

# A Case Study in Newsgame Creation: Why Game Designers and Journalists are Still Learning to Work Together

**Lindsay Grace**  
American University  
Game Lab  
Washington, DC,USA  
Grace@American.edu

**Dr. Mike Treanor**  
American University  
Game Lab  
Washington, DC,USA  
Treanor@American.edu

**Chris Totten**  
American University  
Game Lab  
Washington, DC,USA  
Totten@American.edu

**Dr. Josh McCoy**  
American University  
Game Lab  
Washington, DC,USA  
Jam@American.edu

## ABSTRACT

As early as 2001, digital newsgames offered a noteworthy opportunity to engage audiences and provide a new news consumption experience. Nearly 5 years later newsgames have not clearly delivered on their potential. With such promise, why didn't news presses give way to newsgame studios?

This paper provides a simple case study in newsgame production, providing a set of lessons learned from an academic studio working with a variety of news organizations including one of the largest United States based daily newspapers. It does so to examine the contemporary opportunities and challenges in producing games for news organizations.

The paper describes how the increased reliability of low cost, simple game-making software has afforded for the production of just-in-time newsgames. Such opportunity may facilitate a second wave of newsgames as lowered cost of production, increased distribution channels and growing ludic literacy of the general population facilitates their success. However three challenges remain obstacles to their growth: the pace of news; a misunderstanding of the rhetorical properties of games media, and an evolving ludoliteracy shaped by social currency and politics.

## Author Keywords

Newsgames Game Rhetoric, Game Design, Persuasive Play

## INTRODUCTION

Eventually USA Today rocked the world of journalism with a new format – color. As one researcher put it, USA Today “had come a long way since its founding in 1982, when its colorful brand of journalism was widely ridiculed by critics” [8]. The visual anomaly in news reporting rose to become the most widely read daily newspaper in the United States [8]. It was not only Today's colorful homepage that helped USA Today change the expectations of readers. It was its commitment to digest oriented news, one which favored infographics, bold, summative headlines and easily gleaned content. In an information laden world, this new styled front page provided something readers had been seeking – summary. It also embraced a clear change in the media consumption habits of readers around the world [4]. Media, even the stoic and stayed environment of

newspapers, recognized an increased visual literacy in its readership. Headlines were no longer simply about finely crafted writing, it was also about finely crafted visual information.

The contemporary world of journalism is engaged in another struggle. Journalists are struggling to adapt to a new audience of readers. The inverted pyramid structure must compete with a myriad of listicles, interactive info graphics and all manner of entertaining distraction. In the carnival of information sources, conventional news delivery looks well worn and not a little tired.

Into this environment a variety of solutions have been inserted as experiments. These include the heralded rise of the newsgame. Newsgames, as first asserted by Gonzalo Frasca, were to be “simulation meets political cartoons.” [5]. Likewise Ian Bogost and others [3] offered newsgames as an opportunity to engage audiences on their terms, allowing players to experience news in ways reading and viewing did not. In the ideal situation, such games afforded players multiple perspectives and even the ability to formulate their own understanding of complex issues. If newspaper readers had increased their visual literacy (or at least hunger for it) by the time of USA Today's introduction – the expectation is that news readers were likely developing their own ludoliteracy, or at least interactive literacy.

Supporters of newsgames identify the rising millennial population, which reportedly acquires news information differently than the champions of traditional news journalism – the baby boomer generation. While baby boomers supported the conventions of the past generation of news journalism, Millennials possess sharp differences in preference and habit [6]. Of note to some, is the Millennial culture of game playing [1], which is cited as one of the many reasons for the potential of newsgame consumption.

With such promise, why didn't news presses give way to newsgame studios? This paper seeks to examine the challenges and opportunities that newsgames present in a contemporary media landscape. We provide as a case study, the development of a game for a major national paper with a daily print circulation exceeding 400,000 paid subscribers, more than 500 staff journalists and more than

25 Pulitzer prizes. We list three challenges and provide insight on 3 solutions that we believe addressed these issues. The challenges are the pace of news, a misunderstanding of news culture, and an evolving player ludoliteracy shaped by social currency and politics.

### THE GAME: DELIVERY DRONE

The researchers partnered with newspaper editors to create a game that encompasses a collection of planned and completed news articles. To initiate the design process, the researchers requested 5 news topics for which the newspaper planned at least 3 months of consecutive news coverage. The topics included global warming, the rising cost of college education and the political, economic and moral dilemmas of drone usage. Through a relatively proprietary design process the researchers chose to design and develop a game about moral issues in drone usage.

The game's final design was determined through a series of design collaborations between the university researchers, journalists and technical staff at the newspaper. The final product of the researchers' efforts are depicted in figure 1. The game was designed as a whimsical experience to expose the moral and pragmatic ambiguities of domestic drones.

In the game, players shuttle a domestic drone through a contemporary North American environment, picking up packages from warehouses and delivering them to their final destination. While delivering packages the player must navigate drone congested airspace, avoiding obstacles and making sure not to infringe on personal privacy. The game was developed using the Construct 2 game creation application. The final game was designed for web play via HTML 5 and JavaScript.

To support news objectivity, the game was designed without the heavy handed rhetorical content typical of historical newsgames. The newspaper's team explicitly requested that the game experience emulate the fair and balanced reporting objectives common to high quality news journalism.



Figure 1. Screenshots of the Delivery Drone newsgame, demonstrating package delivery and privacy violations.

### THE LURE OF DESIGN

One of the initial challenges in creating the newsgame was articulating and adhering to the roles and responsibilities of the team. Like many interdisciplinary efforts, scope creep by both the news staff and the game development team occurred. Most often the news staff wanted to propose game designs or mechanics, despite recognizing their own limited experience in the game design domain. When the game developers asked the team for a list of editorial themes, for example, the news staff would frequently provide game design specifications instead of topics. This was more than a misunderstanding of responsibilities. The news staff were themselves game players and sought the opportunity to design. They weren't merely in support of the newsgame concepts, they wanted to provide creative input. The same is not true of game designers on the task, who were unlikely to offer their opinion on news standards and approaches.

Such design tendency emphasizes an essential challenge and opportunity in newsgames. Like other entertainment enterprises, the consumers of the entertainment product are sometimes falsely confident in their ability to make such products. Like the audience-critique of a Star Wars film, game players are often eager to offer their input on how games can be made better. This is a natural and logical instinct that poses both an opportunity and challenge for the future of newsgames.

On the one hand it proves that game players are excited for such play. This interest and energy can be directed toward the creation, critique and promotion of newsgames. It is reasonable, for example, to imagine that with low enough barriers to entry, game-savvy journalists can create their own games without the heavy investment common to contemporary game development.

Game making by non-developers and inexperienced designers has clear potential in a future that converts the relatively specialized game-making process into something as trivial as the now mundane desktop publishing or blog paradigm. If authors of newsgames can author their games relatively free from the technical constraints of authoring such work, the newsgame has a fruitful future. Hence the potential of products, like Game-O-Matic [9] as solutions for a newsgame rich world.

From the opposite perspective, such tendency to walk confidently into the domain of game design without appropriate training demonstrates a lack of seriousness attributed to games. Games, from this perspective, are easily designed (if not constructed) experiences that require only tertiary experience. This logic implies, if someone has played a game, they are ready to design a game. Oddly, few would say the same of filmmaking, book writing, dancing or other creative endeavors. Such design with abandon can be detrimental to the future of newsgames. Without a proper understanding of procedural rhetoric, for example, the game could obliterate the very concepts it is attempting

to communicate [10]. This is a lesson learned in a variety of purpose-driven game endeavors, including educational games and social impact play.

To mitigate this tendency, the researchers met repeatedly with the news staff and outlined a fairly distinct set of responsibilities. The game design and development staff would translate the news staff's core themes, observations and messages to game mechanics. Those mechanics would be reviewed by the news staff. In short, each team focused only on their domain, instead of providing a repeated back and forth between news and game design. The game was black boxed once the editorial goals were provided. To mitigate scope creep, the news staff did not see the game until the mechanics were completed. This approach worked for the project because the teams were housed in distinct institutions. Long term, as news organizations start to employ internal game design and development staff[7], it may be harder to keep these activities distinct.

### **NEWS MOVES FASTER THAN DESIGNERS**

Even with the increased adoption of a variety of iterative and adaptive approaches to game design, the game design and development process struggles to be a fast moving process. As with most creative processes, the scale of the exercise is in direct proportion to the time and resources allocated to it. While there has been a clear growth in weekend long game jams during the past 5 years, the scale and polish of many such games would not meet the editorial or quality demands of a major newspaper. There exists the second challenge in producing effective, accurate and newsworthy newsgames. News moves quickly.

When the notion of newsgames was first promoted, the landscape of game making was different. At that time a few basic tools existed for rapid game making. These included Yo Yo Game's Gamemaker and Unity3D. Web Games were dominated by Flash Technology, with a few third party plug-ins available for web browsers. The promise of web based play was easy dissemination and ubiquity. As newspapers adapted from print to digital delivery, a logical accompaniment was a digital game. Unfortunately, proprietary solutions also complicate the technical infrastructure. If for example, the newspaper is provided in non-proprietary HTML; their readers must still have proprietary solutions like Flash installed to play games. Coupled with techno-political challenges like Apple iOS devices not supporting Adobe Flash, the challenges confounded.

The contemporary environment for such games has changed. Non-proprietary solutions in HTML and JavaScript allow for rapid game development with cross-platform support. Such games are playable on web browsers and mobile devices. They are also based on the same basic technologies used to deliver the newspaper's core content.

The growth in mobile games has also supported an increased focus on development speed in games. Mobile

games have simply helped developers understand how to adapt quickly. The mobile game space is one of quick adaptation, with the scale of player engagement measured in days, not months. For newsgames, this means more developers and players are thinking about games as micro engagements of a few minutes, instead of a few hours or days. The connotative value of a game has moved from the wholly immersive experience of console play, to the casual commitment of a few minutes of mobile play. This framing is likely more useful to champions of newsgame, who historically have never aspired to the AAA-styled 20 plus hour game experience.

This difference in perspective is a product of the technology, but also reflected in the way people consume games. Players are drawing from the evolving landscape of play experiences. For contemporary audiences, games like Flappy Bird are not some strange web anomaly, but an approach to game making and game playing that treats games more like disposable artifacts. Much like the low cost paper on which printed news is produced, the pulp of game making has increasingly included low investment games.

This increased low-production, or pulp game, could be viewed a harbinger for the devaluation of games or as the trend that makes games widely accessible, easily disseminated and enables a wider ludoliteracy.

We believe the disposability of games, as supported by mobile game consumption, has surprisingly created inroads for the newsgame. Just as pre-newspaper audiences had to adjust to the notion of story as newspaper article, or news story, players are adapting their understanding of game from controller mediated console experience to include casual, simple and purpose-driven interaction. This is arguably a stage in development of a ludoliteracy that needs to develop before newsgames can gain popularity.

In support of this perspective, the case study game was designed and developed under game-jam like constraints. It was developed quickly, using low cost non-proprietary technologies. The team held 3 primarily meetings. First to package 15 game concept statements for news staff review. Second to determine the full set of mechanics, dynamics and aesthetics for the final game. Third to review the core mechanics after they were developed. The core mechanics, approximately 80% of the game, was created in just over a week of part-time work. These constraints supported the timely production of the game. The obvious tradeoffs are depth, quality and complexity. We propose that that these are the material trade offs for such work.

### **GAMES ARE NOT AFFORDED FREE PRESS LIBERTIES**

As part of the development of a ludoliteracy, the politics and social-currency of games are evolving. The financial weight of the games industry has afforded it a certain level of respect as an entertainment medium. The sheer number of players has also afforded it some political liberty from its

nascent years. However, ludoliteracy is continuing to develop. Like other types of literacy, exposure is one of the more effective ways to develop such understanding.

In support of such literacy, the last 5 years have seen considerable growth and ubiquity of mobile devices. The result is an increase in player's understanding of what constitutes a game, what games can do and how games can be used. It is more common for players to think beyond the emblematic platformers or first person shooters when games are discussed. The average player's game awareness might include social games like Farmville and Words with Friends, as well as social impact mega hits like Paper's Please and Dumb Ways to Die.

However, although the variety of game experiences has diversified player understanding it has not had the same impact on their understanding of *games about things*. The contemporary logic rests games safely within the domain of entertainment. Previous academic terms such as docugame, social impact games, persuasive games, and more have yet to reach the common parlance of players. As a result, a common mis-translation of newsgame is educational game about a current topic. To define newsgames as such is myopic. It is like describing a newspaper as an educational report of events. Newspapers, like newsgames, contain much more than mere events.

Games continue to struggle to establish themselves as a serious enterprise. To paraphrase Ian Bogost's quip in a 2013 Games for Change speech – "the world finds little need to define serious books or serious film in the same way it seeks to define serious games" [2]. This tension and its historical success as a whimsical form of entertainment have served games well, but also serve to handicap its growth into other domains. If newsgames are to develop they must find a way out of the ghetto of serious games.

In particular, despite the continued attention to free press liberties in a variety of mediums, games are still not privy to the same social-political liberty. It is still newsworthy to make a game about something. This is particularly novel when considering what such newsworthiness implies – all other games must not be about something (or much of something). Like ill-fated satirists, there are risks to making games about certain topics. Games, like comedy, have limits that are far more confined than film or books. The result is that games can only be about certain topics. By analogy the game as pressed medium, is not subject to the same presses as other mediums. This means, that newsgames can be stifled by their own medium's restrictions. It can be argued that newspapers are afforded more liberty than games, at least in their reporting.

In the researcher's case study these limitations were considered before development began. Of the varied topics provided by the news staff hot button topics were explicitly ignored. They weren't even considered an option for game

design because they were too serious, too grave or summarily inappropriate for game making.

In the end, the topic, drone strikes was chosen because it aligns well with the history of games. Drones afforded a familiar military environment, a set of mechanics common to arcade play, and a topic that supports a limited persuasive rhetoric. The final design intentionally avoids the rhetoric rich opportunities to make the experience meaningful by restricting itself to the conventions of popular game mechanics. In our game, drones are never made personal, the stories of individuals are not told, and player decisions are restricted to twitch calculations and practical objectives. It is, in short, a mere playable report of events.

## CONCLUSION

It is our hope that this brief case study provides context for the opportunities and challenges of newsgame development. The researchers acknowledge that such games are important contributions that face a myriad of challenges.

## REFERENCES

1. Bennett, S., Maton, K., & Kervin, L. 2008. The 'digital natives' debate: A critical review of the evidence. *British journal of educational technology*, 39(5), 775-786.
2. Bogost, I. 2015. G4C13 Keynote: Ian Bogost Available at <https://www.youtube.com/watch?v=GBduFJUdoog> (last accessed Jan 2015)
3. Bogost, I., Ferrari, S., & Schweizer, B. 2010. *Newsgames: Journalism at play*. Mit Press.
4. Cooke, L. 2005. A visual convergence of print, television, and the internet: charting 40 years of design change in news presentation. *New Media & Society*, 7(1), 22-46.
5. Frasca, G. 2001. "Kabul Kaboom". Available at <http://ludology.typepad.com/games/kabulkaboom.html> (last accessed Jan. 2015)
6. Howe, N., & Strauss, W. 2009. *Millennials rising: The next great generation*. Vintage.
7. Mullin, B. . 2014. "Games are serious business at news organizations" (11 September 2014). Poynter. <http://www.poynter.org/news/mediawire/267835/games-are-serious-business-at-news-organizations/>
8. O Reilly, C. A., & Tushman, M. L. 2004. The ambidextrous organization. *Harvard business review*, 82(4), 74-83.
9. Treanor, M., Blackford, B., Mateas, M., & Bogost, I. 2012. Game-o-matic: Generating videogames that represent ideas. In *Proceedings of the The third workshop on Procedural Content Generation in Games* (p. 11). ACM.

10. Treanor, M., & Mateas, M. 2009. Newsgames: Procedural rhetoric meets political cartoons. Digital Games Research Association-DIGRA, 2009.
11. Psy. 2012. Gangnam Style. Video. (15 July 2012.). Retrieved August 22, 2014 from <https://www.youtube.com/watch?v=9bZkp7q19f0>
12. Schwartz, M. 1995. Guidelines for Bias-Free Writing. Indiana University Press, 601 N. Morton, Bloomington, IN 47404
13. Langdon Winner. 1999. Do artifacts have politics? In *The Social Shaping of Technology* (2nd. ed.), Donald MacKenzie and Judy Wajcman (eds.). Open University Press, Buckingham, UK, 28-40.