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# PLAYING WITH FAKE NEWS: STATE OF FAKE NEWS VIDEO GAMES

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## **Abstract:**

Employed almost synonymously with disinformation and misinformation, fake news refers to the increasing discourse of misconfigured news and information being shared online which has prompted global concern. Calls for digital literacy have come from researchers, governments, and public interest groups who developing an array of resources for the public. Games are one intervention. This article explores what it refers to as 'fake news games'. Not focusing on a specific game genre, it considers video games that discuss or present fake news as central to their play or design. This paper evaluates how fake news is being presented in games and asks how the concept understood across these games. By analyzing the content, skills, and goals in these games, it situates fake news alongside digital literacy skills to see how the term is being re-framed by the medium of games. Twenty-two games were studied from a larger sample collected in late 2020. Through play analysis of twenty-two fake news video games collected in 2020 this paper provides an overview of game's that discuss fake news. Games were play-tested and recorded to see the range of content, skills and central themes that were invoked in these games. These led to findings discussing the design, core premise, and general discourse around fake news that was promoted through play. The findings in this article offer value for future directions of discussion and game design focused on fake news. By pointing to gaps and differences in games in the field, this article offers potential information for designers while also highlighting how fake news is re-framed by these games. It emphasizes which points of interest around fake news are commonly being brought up, and points to future design and implementation considerations for scholars and designers.

**Keywords:** *Fake News, Video Games, Digital Literacy, Serious Games, Web Literacy, Game Analysis*

## 1. Introduction:

After the term was made prominent in 2016, fake news has pervaded the media cycle and conversation. Bundled with disinformation and misinformation, Fake News refers to the increasing discourse of misconfigured news and political information being shared online. Calls for digital literacy have come from researchers, libraries, and public interest groups who are working hard to make resources available to the public. Games are no exception from this list. An interactive medium that can be made widely accessible, games can be used to provide skills and information about misleading content. The prominence of fake news, specifically through politics, has made the term somewhat of a trope, touted as a catch-all phrase used to discredit individuals or the media. This means that some games employ the term for satirical or marketing purposes while others attempt to provide important information and skills about fake news to its players. This paper outlines what it defines as fake news games. Not a specific genre of game, rather a series of games that discuss or present fake news as central to their play or design promotion. This includes games designed with purely educational motives and commercial games that discuss fake news to generate engagement. The study explores how the concept of fake news is being presented in games. It asks how fake news is understood in games, and the content, skills and goals of the games that employ the term. It situates fake news alongside digital literacy skills and recognizes its engagement across game formats and types.

## 2. Literature Review

Fake news is one of many serious online issues that web literacy programs are working hard to develop skills to counteract. Groups like Mozilla and MediaSmarts have been actively producing content to break down the skills and knowledge needed to be a digitally literate citizen. Mozilla (Chung et al., 2013) offers four categories of web literacy skills: problem solving, communication, creativity and collaboration. These skills apply beyond fake news where scholars have called for critical thinking skills (McDougall et al., 2019; Wardle & Derakhshan, 2018) or emotional skepticism (Silverman, 2017). Unfortunately calls for critical thinking skills leave ambiguity as to the expectations of the general audience. Mozilla and MediaSmarts have provided checklists for identifying fake news which involve fact checking and searching the web. However, among these initiatives fake news requires definition.

Fake news has become a colloquial term that is used to summarize the satire, parody, fabrication, and manipulation of news alongside false advertising and propaganda initiatives (Tandoc et al., 2018). It includes misinformation, disinformation, mal-information, and conspiracy, and is used to define both an activity and/or a person. This generalization of the term makes it practically unusable for academic work since it overshadows the issues and problems at hand (boyd, 2017; Wardle, 2018). However, the nature of this paper requires a working definition. The media is quick to synonymize term fake news with misinformation and disinformation, however their definitions vary. Wardle and Derakhshan (2018) provide a concise summary of the terms defining misinformation as “information that is false, but the person who is disseminating it believes that it is true” and disinformation as “information that

is false, and the person who is disseminating it knows it is false. It is a deliberate, intentional lie, and points to people being actively disinformationed by malicious actors" (p. 44). Despite these succinct definitions fake news remains a buzzword – actively used and politically charged (Silverman, 2017a).

Recently, there have been some attempts to consolidate fake news literature into a workable definition. Tandoc et al. (2018) provide a typology which explores the different actualizations of the term. While helpful, their typology struggles to provide a usable definition. Instead, this project is grounded on the definition provided by Kamshad Mohsen's (2020) who, through considerations of different definitions and uses, posits,

'fake news' as those news stories that are false: the story itself is fabricated, with no verifiable facts, sources or quotes. Sometimes these stories may be propaganda that is intentionally designed to mislead the reader, or may be designed as 'clickbait' written for economic incentives. (p. 5)

The definition insinuates that fake news exists through economic and personal motivations intentionally meant to misinform drawing parallels to the definition of disinformation provided earlier. This is why scholars like Wardle (2018) have called for greater initiatives to improve public awareness and scrutiny of misinformation and disinformation.

While literacy programs exist, games provide a medium for awareness raising that is focused on engagement and interaction. Ian Bogost et al.'s (2010) text *Newsgames* introduced the value of digital games as a method for journalism. Among

newsgames, Lindsay Grace and Katy Huang's (2020) report on the *State of Newsgames in 2020* include media literacy as one game category. Fake news games reside in a grey area where they are not specifically journalism games but are intrinsically tied to aspects of news and journalism. Fake news games can, but do not always, include media literacy skills. As this study shows, these games exist in a variety of genres, some of which align with the findings provided by Grace and Huang (2020). Not an official category of games, this project evaluates how fake news as a modeled concept presented in these games. It explores the content and skills embedded in these games to see how the concept of Fake news is understood.

### 3. Method

#### *Data Collection*

This paper is constructed from a larger research project that is constructing a list of games that deal with issues and skills related to digital literacy. This project draws on a sample of games recorded from November 15 to November 26 using three different methods of title collection. Two keyword searches were done using the terms: digital literacy games, data privacy games, media literacy games, fake news games, disinformation games, and misinformation games. The first search used two different browsers, Firefox and Chrome, to keyword search using *google.com* while the other explored the Google Play Store. Since this project is an individual endeavour, the App Store was not used as the researcher had no compatible device to play their games. The final search involved scrolling through the repository of games found on *gamesforchange.org*, a nonprofit group focused on promoting

the creation of games for change. Data was not collected on how many games were found by each individual method as some games came up multiple times across the searches. At the end of collection, the project recorded 33 games which discussed fake news. Of these 33, seven were analog games and removed from the sample for analysis as they were beyond the scope and timeline of the project. This made the final total of studied games 26 which, after playtesting, was further reduced to 22 games.

The decision to include or exclude games was based on the game's description and visuals. The Google Play Store provided categories which offered an initial consideration based on the developer choosing to label their product a game. *GamesforChange.com* includes a small description beside each game, and the context of the website immediately suggests that anything found on it is classified as a game. Using google searches required more scrutiny. While some games appeared through links to their host sites, most were found by reading news articles, blog posts, and webpages that highlighted specific games. Since the focus was on fake news as discussed in games, as long as the game made fake news an explicit part of its title or description it was included in the sample.

Games were recorded and categorized by date, funding body, target demographic, the content in the game (filtered by specific issues), the type of game/genre, the game's length, the reward system in the game, and the number of players it was designed for. The category on content was initially coded based on the general theme (i.e., fake news) but during playtesting it was retroactively coded to note other

themes that arose during the play experience. Additionally, playtesting the games led to the inclusion of new categories: the skills promoted, if the game offered resources, if the game used real news articles, and the position the player held in the game. These categories were designed around the questions of the research project and to robustly reflect the play experience.

### *Playtesting*

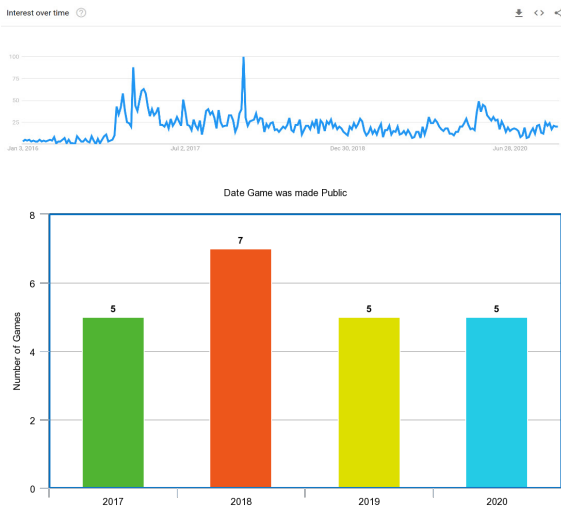
Playtesting occurred between November 27 and December 1, 2020. Grace and Huang's (2020) report highlighted how the majority of newsgames were played in under five minutes. Considering this, the project played each game for a maximum of 15 minutes recording how long it took to reach the conclusion of each game. However, as a solo project there was no way to record an average playtime so games were instead categorized as five, ten, or fifteen minutes of play. Before, during and after each playtest, data was recorded using the categories outlined in the previous section.

At the end of the playtesting, four games were removed from the list for analysis. Two games, *Factitious 2017* and *Factitious Pandemic* were removed from analysis because they were copies of *Factitious 2018* and would slightly alter the results. One android game was removed because the text in the game was entirely in German. Finally, another was deleted because it could not run on my android device rendering it unplayable. This led to 22 games being analyzed and discussed in this paper's findings. All the raw data for this project as well as list of games was made publicly accessible on the researcher's personal website.

## 4. Results

### Date Created

Of the 22 games analyzed, six were designed for mobile devices with the rest meant to be primarily played through a browser. One game, *Fakey* (2018), could be played on both, however for simplicity of coding it was classified as a computer game since that is the medium on which it was played. All games were created after 2017, divided as follows: 5 games in 2017, 7 games in 2018, 5 games in 2019, and 5 games in 2020. This progression appears similar to the term's cultural use after its rise to popularization in late 2016. When compared to google trends for "fake news" in Canada (Figure 1) we see the term maintain relative popularity from late 2016 to 2020.



**Figure 1.** Graph showing the popularity of the term "fake news" in Canada from Jan 1, 2016 to December 11, 2020 (Courtesy of trends.google.ca) in comparison to the date of the games created in the sample.

### Objective (Educational, Research or Other)

While all games were designed around fake news, there was a difference in how they addressed the term. There was a clear divide between browser games and mobile games in relation to education or awareness raising initiatives. Out of the 6 mobile games, none appeared to have any objectives beyond the game. They offered no specific skills, learning resources, or discussed beyond the gameplay. On the other hand, all 16 browser games included some content that could be classified, at minimum, as awareness raising. This means that it offered advice, definitions, tips, or resources to inform players about fake news or related issues. Among the browser games, while all were somewhat educational, there was a subset of games that had been designed as research projects. Among the sample, 12 games were presented without direct connection to a research project. This means that four games asked players to participate in a survey or included mention of a research project linked to the game.

### Site of Development:

In terms of development, most of the games were created in the United States. This matches with the popularity of the term in US politics, suggesting that the cultural use of fake news in America inspired its use within games. However, that assertion might be overzealous as it does not consider the size of the American nation, the fact that searches were all done in English, nor the state of game product and marketing flows. Figure 2 shows the breakdown of games by country of its developer. Some of these games were designed through partnerships or with multinational teams. This blurring of borders was not recorded in this project, rather the developer's

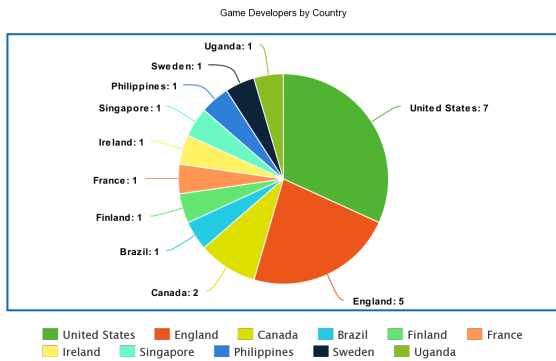


Figure 2. Pie chart showing the breakdown of region of developers.

location was decided through specific mention in the game’s information page or the location of the lead project developer.

### Game Length

Matching with the work done by Grace and Huang (2020) on newsgames, most games in the sample could be played in five

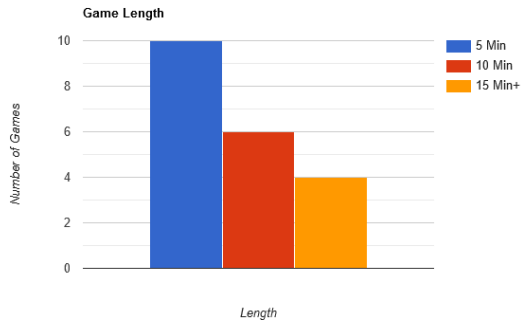


Figure 3. Graph showing the length of time to play each game. Measured in three categories.

minutes with only 3 games requiring more than 15 minutes of play. Importantly, this data includes games that offered the same actions on a loop. This means that play did not change or vary after the first five minutes. For example, while a game might continue to ask players to determine real or fake news with no specific end in sight the core gameplay loop lasted less than five minutes. The player’s action never changes though the game could be played endlessly. On the contrary, games like an idle-clicker about building a fake news empire, while also seemingly endless, offers variations in play through new unlocks, purchasable characters and achievements. In the sample, the former was recorded in the five-minute category while the latter in the 15 minute plus. All the games with looped content were designed for mobile.

### Reward Systems and Leaderboards:

Reward systems act as a motivation to play a game. 16 games (or 72.72 %) offered some form of reward system

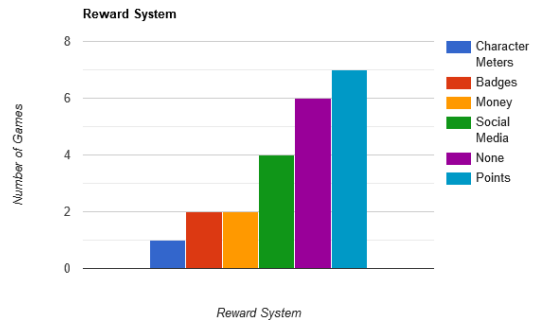


Figure 4. Graph showing the number of occurrences for different reward systems presented in games.



as players progressed in the game (Figure 4). While a generic points system was the most common, the use of social media related rewards such as followers, shares and likes existed in 4 (18.18%) of the games. Badges or achievements reference the symbolic rewards given after the completion of certain parts in a game. Just over a quarter of the games tested (27.27%; N= 6) did not offer any reward system to document or encourage play. The decision to include or exclude a reward system does not seem to be specific to any game genre, which suggests that the inclusion of a reward system is primarily a designer choice.

Even though a majority of the games had a reward system only 3 of the 22 games had a leaderboard or ranking system. These games allowed players to compare their scores with others or inform them about how successful they were in relation to other players. The lack of leaderboards, despite the significant amount of reward systems, suggests that the games were designed as individual experiences. Points systems encouraged play but not competition. This is reflected in the options for number of players, where only 2 of the 22 games studied (9.1%) offered a multiplayer variant. Both were mobile trivia games which encouraged users to play with friends or others who had downloaded the app.

## Genre

After playtesting the games were categorized into 5 genres of play outlined below and presented in Figure 5.

- Quiz Games (54.54%; N=12): These games follow a basic format of question and answer. Presenting news articles or questions they text players on how well they can identify trustworthy or misleading information. Some were categorized by the Google Play store as trivia games, these games range from offering little to no help in having players decipher which information is truthful and which is fake.
- Content Management Games (9.09%; N=2): These games focus on presenting players with an array of information that they oversee the control and management of. The two games, *Fake it to Make It (2017)* and *NewsFeed Defenders (2018)*, put players in opposite positions. The former asks players to manage a fake news empire while the latter encourages players to protect a digital forum from false or negative posts. Content management games build from the simulation game genre and focus on the creation and operation of content in a specific space.
- Text Adventure (27.27%; N=6): While these game's include visuals and articles, players participate by engaging with a text-based narrative. The majority of these games presented the information to players as a series of texts or personal messages that guided player decisions. Text adventures typically invoke a level of role play, asking players to exist as an individual in a story.
- Clicker (4.54%; N=1): A mobile game, clicker games run relatively on their own, asking players only to engage by purchasing upgrades or improving the idle economic collection systems. This specific game focused on having players generate revenue through a fake news empire.
- Phrasal Template Word Game (4.54%; N=1): Another lone fox on the list, the game follows a style like mad libs, where players build a fake news headline. Phrasal template games offer distinct sentences, words or phrases that players put together. In this case, players piece together pre-generated phrases to make a politically humorous headline.

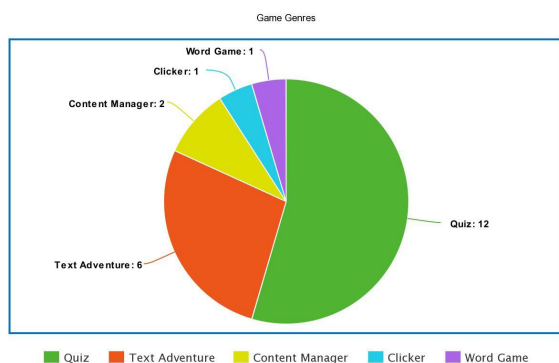


Figure 5. Presenting a breakdown of the game genres across the sample size.

Given the genre and priority of these games these categories make sense. Many fake news games are created in order to raise awareness. This goal means that many of the games are intended to be learning games, where the genres of quiz games and text adventure excel.

### Player Position and Avatars

The games addressed fake news from a variety of different angles and approaches. The games placed players in one of two positions. You either focused on discerning fake news attempting to sort out what was fact from satire or fiction, or you were the mastermind behind the creation and spread of fake news. Overall, discerning fake news was more commonly found in 14 (63.6%) of the games while 8 (36.4%) games asked players to create it. The primary difference in these two approaches meant that players generally would learn about fact checking skills in discernment games and the process of fake news generation in the creation method.

As players, whether discerning or making, some games also offered players an avatar to play as. Some games provided a choice, while others created an avatar for you. However, the majority of games did not provide any character. Just over a quarter (27.3%; N=6) of the games presented players with an avatar. Four of these games gave players a choice in their avatar while the other two provided a pre-generated character. However, in only one case did a player's avatar make a difference to the play experience. In *Choose Your Own Fake News* the three characters each experience a different struggle that requires different technical proficiencies and skills to deal with.

### Skills

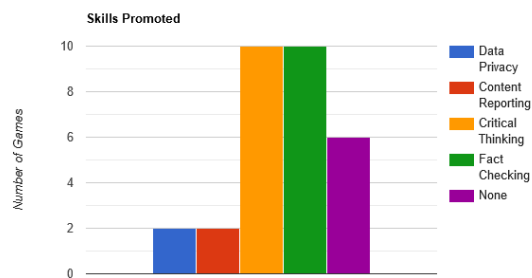


Figure 6. Chart showing the number of skills presented in the games. Skills could exist across more than one game.

To help support their goals, the games provided a series of media literacy skills. The skills focused on digital engagement, discussing data privacy, content reporting, critical thinking and fact checking (Figure 6). These skills were coded during the playtesting of the games and is based on the game's

mention or promotion of them. While critical thinking is a hard term to conceptualize, it was recorded and understood as games that prompted players to examine and challenge content aside from any particular toolkits like fact checking. Critical thinking and fact checking were clearly the most common skills with at least one, if not both, found in each browser game. Importantly, six of the games offered no specific skills to players, all of which were mobile games. These games provided no form of critical engagement. Rather they focused on idle clicking, racing against the clock, or humorous content creation where any discourse around disinformation or fake news was seemingly non-existent. This suggests that mobile games are less inclined to focus on raising awareness or teaching players literacy techniques around fake news.

## Content

The skills embedded in each game were directly tied to the game's content (Figure 7). While each game discussed or presented fake news, they also mentioned of other related issues or material. In the case of this project, fake news already

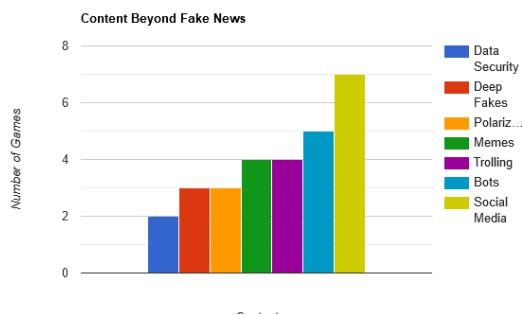


Figure 7. Chart showing the content found in the sample not including, fake news, disinformation or misinformation.

includes discussion of misinformation and disinformation, so recorded content includes any material mentioned other than those two frames. The term polarization includes mention of filter bubbles even though there is a difference in the terms. Polarization refers to the division of individuals into separate groups, while filter bubbles consider the filtering of information to people based on preferences. However, in the state of these games, the construction of filtered groups of people based on polarized ideals was a typical presentation.

The content within the games also varied between actual news stories and made-up stories. Almost an even split within the sample (54.54%; N= 12) had "non-real" news stories or events, while the others (45.45%; N=10) did. Importantly this difference did not seem to rely on player position or type of game. Regardless of genre, medium, or player position, games varied in their inclusion of real or fake stories, suggesting that the decision was up to the development team.

## 5. Discussion

The data in this study suggests that fake news games most commonly focus on providing useful information to players. While not necessarily classified as newsgames, the findings reinforce some of the work by Grace and Huang (2020) on newsgames, specifically around game length and diversity of genre. Most of the games could be played in five minutes which suggests that these games are relatively accessible for engagement. The games themselves only varied across five genres of play, which primarily focused on quiz and text-adventure games. Of note, many games were developed in western nations with the majority residing from the United

States or Europe. This is partially attributed to the proclivity towards English within the data collection, making this a study particularly focused on English language fake news games. However, these findings also suggests that fake news games do not perfectly fall within the newsgames archetype. While some of them possess many of the qualities of newsgames, they also include genres and forms of play that lie outside of what is defined as newsgames.

Play itself was relatively disparate from the data set. While these games discuss fake news, they offered very little agency for players using the game as a device for description rather than acquisition through engagement. In other words, the games acted as top-down information instructors where play is along the design intent of a system rather than allowing players to be reflexive with the system. This is not uncommon for many educational games but seems somewhat surprising given the interest in games promoting critical thinking. Critical thinking skills focus on having users wrestle with information by questioning the content they are engaging with against their own belief systems. While some games attempt this in their trivia approach to play, players receive limited feedback and discussion on their decisions that promoted connections to be made between their decision and the correct answer. Perhaps this is related to the medium where solo play without facilitation would prefer inscribed forms of gameplay.

The variance in mediums also point to a disparity between browser games and mobile games. Mobile games did not seem to have an educational or awareness raising objective. They offered no specific skills to players, little to no narrative, and could all be played in a matter of minutes. Mobile games

seemed to be focused on exploiting the term fake news for downloads and would offer ads during play to generate revenue. The latter is not an uncommon practice for mobile games, rather the use of fake news to promote a game further solidifies its use within cultural conversation. This is most aptly seen in the thumbnail for one of the few multiplayer games, *Fake News* by ZarciaJ which uses a silhouette of Donald Trump's head as the bird commonly associated with Twitter's logo.

Browser games typically had an educational motive or goal of raising awareness. For instance, in their reflections on their game *Fake it to Make it*, Amanda Warner discusses how the game was a personal endeavour that hoped to "[make] players more aware of how and why fake news is written and distributed". The desire to have the games inform players reflects the decision behind the genres that were most commonly used. Quiz games follow a longstanding educational practice where asking students questions on material, tests the knowledge they have and can provide room for them to see where they are wrong. In the sample, quiz games were most popular which could be due to their simplicity to create or play. However only in the browser games were players also given prompts to investigate a news site or provide additional information on why players were correct or wrong. Text adventures, the second most popular game type, offer an alternative teaching approach. The choose-your-own-adventure style offers a dialogue with players that supplements the role of an instructor guiding learners through the process. This format allows the game designers to translate knowledge through a digital conversation with players. This is reflected in the exploration of the relationship between game genre and learning

style by Rapeepisarn et al. (2008) where they articulate how quiz games help with understanding facts while role-playing games (which text adventure games typically fall under) aid in teaching skills, judgement and language abilities.

### *How Fake News is Understood*

When surveying the data, the discussion of fake news arose from a multiplicity of approaches. The most apparent was the difference in a player's position. When asked to be the creators of fake news, players were offered a chance to "peer behind the curtain" and become a fictional part of the process in how it is made. In these games fake news is framed in one of two ways: to make money or to troll people. With a reward system based on stacking followers, gaining money or reaching achievements for your deed, players are encouraged to take part in the process of fake news discovery. These games prompt players to critically evaluate the motivations behind the spread of fake news as well as the factors that might make content misinformation, such as emotionally written texts. However, these games still only show one side of the story. They offer players a critical gaze but not a set of fact checking skills.

The more common alternative, having players discern which news is fake, offers fact checking skills alongside breakdowns about why information is correct or false. Games that had educational intent would push players beyond the quiz, giving them feedback on their choices, options to seek out more information, or explanations if they were correct or wrong. Even when not explicitly educational, having players sift through ridiculous headlines to determine what is or is not legitimate

provides commentary, whether intentional or not, on the sheer amount of misleading news.

Both approaches articulate fake news as an industry. Making fake news shows players the cogs of the machine and suggests to players that fake news is about building an empire. This is aptly seen in the sole clicker game of the sample which has players construct a vast empire through fake news articles generating views idly on their phone. Discerning fake news shows the face of the industry. It overwhelms players with the difficulty of determining which headlines and stories are real and which are fake. The fact that non-educational quiz games are being made also suggests that the vast amount of fake news that people might have to decipher can be fun and engaging, or at least fun enough for ad revenue. In either case, it does not matter if the game is educational, players are made aware that fake news is an industry.

When we revisit the skills and content of these games, all seem to articulate fake news as an obvious problem of online news and social media that is situated alongside other concerns. Data privacy, online trolling and digital meme culture, fake news all seem to be articulated as an individual act targeted at the collective. Echoing this, most games are single player suggesting that actions to create or counteract can be a solely individual effort. This focus, while recognizing the harm our individual actions can have on others, fails to consider the other collective and organizational methods that could be enacted. None of the games discuss government legislation or digital policy around fake news monitoring. Games seem to avoid discussing the larger cultural and social issues that led to the rise and constant use of the term as well. The

action and blame is placed on individuals, and games offer little information or support in thinking about those who players could pressure to make a large-scale difference.

This gap in discussion is most likely existent because of the small size of these games. With short playtimes and, most likely, tight budgets it is hard to cover all the issues. While it would be easy to critique *Interland*, a game designed by Google, for having corporate bias in how it presents information, many of the other educational focused games are related to academic institutions. Of course, some of the commercial games might also give a discussion about policy and legislation a pass because it might not be engaging or part of the commercial narrative of the game. However, since a large subset of games were designed by institutions or alongside academics there is a surprising lack of resources that discuss the options for dealing with fake news beyond individual action. Yet, these calls exist in academic scholarship. Connaway et al. (2017) discuss some of the options that industry professionals have at hand. Anderson (2020) emphasizes the political economic forces in relation to platform structures that lead to the sharing of fake news. Similarly, Chris Marsden (2018) calls for greater platform regulation through the implementation of properly thought-out policies. Fake news is never considered alongside these issues. The industry is presented as individually controllable which leaves a gap in how these games comprehend fake news.

Even for the issues presented, it was surprising to see content reporting so minimally discussed in the games. Considering how important user reports or versions of flagging can be in determining which content should be reviewed (Crawford &

Gillespie, 2014; van Dijck, 2013), it is surprising that it received such limited attention. As Crawford and Gillespie (2014) note the flag is, “merely the first step in a process of content regulation” (p. 419) and, while it can be easily ignored or waved off, it is one of the few options that users have in reporting. When we consider how heavily the games prioritized the role of the user it is interesting that content reporting, or flagging, saw little discussion.

## 6. Limitations:

As a preliminary study, this research offers a variety of further avenues for consideration. Profoundly missing was data on the players of these games themselves, discussing where the players are from, the demographics of people who play these games, and highlighting if they are being used in any specific spaces such as schools or libraries. This data was beyond the scope of this project’s timeline but would complement work on the geography of game development, and further articulate where discussions of fake news are seeing prominence. It would help affirm the suggestion of the data in this piece that fake news is most prominently discussed and drawing concern within the United States and Europe. This research also fails to consider the actual learning value of playing these games. While some of their authors have written positively about the game’s potential to impart knowledge (L. Grace & Hone, 2019; Roozenbeek & van der Linden, 2019) it remains to be seen how well the set of games succeed at their goal. Inversely, scholarship should also attempt to broaden understanding on the difference between mobile and browser games specifically in how they deal with issues.

This research suggests that mobile games fail to offer any informative value for players acting in contrast to the browser games. In the end, even though there are still gaps in the material that is covered, the games do well to address the definition of fake news provided at the start of this piece. They argue for the multifaceted messiness that makes up fake news. Playing these games reaffirms that concerns that Wardle (2018) and Boyd (2017) have discussed, fake news is too broad making it almost impossible to succinctly represent and discuss.

## 7. Conclusion

The project provided data on the nature of fake news games. Curating a list of twenty-two games, it outlines the range of content, skills, and goals of these games. It suggests that browser games overwhelmingly focus on educational or information sharing objectives, while mobile games offer little skills or knowledge value to players. Rather, these games suggest the prominence of fake news as culturally prominent to create commercial games. The findings also highlight how fake news is being presented to players, where the focus is on individual knowledge, and skills. However, none of the games discussed the large-scale adjustments that could be done in the industry or actions players could take to pressure the industry. The games primarily used a quiz approach or text-based adventure which align with existing literature on newsgames, and instructive approaches. According to these games, fake news is an industry online, that can be controlled by the actions we take. Fake news is information that trolls people, exists as satire, is posted to make money, or does not have the proper journalistic rigor. In the same manner, fake

news is not a large-scale issue connected to platform regulation, effective fact-checking services, or issues that pervade public discourse beyond individual action.

The findings in this study offer value in future directions for discussion and game design around fake news. As long as fake news remains an issue, these games are likely to be made. The results in this paper are meant to provide information on the key components, design goals and content that are found in fake news. By pointing to gaps and differences in games in the field, this project offers potential information for designers while also highlighting how fake news is understood by these games. Beyond that, it also asks players, designers, and educators to think about how we design playfulness in a time where truth is being challenged. Fake news has only continued to grow in public prominence and discourse since this project started, and the findings here stress a need to consider its position within our publics. The sample's oscillation of sincerity between mobile and browser games hints at the challenges with educational initiatives meeting audiences where they are most actively engaged. To remain relevant to today's audience, educational tools need to consider how they can best reach their audience, how they are constructing the issues, and how they can effectively engage with a global social issue like fake news. As truth becomes harder to discern, and facts and fiction get soaked up in a milieu of discourse constructing dynamic systems, like games, to help make sense of these issues becomes even more important. By examining how these issues are described within these games, this paper has provided insights on how we can interrogate our practice to garner better understanding in how it is framed. Fake news is just one point of educational

intervention. But interrogating our mediums for information dissemination allows us to improve our practices, consider what is being taught and what is missing, and address gaps in the work being done. The battle of truth and fiction is not going away and finding optimal methods and tools to do so is pivotal for designers, scholars, and educators to consider.

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