

The Form and Usefulness of Alternate Reality

Games

Du-Yeol Choi, Jin-Wan Park
GSAIM, Chung-Ang University
artreals@naver.com, jinpark@cau.ac.kr

대체현실게임의 형태와 유용성

최두열, 박진완
중앙대학교 첨단영상대학원 영상학과

ABSTRACT

Alternate reality games (ARGs) are a game genre with characteristics that can lead to changes in current integrated media environments. While technical combinations are being pursued as diverse media are utilized based on formative aspects, the representative, narrative combination of the real and the virtual is a convergent factor in narrative structures. Through perspectives that perceive transmedia storytelling—which has brought convergence to communication among gamers—as having a structure and utility that can outclass previous game forms, this study focuses on ARGs, which have features that converge reality and virtual reality. Further, the study reveals the structure and utility of that system. This study sheds light convergent storytelling, which is in demand in the transmedia age, and which will serve as a significant investigation with regard to social perceptions of future games and changes in game form.

Keywords : alternate reality games, transmedia, communication, culture, unity world

Received: Mar. 15. 2021 Revised: Apr. 15. 2021
Accepted: Apr. 20. 2021
Corresponding Author: Jin-Wan Park(Chung-Ang University)
E-mail: jinpark@cau.ac.kr

ISSN: 1598-4540 / eISSN: 2287-8211

© The Korea Game Society. All rights reserved. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Users who have adapted to integrated digital culture want active, bi-directional communication. In other words, people accustomed to new convergent media have a strong desire for “participation” with the development of digital network technology. Following demands that require communication among multiple users, storytelling based on transmedia broadens the breadth of opportunities for user participation. Efforts are being made regarding methods that could reinforce the narrative elements of existing forms, overcome the restrictions of limited (e.g., online, console, and mobile) platforms, and simultaneously employ diverse kinds of media. Alternate reality games (ARGs) are game systems that blur the lines and break down the walls between the real and the virtual[1].

The concept of “gamification” has been incorporated into the gaming techniques of various fields; it induces interest and enhances efficiency for users. ARGs revolve around this notion[2], which allows gamers to immerse themselves in games by combining narratives, media, user participation, and game elements based on specific patterns of storytelling, the connection and integration of different types of media, and the willing participation, active communication, and cooperation of gamers. Storytelling that can pique interest in ARGs allows gamers to be born as “socially active people” who can dream of a better reality by unraveling stories. This can lead to a consensus that can restore human relationships

—which may have been severed in today’s “me-media” society—and recreate mutual ties based on social engagement through the digital convergence of the virtual and the real. Therefore, continuous research must be conducted on ARGs, which can serve as a turning point in rediscovering humans’ social characteristics, going beyond simple game objectives. This study observes existing data on ARGs, along with actual cases, to present opinions on the types and formative aspects of ARGs, along with their future applicability and competitiveness.

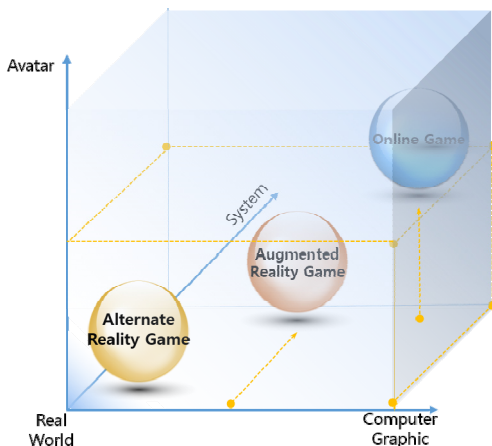
2. Features

Online games share traits with ARGs in that large numbers of people connect to the Internet and participate, and in that the links between the virtual and the real work in combination. However, all media forms of reality—such as telephones, smartphones, social networking services, newspapers, books, letters, faxes, bulletin boards, and TVs—can be utilized as interfaces for ARGs, in addition to the Internet and the online virtual world. This is nothing more than a means of obtaining diverse pieces of information necessary to play games. As all surrounding media can be applied as ARG interfaces, there is no need to prepare separate hardware devices for game playing. This entails interface-related distinctions from games that require separate platforms, such as computers or console game devices (e.g., PlayStation)[3].

Games played on computers or consoles need a physical location for games to be executed and installed; gamers can play on

limited sites. However, as the restrictions of hardware forms minimally apply to ARGs, games can be played without the constraints of time or space, with the existence of a single medium. The corporeal or physical impediments of online games create clear distinctions from real life. Notwithstanding, as all surrounding media used in everyday life (e.g., smartphones, the internet, SNS, newspapers, TVs, and radio) can serve as game interfaces for ARGs, the boundaries between games and reality can become vague [4]. Also, while game avatars exist in online games, there are no avatars with ARGs, thus creating a vivid reality. Lastly, comparisons of the facets of gamer interactions indicate that ARGs require more cooperation among gamers compared to games of other genres. The missions of gamers are above average in terms of difficulty, making them impossible to solve alone. Hence, mutually cooperative sessions are required, wherein knowledge and experience are shared. This serves as the foundation for ARGs to build stronger communities when compared to online games [5].

[Fig. 1] compares existing online games with ARGs through a three-dimensional graph. The “zero position” refers to the real world, which excludes all elements of a digital virtual world. When the X axis is closer to the positive (+) direction, this signifies closer proximity to unrealistic virtual reality (VR), with a high dependency on computer graphics. When the Y axis is closer to the positive (+) direction, this implies greater dependency on substitute characters (i.e., avatars). When the Z axis is closer to the positive (+) direction, this suggests increased dependency and difficulty in attaining a system with regard to devices and interfaces for carrying out the game. When existing online games and ARGs are compared to better understand ARGs, as in the graph above, ARGs can be defined as “games developed by a collective intelligence on a large scale that uses various forms of media interfaces without boundaries between the virtual and reality.” ARGs are more similar to the real world than existing game genres, with minimized computer graphic and systematic elements.



[Fig. 1] 3D Positioning map of game platforms

3. Framework

Diverse content must be systematically utilized to produce ARGs. Using numerous internet services such as the Web and SNS, gamers are given access channels. With the provision of a gamemaster (i.e., puppet master) who engages in storytelling based on these services, each gamer comes to participate. Gamers fulfill their respective roles in the game, and progress is made smoother through

communication achieved via the use of myriad kinds of media. Rewards are materialized, encouraging gamers to reach the next goal. In other words, gamers do not use avatars in the game world, but unravel their own stories while performing directly in the game.



[Fig. 2] Elements of an ARG

ARGs simultaneously entail diverse types of communication and kinds of interface media. This is what is most important in system materialization. While things that are naturally derived, reproduced, and spread are features of ARG, planned and systematic operation (i.e., the basis of all services) require direct management. In other words, a game system with a subordinate concept of “virtualism” must be established within the larger game system of “reality” in order to implement ARGs.

4. Narrative

The storytelling of ARGs is generally designed based on a massive amount of expert knowledge, involving the following: (1) ARGs rely on the collective intelligence of many people. (2) Games are conducted as the gamemaster reacts in real time to gamers’ actions. (3) ARGs integrate global perspectives that frequently cross the virtual world with reality (such as through the Web, newspapers, SNS, books, and TVs)[6]. In other words, unlike computer, mobile, or console games, ARGs have no clear boundaries between the real and the virtual.



[Fig. 3] Separate narrative

ARG narratives are distinct from one another. Gamers find story clues that have been spread out in the gaps of numerous media and piece them together to synthesize an entire narrative. In ARGs, gamers immerse

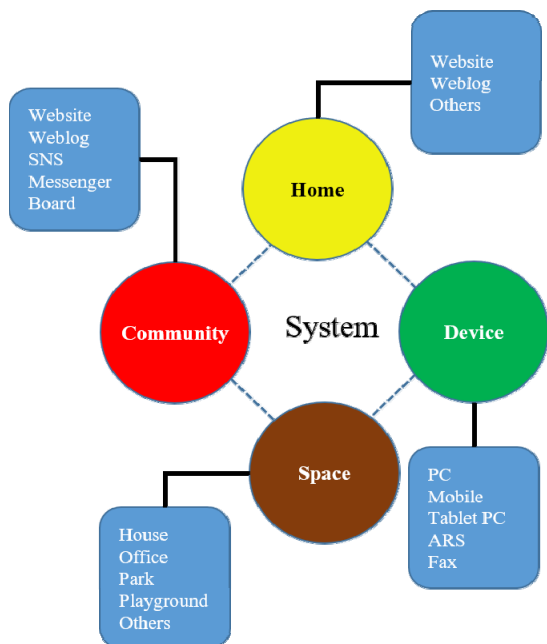
themselves in the game through participation, and play observing roles by analyzing disassembled narratives[7]. In other words, gamers are simultaneously participants and observers. Disassembled narratives encourage gamers to become the principal character while immersion is induced through outside observation; thereby, storytelling that gamers can participate in is made possible in ARGs.

Games can be divided into the four essential components of goals, rules, feedback, and willing participation. Of these, goals contain the direction and results that gamers must achieve. Rules are the constraints the gamemaster puts in place so that gamers cannot easily arrive at a consequential situation. They remove or limit goal achievement methods, prompting gamers to explore and travel to mysterious places that have not been experienced before. Through such limitations, gamer creativity is exhibited and strategic thinking becomes active [8]. A “feedback system” that shows how close a gamer has come to attaining a goal is displayed using scores, levels, and progress rates (etc.). Gamers are given hints for goal access such as, “The game will end if you do this.” This feedback system, provided in real time, is like the concept of a “promise” between the gamemaster and the gamer whereby the achievement of the gamer’s goal is surely possible, and motivates the gamer to continuously play. Gamemasters actively use the “feedback system” to increase gamers’ active participation. Gamers find divided pieces of stories and put puzzles together one piece at a time. This process of eliciting curiosity can be considered a “feedback system”

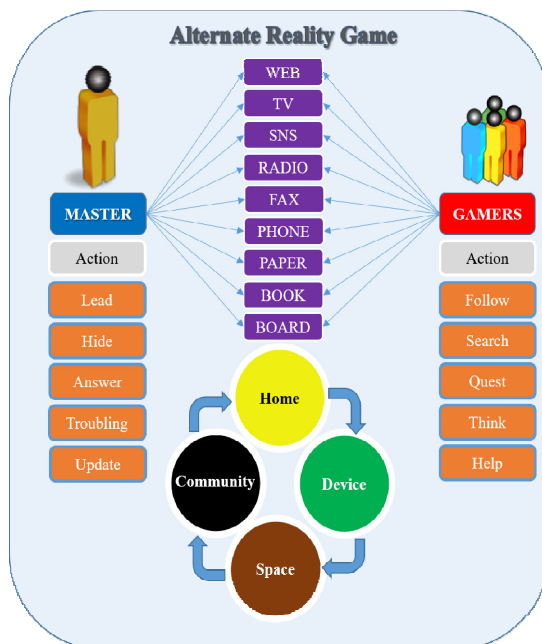
established by the gamemaster[9]. Lastly, all of these things must occur wholly through the gamer’s “willing participation,” and all gamers must naturally accept and recognize the goals, rules, and feedback system throughout the game’s progress. Because of this, participating gamers must feel interest, fun, stability, and a sense of accomplishment (rather than stress) while solving the game. Such willing participation organically leads to a consensus among gamers; this is when “common ground” is created. Also, game elements within ARGs, when combined with narratives, make gamer immersion even stronger. Narratives separated using diverse interfaces are connected through intrinsic systems; gamers become naturally absorbed in ARGs due to additional elements that the gamemaster uses to produce willing participation.

5. System for the unity world

System compositions for ARGs are generally organized into transmedia that connect the online and offline environments. First of all, a web-based “home” is needed to provide narratives for game progress. The first influx of gamers is through this “home” and also serves as the game’s starting point. At this “home,” gamers decide whether they will participate in the game. Next, a “community” space is needed for communication between the gamemaster and a player, or between players, for game progress. This includes phones (ARS), blogs, cafes, or sites (the Web), along with messenger services and SNS for communication among players.



[Fig. 4] The framework of an ARG



[Fig. 5] Total system of an ARG

If such a system is constructed, diverse interfaces can be realized to move ARG storytelling and narratives forward. Such interfaces can largely be divided into “video” and “audio” elements. With the popularization of smartphones, all interfaces can be employed. Even if this is not so, myriad interfaces and devices (e.g., TVs, radios, books, and bulletin boards) allow for abundant communication about game progress between the gamemaster and gamers. Eventually, as gamers decide on ARG participation, they become immersed in a massive game with an integrative worldview that combines the virtual and the real.

6. Usability

Jane suggests that ARGs will be used commercially in the future, and business people will collect opinions from users who have willingly taken part, and use them for business research and development (R&D), such as in product development and market research, as well as for simulations of major issues[10]. Jane asserts that “Games can make a better world” and that “Game players show the best of themselves when they play, help others without hesitation, focus on problems with persistence, and get back up and try again, even if they fail. If such emotions within games are applied to reality, this will aid in the generation of unprecedented human resources.” In other words, Jane implies that games can provide gamers with the effects of

“urgent optimism,” “social fabric,” “blissful productivity,” and lastly with an advanced yearning for “epic meaning”[11]. This signifies that gamer time and effort should not simply be used to solve problems in the virtuality of games, but that they are needed and should be harnessed to solve the diverse, direct problems of reality.

With this logic, gamers must break the invisible barriers between games and reality to achieve their goals of creating an alternate reality (AR) in ARG. For this, Jane stresses an “optimal experience design” in ARGs; for elements, Jane mentions “interesting goals,” “interesting limitations,” and a “well-realized feedback system”[12].

7. Application field (A, B, C)

7.1 Advertising

ARGs can be defined as the future-oriented model of advertising. As ARGs are realized through the active participation of users, collective intelligence, and transmedia forms, ARGs have all the strengths needed for marketing and advertising[13]. ARGs have already been vitalized overseas in places such as the U.S. and Europe, enough for competitions to be held annually, and are being positioned as an important promotion genre. Promotion types primarily refer to productions made for promotion purposes, such as <I Love Bees, 2004>, which was created to launch the game <Halo> and <Year Zero, 2007>, generated for advertising albums.



[Fig. 6] Nancy's disappearance (LG, 2007)

Promotion cases that have used ARGs in Korea include the marketing of LG Electronics in <Nancy's disappearance>, which generated the virtual story that “The pop artist Nancy Lang has disappeared.” The aim of this story was to advertise the company's new products to participants[14].

7.2 Broadcasting

ARGs converge the virtual with the real and are created via the development of information communication. ARGs are more than simple game forms, gradually revealing possibilities as broadcast media. ARGs have begun to produce possibilities as broadcast media because they contain diverse storylines that change based on interactions among gamers, and can be generated expansively. In addition to a growing number of viewers who prefer communities with unlimited ranges with regard to situations of conversion, those viewers can also always be converted to broadcast participants; attention is attracted because of such characteristics, slowly increasing the number of viewers. ARGs

comprise broadcast systems that display morphological characteristics that form repetitive, virtuous cycles. Broadcasts that can be created based on ARGs include dramas, documentaries, debates, and talk shows that analyze participant tendencies, targets, or clues [15]. Viewers come to acknowledge situations through devices such as phone connections with citizen debaters.



[Fig. 7] Real Experiment Project X: Yes, Yes Man
(EBS, 2009)

7.3 Clinics and campaigns

ARG gamers become characters within stories (i.e., protagonists) moving in and out of the virtual and the real, solving problems that arise within stories, and settling cases. This conversion of games and narratives in ARGs harmonizes elements that seem to lack organic probabilities and elements intended by the gamemaster within narratives, thereby securing natural story connections, and allowing gamers to have direct story experiences. ARG gamers come to a consensus by creating communities with others, and feel a strong sense of belonging and unity within organic relationships. Community usage leads to the

sharing of stories, facilitates the development of a collective intelligence among gamers, cultivates sociality through the acquisition of knowledge and experience, and provides opportunities for social connectivity to be realized among people. Gamers gather new information through the exploration, sharing, discussion, and spreading of information, or they go through a process in which errors are corrected[16]. Also, as shared information and ideas expand in volume, collective creativity and originality are exhibited through the processes of collection, diffusion, debate, change, and proliferation[17]. Rapid feedback allows community vitalization to be further invigorated, and bidirectional storytelling that others react to and that is led by gamers becomes possible. Because of this, the story formations of “clinics” and “campaigns” that trigger the consolidation of social consensus, shifts in understanding, and the moderation of (or need for) desire satisfy story developments. The central event of an ARG is a virtually-created world. However, the series of processes that unravels the narratives, backgrounds, and events that compose the central incident are grounded in reality. ARGs begin with virtual events and connect to the activities of reality; ARGs can be considered as a “hyperreal form” in which the virtual dominates reality[18].

8. Conclusion

ARGs created through the conversion of media and content serve as models that can display ripple effects more powerful than any other game genres produced thus far.

Notwithstanding, for the successful implementation of ARGs, the tasks of developing an elaborate game system and stimulating recognition remain.

Observations of models that have evolved from recent media show that hardware, software, various devices, and content maintain links connected by a single chain. As this accelerates, it becomes more difficult to define the limitations of the virtual and the real. From these perspectives, if ARGs that have succeeded as transmedia are actively utilized and expanded, their role will be enhanced greatly as the industrial components of games – which were largely divided among computers, mobile devices, and console games – quickly progress into “me-media” and the age of digital information. Countless gamers around the world are “consuming” or “investing” a considerable amount of time in games. This is “consumption” in the sense of significance, and can be defined as “investment” in terms of attaining psychological gratification or healing and economic gains. When gamers complete their sessions with other gamers that they meet in the virtual world, they generally return to reality and have their own personal time. Due to this, games have been recognized as a form of non-productive “consumption.” The usage of ARGs is critical in that the time and skills consumed in games are not simply employed to play virtual games, but also to solve diverse, interest-inducing problems in the real world. Countless game providers have materialized virtual worlds, provided places and opportunities for gamers to escape from the real world, and assuaged emotions that have

inadvertently been scarred from reality until now. These days, we can anticipate the evolution of a society in which gamers come out into reality and live their actual lives, and where gamers (the social members) can provide mutual encouragement and commandments, along with comfort for sadness. Gamers want to have their game avatars expressed as heroes. Such heroic images can be found through ARGs. A turning point has arrived through which game purposes that used to mainly be about “growth” and “victory” can be substituted by the two propositions of “cooperation” and “self-realization.” Future tasks require focus to be placed on raising awareness regarding that which utilizes transmedia and on the development of business models. Further, explorations must be made into the possibilities for growth into surreal forms that break down the invisible walls of the virtual and the real.

REFERENCES

- [1] Carolyn Handler Miller, “Digital storytelling: a creator’s guide to interactive entertainment”, Amsterdam : Taylor & Francis [CAM], p. 275-278, 2004.
- [2] Dong-Hee Shin and Hee-kyung Kim, “A Case study of Knowledge & Information Contents applied Gamification and Alternate Reality Game concepts”, Journal of Digital Contents Society, Vol. 14, No. 2, pp. 151-159, 2013.
- [3] Seung-Hee Nam, “A Study on Alternative Reality Game Storytelling”. Journal of Korea Game Society, Vol. 9, No. 2, pp. 41-50, 2009.
- [4] Charles Palmer, Andy Petroski, “Alternate Reality Games – Gamification for Performance”, CRC Press: USA, 2017.
- [5] Jeffrey Y. Kim, Jonathan P. Allen, and Elan

- Lee, “Alternate Reality Gaming”, *Communications of the ACM*, Vol. 51, No. 2, 2008.
- [6] Lynch, R., Mallon, B., & Nolan K. “Mastering the puppets: Criteria for pulling the strings in an Alternate Reality Game”, *Journal of Gaming & Virtual Worlds*, Vol. 5, No.1, pp. 23-40, 2013.
- [7] Min-ju Byun, “A Study on the Storytelling of Beast’s Alternate Reality Game Based on Cross-Media Strategy - Focused on the first ARG Beast”, *The Korean Society of Science & Art*, Vol. 37, No. 3, pp. 173-185, 2019.
- [8] Jane McGonigal, “Reality is Broken”, *The Penguin Press: USA*, pp. 35-43, 2011.
- [9] Jane McGonigal, “Reality is Broken”, *The Penguin Press: USA*, pp. 44-45, 2011.
- [10] Jane McGonigal, “Gaming can make a better world”, TED, 2010.
- [11] Ibid., Jane McGonigal, “Gaming can make a better world”, TED, 2010.
- [12] Jane McGonigal, “Reality is Broken”, *The Penguin Press: USA*, pp. 119-127, 2011.
- [13] Yong-tae Kim, “What is ARG?”, *Monthly Marketing*, Vol. 7 , 2013.
- [14] LG, “Nancy’s disappearance”, LG Monitor Promotion, 2007, http://www.lge.co.kr/event/flatron/200702/05_event/week01/index.jsp
- [15] Jae-ha Kim, “The Study for analysis and implementation of Alternative Reality Game by media convergence”, *Journal of Korea Broadcasting Engineering*, Vol. 13, No. 5, pp. 752-759, 2008.
- [16] Maeng-Ha Kim, Eun-ji Kim, “Elements of Interactive Storytelling in Alternate Reality Game”, *Journal of The Korea Contents Association*, Vol.12, No.8, p. 106, 2012.
- [17] Stephanie Janes, Antero Garcia and Greg Niemeyer (ed.), “Promotional Alternate Reality Games and the TINAG Philosophy in Alternate Reality Games and the Cusp of Digital Gameplay”, *Bloomsbury: USA*, pp. 107-130, 2016.
- [18] Seo-won Shin, Hyun-jin Lee, “A Study on Alternate Reality Art as Social Art through Alternate Reality Game Analysis”, *Journal of Korean Society of Media and Arts*, Vol. 10, No. 1, 2010.



최 두 열 (Choi, Du Yeol)

약 력 : 2012 한양대학교 경영학 석사
2013-현재 중앙대학교 첨단영상대학원 박사과정

관심분야 : 게임, 디지털 아트, 트랜스 미디어, 융합예술



박 진 완 (Park, Jin Wan)

약 력 : 1999 Pratt Insitutue master of Fine Art (MFA)

2003-현재 중앙대학교 첨단영상대학원 교수

관심분야 : 미디어아트, 게임, 애니메이션, 데이터 시각화