines *macro mechanics*, which are slow to be agreed upon and often even slower to be implemented and experienceable in day to day life. A personal vote might be perceived more as a *micro mechanic*, since it is a short activity for voters – however, this vote might very well have long-term impact.

Salen and Zimmerman (2004, 95) describe the “magic circle” as the non-physical place where game experiences usually take place. The magic circle is separate from reality, and for the duration of play, its rules overwrite other norms outside the magic circle. According to their research, another essential aspect of games is the fact that the outcome is uncertain (Salen and Zimmerman 2004). Now, we could argue that magic circles do not only exist in game contexts. If we compare them to cultural norms and values, every culture has their unwritten rules, which are followed by large parts of the population. When visiting different countries, we adapt to local rules – during the time of our stay, we enter a different magic circle. One could understand any political system as a magic circle, since every country has their own legislation and norms. The serious danger of isolated institutional *magic circles* lies in exactly the fact that they have the power to overwrite reality. We can see extreme examples in totalitarian systems, which work with hierarchies that can be climbed when following the rules, a monopoly on truth, unified performances and standardised appearances. As long as the magic circle holds, everything is allowed. Luckily, such extremes are exceptions. On another note, the uncertainty aspect which is present in most games is also present when politically participating in any political system. There are always fellow citizens and existing legislation to be considered and one never really knows if

the personal action had an effect. This might be part of the reason why the previously described *Unconventionally participating* or *Politically frustrated* non-voters are unhappy.

While the goal of a game is usually defined, there are challenges and limitations which keep players from reaching this goal. These challenges and obstacles are core aspects of any game (Brandse 2017). Providing the player with different, “meaningful choices” (Schell 2008, 179) in order to overcome challenges is another important task for game designers. Having the freedom to choose their actions is one reason why players have a sense of being in control while engaging in the “possibility space” (Bauer 2018, 35), which is created by the game system. Time investment and the ability to manage and shape the game reality gives players a sense of responsibility for the game world (Götz 2017). With regards to democratic participation, the first step for voters is to shape their own opinion. According to their thoughts, they can identify their political goals, be it societal change or personal contribution. This might be a point which *Incompetent* non-voters do not reach in the first place. While game challenges offer feedback, punishments and rewards, we could argue that the challenge in political education lies in the fact that voters need to understand political fields before making decisions on how to reach their political goals. Without awareness of the personal political opinion, goals derived thereof and the available options to reach them, it is difficult to define subjectively *meaningful choices*. Without meaningful choices or options available, it is difficult to establish a sense of participation, investment and ownership over the personal contribution to a political system.

On the opposite end of being in control is the element of chance, which keeps players on their toes, as they are anticipating the outcome of their action or a random event

in the game world. Players are often unwilling or unable to differentiate between chance and personal skill (Schell 2008, 183). The anticipation of the result leads to the release of dopamine, which fosters knowledge seeking behaviour (Weinschenk 2011, 121). Compared to the pace of social media and entertainment, politics works slowly and there are not a lot of perceived elements of chance. While it is certainly important for decision-makers to rely on facts and consideration instead of chance, this lack of novelty might be one of the reasons why disengaged voters are *Content but disinterested*. On the other hand, political conflicts and aggressive political debates add to the *digital stress*, which especially young people are confronted with on a regular basis.

Another major element of any game is the way in which it provides feedback to users (Fabricatore 2018). This feedback shows players how they are progressing towards their goal, it guides them through the game world and exposes limits or *forbidden* actions right as they are encountered. While every country has legal feedback mechanisms in place, there is not a lot of feedback given on an individual's political participation. At the moment, this feedback role is usually taken on by specific political parties, which create events for their voters, where they exchange, celebrate and discuss. *Socially isolated* non-voters, or people who do not identify with specific political parties do not have such a feedback system.

Clear goals, immediate feedback and a sense of control over one's own actions facilitate the experience of *flow*, which allows people to forget the world around them and truly invest themselves into a specific task (Csikszentmihalyi 1990). This state of mind can be sustained by providing tasks that are in balance between being too simple (boredom) or too difficult (anxiety) (Sherry 2004). Without clear goals, options on how to reach them or feedback on the personal contribution, there is not a lot of

flow in democratic participation. While it is debatable if this state of mind is desirable during political participation, a *flow* experience could motivate users while they are informing themselves about politics. Balancing between boredom and anxiety means that voters should not find themselves in a stressful situation while learning about politics, but that they should have the possibility to learn and progress at their own pace.

Building the Bridge. Communication Model

To structure my thoughts about the differences between political communication and entertainment communication, I came up with a *Communication Model*.

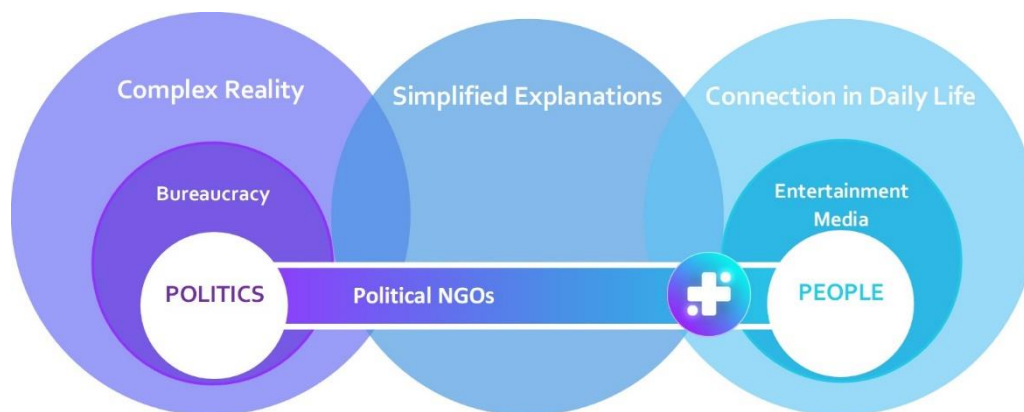


Figure 2. Communication Model: Communication between politics and (possible) voters.

Politics relies on thorough, slow processes where information and decisions have to run through various channels and filters before action can be taken. The communication is often slowed down and de-personalized through bureaucratic procedures and legislation. On the opposite end we have voters who, in their free time, consume fast, emotional, sensationalistic content and often live in a world of *digital bliss*. Usually, entertainment content is consumed at the user's free will, while bureaucratic or legal procedures would not likely be described as leisure activities. On the level of information content, politics is an extremely intricate field, where

experts and laypeople alike are challenged to comprehend correlations or conflicts. Educational institutions and political NGOs break down this complexity into simplified explanations, so that they can be discussed on a broader level. By the time political issues reach politically disengaged individuals, the information content of political messages is often reduced to a minimum: slogans, headlines or social media posts. While there are Swiss institutions who work in the field of political communication, their focus is to make complex reality more understandable (simplified explanations). There are no institutions who address the issue of political education from the other side of the spectrum. In *Projekt CH+*, we attempt to use the entertainment language to connect with disengaged voters and show them access points to more in-depth information.

Exposing Mechanics. Feedback Model

Now that the entertainment approach is illustrated, the question is how to implement it without distorting political information or drifting into a certain ideological direction. I drafted my approach after going back to our game design basics, as illustrated above.

Every game has an implicitly or explicitly pre-defined goal. In order to reach this goal, players have a limited amount of options, which are provided by the ruleset and the environment of the game system. Players are free to choose from these options and can therefore shape their personal path of progress towards their goal. Their interactions with the game system are accompanied by constant feedback, which gives them indicators on how they perform. To reach the goal of the game, players need to understand the rules and the options they have to act within this ruleset.



Figure 3. Basic model on game feedback.

As it was outlined in previous parts of this text, we can find similar themes in democratic systems. In order to create change, there needs to be a clear goal. This could be a desired change in society, legislation or the political landscape in a parliament. In order to reach political goals, voters need to be familiar with their system's rules and their *options* to work towards their goal. By choosing from their options on how they would like to work towards their political goal, voters can create their own progress towards reaching this goal. At this point, the biggest difference between democratic systems and game worlds becomes evident: *In a democratic system, there is often no direct, personal feedback on the voter's participation.* Even when looking at election results, the feedback can be delayed by days, weeks or months, and might never be experienceable in day to day life. In addition, being one voice amongst millions, there is no reason for voters to feel personally responsible for the outcome of an election. The feedback which *is* provided, is mostly given by parties and bound to ideology. There is no, or very little, personal feedback on personal progress with regards to political reflection and political learning. In order to motivate independent thinking, motivational strategies must be built around giving people feedback on their personal progression as they are working towards a deeper understanding of their personal political concerns. *Projekt CH+* aims to support voters in their familiarisation process with the options they have within their system,

and show them how they can act and progress towards their goal within the ruleset of their system. Most of all, the aim is to address the lack of personal feedback on personal political growth, by showing voters *their value* in the system and giving feedback on their *personal progress* within *their own* understanding and evaluation of political matters.

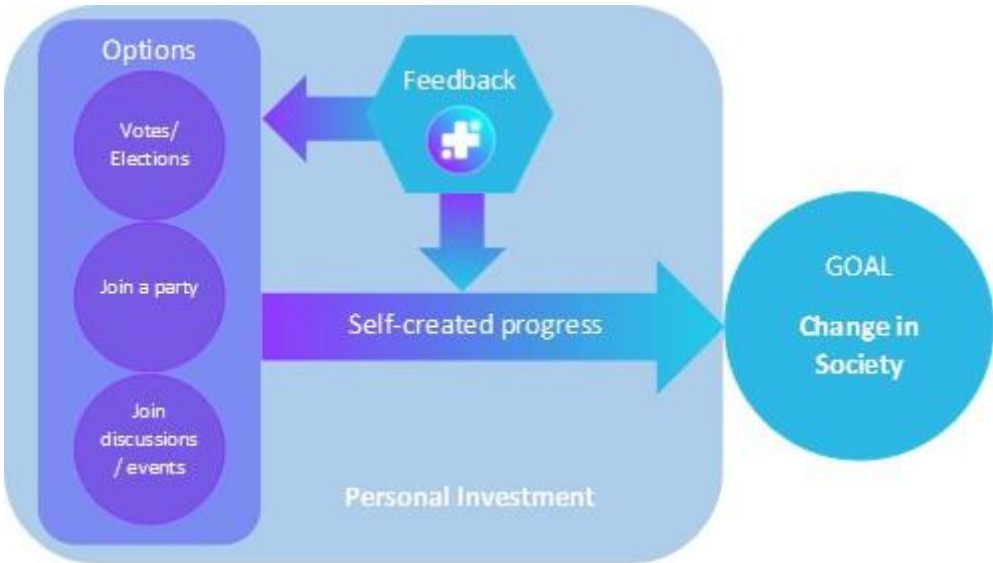


Figure 4. Feedback model: Comparison of a simple game structure with political participation.

Field Research. Federal Elections of Parliament 2019

We can read and theorise all day, but until we test and share our thoughts with others, there is not much to be gained. While I conducted interviews and short feedback sessions during the literature review and initial concept phase, I decided to set up a quantitative field study during the federal elections of parliament. The only problem: When the elections were around the corner, I had nothing to test. One month before the elections, my prototype was still on paper. It was clear that there would be no digital prototype which could be tested, at least not without personal instructions and basic explanations. With the federal elections only occurring every four years, I still had to take advantage of the fact that *now* was the time when users

experienced their *election problems*. After some deliberation, I decided to use the federal elections to get as much feedback from voters as possible. The more I thought about it, the more I liked the idea. Who was better to shape the concept of an electoral support tool than people who were actively trying to create their political lists, while being surrounded by political campaigns? The resulting first cycle of public field research consisted of three online surveys (before, during and after the elections) and 15 face to face testing sessions, where users were given a paper prototype or a digital prototype. The aim for this research was to find out what kind of support voters would like to have during political elections, and how they perceive politics during elections.

The online surveys were shared by political NGOs, which resulted in a sample composed of more politically interested participants. While respondents of the online surveys were not very receptive of a playful electoral support (the more playful, the lower the ratings), participants of the user tests were in favour of the playful elements. In general, this research made clear that *user experience* during parliamentary elections was not very good. On the contrary, many people indicated that they needed support in getting an overview over the available candidates, and that they were not confident in their selection process. The sheer amount of available candidates (more than 900 in the canton Zurich), the lack of overview and the omnipresent campaign ads on the street left many people with rather negative feelings.

Between September and October 2019, the 15 participants of the user testing sessions had the opportunity to give feedback on the usability and specific functionalities of a first prototype. Their input led to the decision to choose a Tinder-like swiping mechanic as the core functionality of the application, and to emphasise

usefulness over a *traditional* entertainment experience. At the same time, respondents of the online surveys could indicate what kind of functions they would like to have in an electoral support, and which facets of political candidates they wanted to know more about. The survey results revealed that users are interested in customisable solutions, which provide them with feedback in the form of updates and notifications on their selected political topics – or people – of interest. Concerning political candidates, the top three highest scored points of interest were the candidate’s personal political goals, the candidate’s party and the candidate’s character. While we see that the personal element is important, respondents were not interested in private details (family) or chatting with candidates. A couple of the most popular requests from the user were chosen to be fully implemented. These requests include the possibility to compare and rank candidates and the possibility for users to match their own profile with various political lists. A major conclusion drawn from this research was that our application had to be focused on usability instead of playfulness. If it is not useful, the application, especially if it is playful, is not accepted.

The Uri Prototype

According to the literature and field research findings, the pillars of my app design were simplicity, progression, control and personal investment. In accordance with our Feedback Model, giving user feedback on their personal progression towards their political profile and their political list was another focal point during the design process. We will now go through the application and examine how the app gives such feedback without evaluating the user’s political choices.

When starting the application, users see their cantonal flag. They are addressed with their username and can see how much time is left until the polls close. The remaining

time is displayed by a countdown. Once users start creating their own political profile, their political diagram appears as a backdrop behind the *Uristiär*, the main symbol on the cantonal flag of Uri. When they first enter the main menu, users see the flag of their municipality and a menu with 5 items, 4 of which are locked. By choosing the unlocked *Profiil* item, users are faced with their first challenge. By answering political questions, they create their own political profile. In order to receive their political diagram, they have to answer at least one of two official smartvote questionnaires, which have been implemented directly into our prototype.



Figure 5. Uri Prototype start and home screens, 2020 © Sophie Walker.

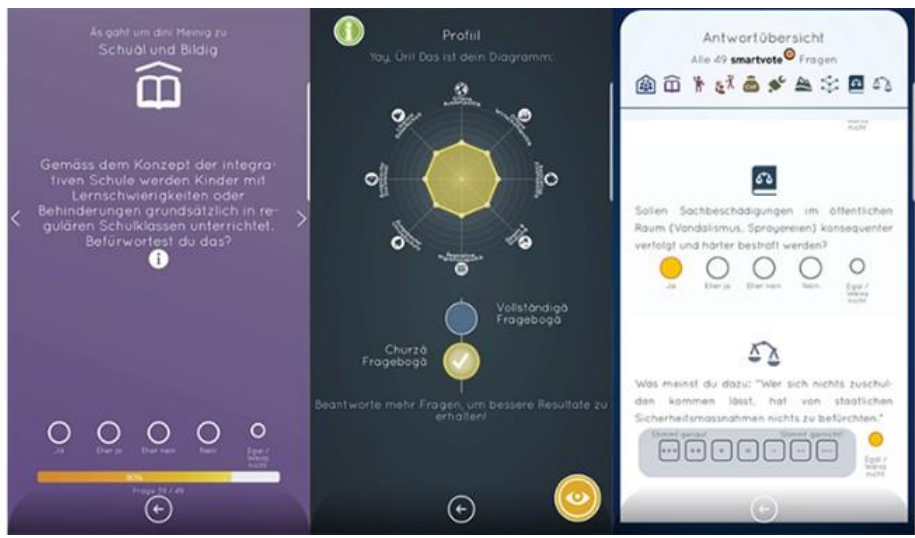


Figure 6. Uri Prototype *Profil* functionalities, 2020 © Sophie Walker.

As a reward for completing the first questionnaire, they receive their political opinion-diagram (created by smartvote) and unlock the next functionality, *Üssortierä*. Here they can swipe through all political candidates of their municipality, which are shown in a random order. Users never know if the next person will be a good match or someone they completely disagree with. Inspired by the popular dating app *Tinder* (2012), users can like or dislike candidates by swiping left or right. Once they have gone through the first couple of candidates, the next functionality is unlocked. All people who have been accepted in the previous step are collected in the *Favoritä*-overview. Users now have the possibility to rank candidates via drag and drop.

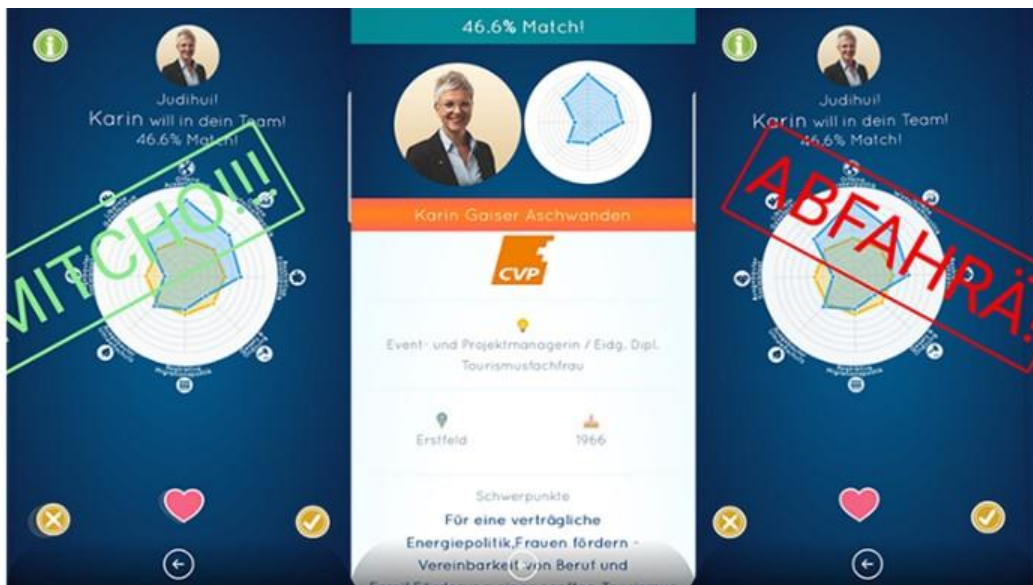


Figure 7. Uri Prototype *Üssortierä* functionalities, 2020 © Sophie Walker.



Figure 8. Uri Prototype *Favoritā* functionalities, 2020 © Sophie Walker.

Once they are happy with their ranking, they can continue to *Alli Liischtä*. *Alli Liischtä* is a structured overview of official political lists and lists created by the user. Adapted or newly created lists can be renamed and edited at any time. Users have the choice to copy official lists or to make their own list from the ground up. The first time they choose either option, *Mini Liischtä* is unlocked. *Mini Liischtä* is the centrepiece of the application, since this is the point where users can dynamically change and try out

Motivational Design Recap ii

Goal

The goal of the application is to help users create their own political list. This goal is clearly communicated from the first time users open the application and can always be seen on the main menu. A timer reminds users of their limited time resources to master this challenge until the elections are over. This exposure of time scarcity is inspired by the descriptions of Tracey Fullerton (2008).

Options

Users can base their choice of political candidates on various aspects: personal, political, or defined by users themselves. Overall, the aim is to give users a sense of ownership over their candidate selection by clearly providing them with options and asking them to invest time before making decisions. This approach is shaped by the motivational theories by Ulrich Götzt (2017). When swiping through candidates, users experience chance and uncertainty of outcome, which are enticing game components according to Salen and Zimmerman (2004). In addition, Weinschenk states that chance and anticipation foster information-seeking behaviour (2011). To a lesser extent, these mechanics are picked up again when users can create their own list. At this stage, chance takes a backseat to a mixture between Lazzaro’s (2004, 7) “easy fun” and “exploration,” and a strategic approach to creating the best possible list with regards to the user’s own opinions, the candidates’ personal stats and the *team stats* of the entire list. Being able to accept or reject candidates puts users into a position of power. When ranking candidates, users are able to interact with candidates instead of being in a position where they merely receive information about them. Users are able to evaluate and act on this information, which allows them to make “meaningful choices,” as described by Schell (2008, 179).

Feedback

The unlocking mechanic of the individual functions prevents information overflow and gives users a sense of progression and achievement. This basic motivational system is most likely to appeal to "achievers" (Bartle 1996, 3). Completing the smartvote questionnaires is supported by visual feedback and unlocks other functions of the prototype. Completing the questionnaire gives users a sense of mastery. The notion that every user action has to be followed by immediate feedback is derived from the theories of Fabricatore (2018).

Personal Investment

The prototype requires users to concern themselves with their own political opinion and the opinion of candidates, therefore creating a sense of meaningfulness and facilitating the formation of personal involvement. Our target is to foster the interest for individual candidates and to encourage the establishment of a sense of responsibility for the personally created list.



Figure 11. Feedback Model as applied in the first public prototype, Uri 2020.

Evaluation: Local Elections, Uri 2020

The first public evaluation of my prototype took place during cantonal elections in Uri. The application was publicly accessible under uriwahlapp2020.ch. The evaluation consisted of three parts: A public evaluation (n=75), where volunteers filled in a survey which they received after the elections, an A/B evaluation of the prototype (n=29) and smartvote (n=26) which was carried out with educational institutions, and an expert review by students from the ZHdK Game Design Master study (n=16), who filled out the public feedback survey and took part in a feedback discussion.

Public Ratings

The different functionalities all got public ratings between 3.79 and 4.17/5. Hereby, the highest scores went to the profile and the dynamic list creation. At the time of the evaluation, a technical error in the *Üssortierä* functionality is likely to have influenced the ratings for this functionality. When asked to indicate how helpful the functionalities were, all ratings were between 7.2 and 7.99/10. The general assessment scores of the prototype with regards to user friendliness, the combined functionalities, the visuals and the overall rating for the prototype were all above 4/5.

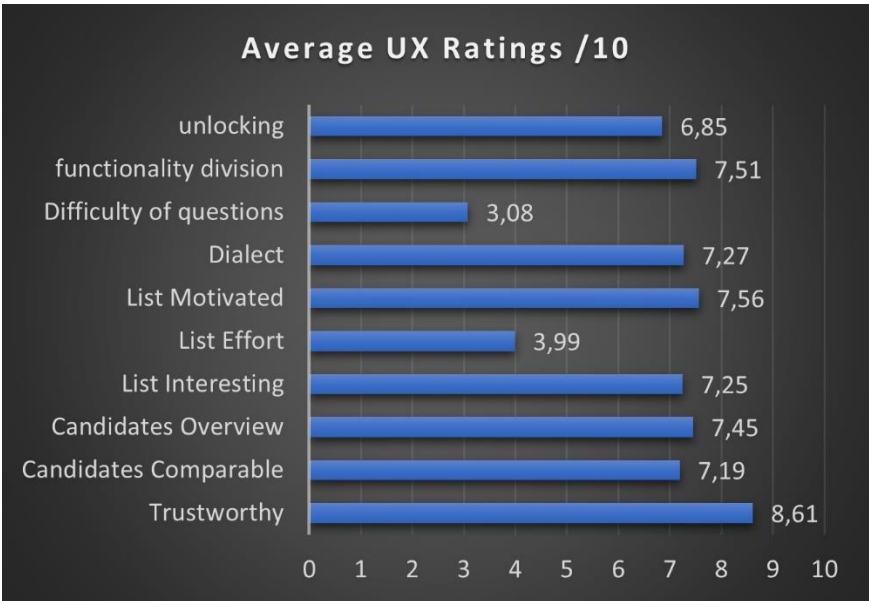


Figure 13. Average scores of the public group for various user experience questions.

From the respondents who voted during the elections, 74% used the application to create their political list. From this group, 59% created their own list from scratch, 24% voted for an edited list and 17% for an official list. While the prototype includes explanatory videos on the electoral system, it is important for future iterations of the prototype to point towards the implications of voting for a completely custom list instead of an official list, as this is something that voters might be unaware of. 71% of respondents confidently stated that they would use the final application and there were no responses explicitly stating that they would not use the application. This is an indication that the prototype is going into the right direction. Overall, the public ratings were higher than those of the other two groups who were part of the evaluation.

A/B Evaluation

55 students took part in an A/B evaluation of the prototype and smartvote. At this stage, there were no significant differences between the comparable functionalities of the prototype and smartvote, how users interacted with candidate profiles or how

they perceive politics. On the one hand this shows us that our solution measures up to an established system, on the other hand we see that there is still room for improvement. The biggest difference between the A/B groups was the user's interest towards political candidates, where our prototype group scored their interest for candidates as a 6.4/10, while the smartvote group scored it at 5.2/10. On the flipside, the respondent's subjectively perceived interest from candidates towards voters was rated slightly lower by the group who used the prototype (3.77/10) than the group who used smartvote (4.08/10). While this is a small difference, it shows that the prototype failed to establish a more personal sense of connection with candidates. Additionally, the prototype makes use of cheeky remarks about candidates who did not fill in their political profile on smartvote. It is possible that these remarks had a negative effect on the user's impression of candidates, so the phrasing in the next project iteration will be considered more carefully. With a small sample (n=55) and small A/B groups (An=26, Bn=29), it is not possible to draw final conclusions. It should also be noted that, since participants only used one application or the other, they could not directly compare the two applications and the features in which they differed.

Game Design Evaluation

Compared to the other groups who were part of the evaluation, game designers were stricter in their evaluation. Especially in the face to face feedback round, they criticised visuals, usability, the lack of playful elements and a final reward after having unlocked all functionalities. While the public group was content with their overview of candidates (7.45) and how they could compare candidates with each other (7.19), the expert group had a different opinion. They were not happy with their overview (5.94) and did not feel candidates were comparable (4.25).

The most prominent request for improvement of the prototype was the addition of more animations. While designers believed that the application needed work in the sound department, users wanted to see more videos.

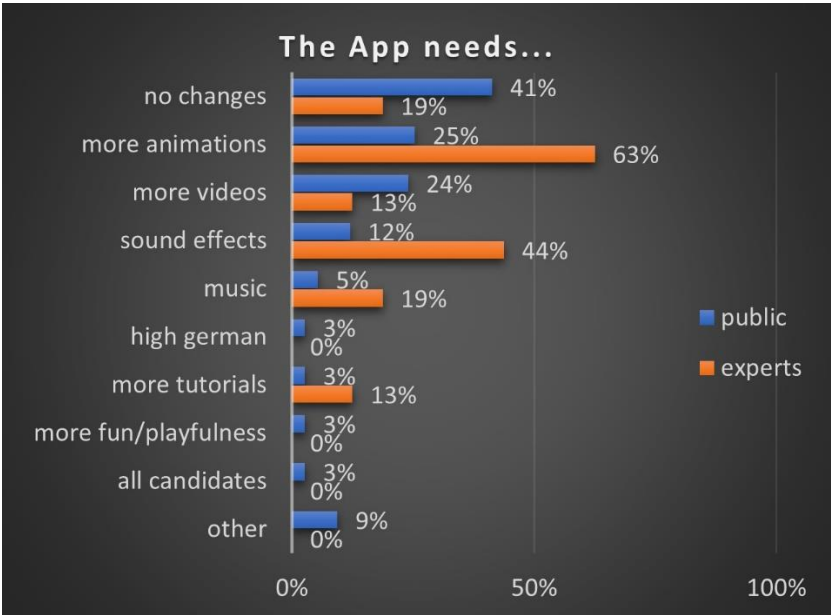


Figure 14. Most requested improvements of public respondents and game design experts.

In conclusion, the public prototype received high ratings for user friendliness, helpfulness and the visual style. The two most popular functionalities were the creation of the personal political profile as well as the personal list creation. The fact that the differences between the comparable functionalities of the traditional voting aid and the playful prototype were assessed as being small, was a disappointment at first. Personally, I had been hoping for more extreme results – regardless of whether they would have been positive or negative. This would have given a stronger indication of what areas to improve or develop further. On the other hand, it made sense to me that a master’s project and a prototype that was developed in 6 months would neither be the best thing ever created nor a magical cure for political self-education. While there are no significant differences between the comparable functionalities of the prototype and smartvote, it is also safe to say that the playful

approach measures up to the earnest solution. In addition, the entertainment approach has no negative effect on how users interact with political profiles or how they view politics and political participation. The main design elements of simplicity, progression and feedback appear to be working. However, it is clear that they need more polish to truly make an impression. The feedback from the game designers shows that there needs to be a final reward once people have made use of all functionalities, or when they have made their final selection for their political list. It is clear that the trigger of this reward needs to be activated by the user, since they are the ones who decide when they have created the *perfect* list.

CH+ Feedback Model

With these findings, I returned to the Feedback Model once more. Since its last state merely applied to the Uri prototype, I wanted to summarise my research finding in more general terms. This would allow the thought process to be used as inspiration for other civitech projects, which aim to motivate voters to politically educate themselves, and make their personal contribution to democracy. This model is applied to structure future iterations of *Projekt CH+*, and is therefore named after the project. The CH+ Feedback Model is expected to change in accordance with the ongoing development and accompanying research progress.

Goal

The goal of the application must be clearly communicated as something that is shaped by the user themselves. This includes the goal inside the application, (e.g. creating a political list), as well as its real-life consequence (e.g. voting for a political list).

Options

Clearly illustrated and explained options must allow users to choose how they would like to structure their thoughts and priorities with regards to their personal goal. The provided options depend on the official regulations of the relevant political system and must be designed in close exchange with political experts and voters from diverse political, educational and social backgrounds.

Personal Progression Feedback

Feedback given in the application must not address political ideas, but instead address the user’s progress towards their personally defined goal. Regardless of the political content, descriptions which contextualise political content featured in the application must be identical for related content (such as information about different parties or individual politicians). This applies for all texts, visuals and sounds featured in the application which are accompanying political descriptions. Ideally, the political content is directly provided by political personalities or institutions and not by the designers of the application.

Personal Investment

A connection must be drawn between the time and effort which users invest in the application and the final step of taking political action in real life. It must be clearly communicated that this investment is lost if users do not follow up with real-life political action and that the real-life action has real consequences.

Dissociation from Ultimate Truth

As a voting aid, any application must refrain from claiming to offer the best possible solution for voters. Voters must be reminded that various factors can influence the optimal selection for them, and that it is impossible to fully portray these factors in an application.

The CH+ Feedback Model

This final illustration of our model demonstrates the previously described points with regards to the CH+ implementation. While *Projekt CH+* currently focuses on political elections, the model can be adapted to apply to other cases.

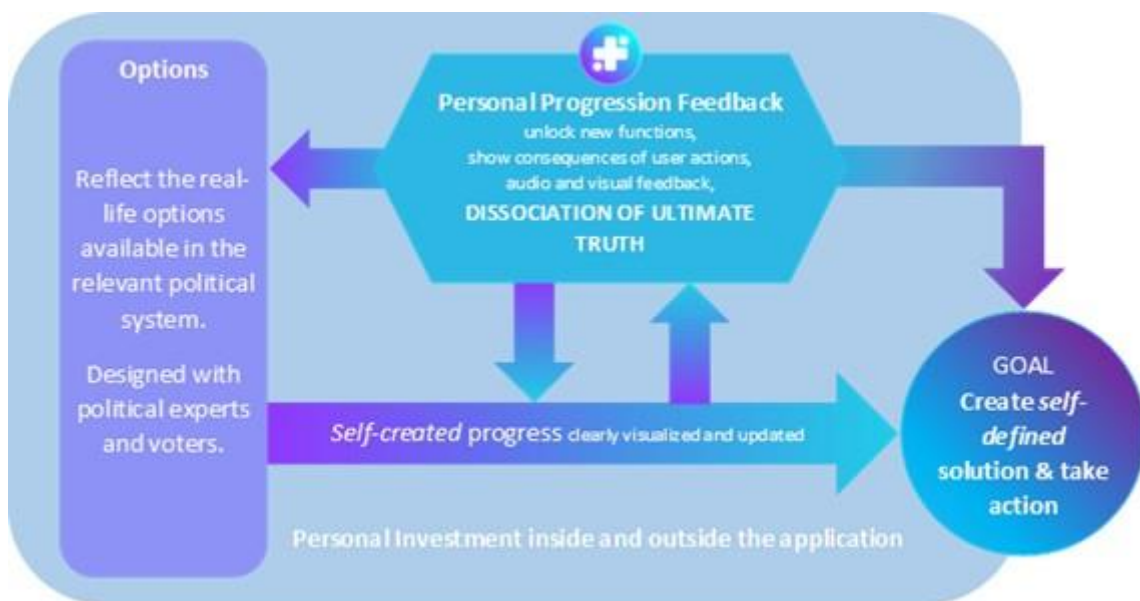


Figure 15. The CH+ Feedback Model.

In the end, it is evident that one has the best chances of winning a game if one is familiar with the goal, the rules and the options available to reach this goal within the game's ruleset. It is equally important to know and understand the other players involved. Applied to a democracy context, voters need to be familiar with their personal opinions and goals, the system they live in and what options they have to

reach their goals within the rules of this system. Especially during elections, it is important to be aware of other *players* and their interests: the parties, the candidates and of course, fellow voters. Feedback and motivational mechanics can support voters on their journey of political emancipation and awareness, but they cannot replace political education.

Conclusion. More *User-Friendly Political Information*

Over the course of a year, more than 600 volunteers have shared their opinions and preferences on *games for democracy*. I noticed that people are intrigued by the thought of shaping something that combines two seemingly distant fields. The need for more *user-friendly political information* is clearly apparent. Games are unique in letting players progress at their own pace, learning and mastering information step by step. These mechanics can support users in contextualising their political beliefs, as well as structuring and comprehending political information according to their personal preferences. At this point, it is crucial to underline that an open, inclusive co-design approach is the only way to go. When using motivational feedback, there is a real danger of evoking biases or popularising certain opinions. The only way to ensure that no political ideals are favoured, is to open up the development process as much as possible and to make design decisions transparent. Our co-designed concept has passed the first test from theory to prototype and shows that gamification principles applied to political communication can indeed motivate Swiss voters to politically educate themselves. It does so by supporting them in identifying politicians who accurately represent their views. Digitalisation offers possibilities, challenges and chances. As researchers and designers we have a responsibility to share and implement our knowledge to the benefits of our society. A feat best achieved together.

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ⁱ The original master's project at the Zurich University of the Arts was mentored by René Bauer and Dr. Mela Kocher. In the context of the Gebert Rűf Foundation's *First Ventures* programme, *Projekt CH+ Games for Democracy* is continued as a research and business project at the Zurich University of the Arts. With the prototype being developed from election to election, we are thankful for the support of our partners and most of all, our testers. If you are curious about *Projekt CH+* you can find us on www.projektchplus.ch.

ⁱⁱ The section *Motivational Design Recap* is taken from the original master's thesis. To access the thesis, please contact the author.