2006 Alternate Reality Games White Paper

The IGDA Alternate Reality Games SIG

http://igda.org/arg

Foreword

Welcome to the 2006 Alternate Reality Games SIG Whitepaper. This is the first paper from the ARG SIG, and provides a full introduction to the genre as well as a wealth of practical and analytical information on design methodologies, business models, and current and recent games.

The ARG industry is consistently producing multi-million-dollar games for tens of thousands of players at a time, and generating interest across the entertainment, broadcast, and advertising industries. In the last few years, successful games have received widespread recognition, winning awards from the gaming, media and broadcasting industries[1,2,3,4,5]. As well as these critical success, there are already several businesses with long-term sustainable revenue streams.

Although new to many people, Alternate Reality Games (ARGs) are still far short of achieving their full potential, each new wave of games bringing major new innovations and increased understanding of what works and what doesn't. We hope you find both inspiration and real practical help in this paper, and look forwards to playing the next wave of ARGs you come up with.

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http://igda.org/arg/whitepaper.html

Regards,

Adam Martin

Editor, ARG Whitepaper

Chair, IGDA Alternate Reality Games SIG

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[1] *The Beast*: Best Idea of the Year, The New York Times Magazine, 2001; Best Website of the Year, Entertainment Weekly, 2001; Best Promotion of the Year, Times Magazine, 2001

[2] *I Love Bees*: Game Developer's Choice Award for Innovation 2005; International Academy of Digital Arts and Sciences' Webby, 2005

[3] *ReGenesis*: Gemini for Best Cross Platform Project 2006; Rocky Award for Interactive Television, 2006

[4] *Perplex City*: Vanguard Innovative Game Award 2006

[5] *Art of the Heist*: Best in Show, MIXX, 2005; EFFIE 2005

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Introduction

Adam Martin, Tom Chatfield

From reading this paper, we hope you'll see that Alternate Reality Games (ARG) are many things to many people, from the latest innovation in interactive storytelling to a new form of ultra-realistic video game. The common ground shared by each of these is that they are some form of game, in that they are not an entirely passive experience (although many people enjoy them passively, there always has to be at least one active player, usually thousands), and that they use the world around you – advertising hoardings, telephone lines, websites, fake companies, actors and actresses you can meet in real life – to deliver the game experience.

What is an ARG?

What if reality were different? What if you suddenly discovered not just different customs but different rules, different rewards, wholly different aspirations – a reality in which everyday occurences were not exactly what you thought, in which certain activities suddenly took on a rich and newly meaningful sense of possibility?

Alternate Reality Games take the substance of everyday life and weave it into narratives that layer additional meaning, depth, and interaction upon the real world. The contents of these narratives constantly intersect with actuality, but play fast and loose with fact, sometimes departing entirely from the actual or grossly warping it - yet remain inescapably interwoven. Twenty-four hours a day, seven days a week, everyone in the country can access these narratives through every available medium – at home, in the office, on the phones; in words, in images, in sound. Modern society contains many managed narratives relating to everything from celebrity marriages to brands to political parties, which are constantly disseminated through all media for our perusal, but ARGs turn these into interactive games. Generally, the enabling condition to is technology, with the internet and modern cheap communication making such interactivity affordable for the game developers. It's the kind of thing that societies have been doing for thousands of years, but more so. Much more so.

We take the start of the ARG genre as known today to be the release in 2001 of *The Beast*, the unofficial title for the game interwoven with Steven Spielberg's film AI, and of *Majestic*, a commercial game from EA. That summer saw the identification by players of this whole new genre, and the coining of terms for it. It saw the formation of large communities of players[67] dedicated to the discussion, dissection, creation, and above all the playing of these new games.

The genre is not just a new direction in gaming but part of the more general evolution of media and creative narrative, and a reaction to our increasing ability and willingness as consumers to accept and explore many media in parallel, simultaneously.

ARGs and MMOGs

Technically speaking, ARGs are a form of Massively Multiplayer Online Game (MMOG), with individual games attracting playerbases numbering in the hundreds of thousands, and with a heavy slant towards online media. However, ARGs use "online" merely as a convenient, cheap, mass-communication medium, rather than as a narrow straightjacket to deliver a tightly defined gaming experience. Where the typical MMOG uses a custom client, an application running on the player's home computer, which delivers and controls all content and interaction, ARGs use any - and every - application available on the internet, and potentially every single website, as just small parts of

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[6] Cloudmakers, http://cloudmakers.org/
[7] Unforums, http://forums.unfiction.com/forums/

the wider game.

Looking at the games themselves, ARG and MMOG/MMORPG (Massively Multiplayer Role-Playing Games) also tend to diverge wildly in core gameplay. On 5 September 2006, the New York Times announced that World of Warcraft was on track to bring in more than one billion dollars of revenue in the year 2006 from its approximately seven million players, making it 'one of the most lucrative entertainment properties of any kind' in the world. It is an income and a participation that most games would kill for, and it has been won through a number of well-established gaming virtues: good marketing and company reputation, well-established player community, good design, good attention to detail, and perhaps above all, exhaustive testing, which in practice has meant literally millions of hours logged within the evolving game world. Oh yes, and you can play with lots of other people.

But WoW doesn't claim to be real. You sign in, and there your avatar is, safely locked up inside the server. He, or she, is the ultimate object of your game – your mission is to make this creature as potent as possible. There's plenty to enjoy along the way, and you won't get far without co-operating, but it is this essentially solitary triumph that will keep you coming back.

Most of the shortcomings of MMORPGs are well-documented. Leaving aside the huge demands their upkeep can put on servers and customer service, perhaps the greatest gripe among players tends to be the difficulty of releasing new material and patches at anything like the rate the community would like (Smugglers in Star Wars Galaxies are a classic example – the implementation of an in-game smuggling system has now been promised by developers for over two years, with the overwhelming backing of the player community, but has yet to be achieved). Inevitably, also, the fine balance necessary for long-term playability becomes exponentially harder to maintain as more content is added; and new content has the disconcerting ability to make yesterday's amazing equipment, won at the cost of a thousand hours' play, into today's vender trash. But there is also a more structural, and related, problem with all conventional MMORPGs, and one that even the mighty WoW isn't immune to. Eventually, casual gaming ceases to be an option. You've hit top level on one or two characters, you've played around with all the classes – now you'd better either clear your diary three evenings a week for the next month to try and make an elite guild's raid calendar, or you can sell (sorry, discontinue) your account and move on to a new product.

ARGs do not require there be an avatar to build up, grow bored of and cast aside, or that there be a sandbox world for this creature to inhabit. There is, rather, the insertion of additional slices of reality into our own, and the only demand is that you interact with these as yourself. Moreover, the satisfactions of ARGs are as much aesthetic as they are egotistical, in that the pleasures they offer are as much those of contemplating characters, situations and narratives as of acting within these narratives. This has been true of aspects of many games before, but never to such a degree, or with such potential for mass involvement. The truly immersive narrative games of the past were largely limited experiences designed for single players (the old LucasArts point-and-clicks), or cases of a 'mythos' grafted onto essentially stationary game worlds (Ultima Online). ARGs are something quite different, fusing religion's TINAG principle with both the active pleasures of gaming and the more passive pleasures of art; a combination which potentially calibrates them for pleasure, participation, and thus for profits, at a level even WoW might envy.

For these reasons, for the purposes of this paper we consider ARGs and MMOGs to be distinct genres - in practice, there is only superficial similarity between the current MMOG market and the ARG market.

Antecedents to Alternate Reality Games

Bryan Alexander

As with any cultural development, Alternate Reality Games (ARGs) depend in part on previous practices, texts, and traditions. While the outlines of any given ARG may seem strange or alien – fictional characters calling real life players, distributed detective teams, cryptograms and steganographically-hidden items advancing plots – their appearance evokes a previously hidden history of mysterious, gamelike texts and plots. Indeed, we can view the ARG as a revisionary project, recasting narrative in a mix of old and new lights. The antecedents to ARGs cross media, nations, genre, and canonical status, and seem too disparate to cohere. Alongside the podcasted novel, books read as RSS, and ghost stories told by images posted to a discussion board,[8] the ARG represents an emergent narrative form, deeply based on the affordances and possibilities of new media.

In her influential *Hamlet on the Holodeck* (1997), Janet Murray offers a powerful theoretical approach to ARGs[9]. Every new technology-based medium, she argues, evolves in two early stages. The first sees the porting over of forms from other media, as when early movies relied upon theatrical conventions. During the second stage creators pick up on the intrinsic elements of a new medium, and create new forms. In cinematic history, we can consider Griffith's innovation of moving the camera while filming, or Dziga Vertov's use of editing to break up filmic time and space (see also Manovich, 2001). A similar process is visible across the history of digital media. The first decade of Web design, for example, built HTML documents with the trappings of print (pages, bookmarks). As we see the proliferation of newer technologies, some dubbed Web 2.0, new storytelling forms emerge.

The full set of antecedents is fairly large, drawing on a wide range of games, documents, practices, and grows even if we include the literature of hoaxes and publishing stunts. This describes, for example, the eighteenth-century practice of pseudonymous authorship, extending into the eighteenth century with writers like Jane Austen, and as far into our time as *Primary Colors* (1996). The roman a clef appears under this rubric, based on the game of mapping a fiction's characters onto their nonfictional targets, as in the Romantic-era satirical works of Thomas Love Peacock. Part of the pleasure in reading Robert Penn Warren's *All the King's Men* (1946) lies in unraveling the details connecting fictional Willie Stark and his unnamed state to Huey Long of Louisiana.

The thin but important tradition of play-based, or "ludic", texts play a key role in preARG history. These are books or other documents whose very form is gamelike. The most famous example is the *Choose Your Own Adventure* series (Edward Packard et al, 1979ff), which are both played and read at the same time. Published for a children's audience, and beloved by ARG designers and players alike, these books reared two generations on both hypertext and the practice of reading a story as game/game as story. A similar group of books is the *Fighting Fantasy* series (1980ff), which let readers jump from page to page by dice rolls as well as choices. Espen Aarseth describes these influential texts as "ergodic", requiring work ("erg") to read. Like ARGs, "playing" ludic texts is essential to reading them. Unlike a traditionally linear text, like a Shakespearean history play, with a one-way track through events, the reader must choose a path through alternatives. Unlike flashbacks, flashforwards, or other time-based narrative strategies which

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[8] *Las Gafas de Platon* (2005, http://www.sergioparra.net/~sparra/paginas/platon.html), *Pulse* (ongoing, http://www.pulsethebook.com), "I Found A Digital Camera in the Woods" (2004, originally at http://www.gtaforums.com/index.php?showtopic=144008&st=0, mirrored at http://dirtyashtray.com/forum/viewtopic.php?p=1374&sid=01969379d85a1ec1c5d52093ff2c86a2), "Tell a Story in Five Frames Flickr Group" (http://flickr.com/groups/visualstory).

[9] I owe a debt of thanks to the kind commentators at Infocult, who offered so much useful discussion on this topic: http://infocult.typepad.com/infocult/2005/10/antecedents_to_.html .

ultimately resolve into a unitary timeline, the ludic text's reader is required to select from choices, actively constructing a single narrative path, which won't necessarily be the same on rereading (or replaying). *Henry V*, in contrast, retains the same plot each time (setting aside what the reader might learn between readings).

Examples of ludic texts are well known in the established field of hypertext scholarship, as hypertext stories must also be operated to read: Maya Deren's *Anagram of Ideas on Art, Form and Film* (1946), the OuLiPo group's activated poetry (1960ff), or the puzzles within the conclusion of Mark Danielewski's *House of Leaves* (2000). The performance-oriented school of dramatic criticism leans to the ergodic, in this sense, as does performance art: radically, these texts require performance to be comprehended. Hoaxes surely fall into this history, texts pretending to be authored by or for something other than they are, such as Edgar Allan Poe's *Narrative of Arthur Gordon Pym of Nantucket* (1838), which purports to be a true story of fantastic adventure and survival, or *The Blair Witch Project* (1999), with its swarm of documentary evidence and staged discussion.

However, we can exclude many such works for the time, partly for reasons of space, but also being based on a single factor: most are evidently games or call attention to themselves as puzzles. They do not demonstrate a sense of the TINAG principle (This Is Not A Game), which David Szulborski (among others) sees as central to ARGs. They remain clearly identifiable as fictions, even though the structure of those fictions purports to be different than their publication history. They often appear in media or genres mature enough to allow this sort of play. They lack the boundary-crossing of ARGs, which clearly challenge the distinction between fiction and nonfiction, or at least open up the possibility of a different, mysterious platform for stories beneath the evident one. This crucial aspect of ARGs distinguishes them from other digital narratives and games, and can be viewed as a horizon or boundary around the field.

Even accepting that limitation, we can detect several antecedent threads leading up to the ARG. We will consider four such strands in the present discussion: fictional representations of ARG-like enterprises, games using ARG strategies, art using ARG strategies, and hoaxes relying on the TINAG principle.

ARGs in Fiction

ARGs and ARG-like projects have appeared in fiction for some time. We can begin with the past century, and one of the most widely-read, John Fowles' *The Magus* (1965, revised 1977).   Its protagonist, Nicholas Urfe, plays an elaborate, multi-leveled game, at one pointed dubbed a "godgame," with ever-shifting characters, levels of fictive identity, and a deepening intrusion into his life. The game's focal character and likely puppet master, Maurice Conchis, is the titular magician, but the precise nature of his role shifts as the game progresses, burying rather than revealing his intentions for most of the novel. As with any ARG, Urfe must investigate mysteries in order for the plot to advance. He interrogates visitors, trespasses on Colchis' property, and attempts to influence the outcome of subplots. At the same time, as with EA's ill-fated *Majestic*, "the game plays [him]." The game staff read his mail, mentally and physically torment Urfe, invade his personal life, and gradually draw him into a series of existential crises culminating in a romantic confrontation. The boundaries of the godgame are never clear, as with a good ARG, with part of the action consisting of Urfe trying to determine what is game and what is not.

G. K. Chesterton offers another ARG story in *The Tremendous Adventures of Major Brown* (1905, in the *Club of Queer Trades* collection). During his retirement, the main character stumbles into a game being staged for him, and finds his faculties revived. The puppet masters, the Adventure and Romance Agency, Limited, use planted characters in Brown's neighborhood, "chance" encounters, mysterious messages, hidden locations to simulate an invigorating adventure. The plot only unravels when Brown discovers the Agency, who then asks him to pay the game's bill. This game

is perhaps too deeply embedded in the player's life to be the sort of ARG we recognize, but we can certainly appreciate the mix of distributed game content pieces and the delight in play:

> the man who feels this desire for a varied life pays a yearly or a quarterly sum to the Adventure and Romance Agency; in return, the Adventure and Romance Agency undertakes to surround him with startling and weird events. As a man is leaving his front door, an excited sweep approaches him and assures him of a plot against his life; he gets into a cab, and is driven to an opium den; he receives a mysterious telegram or a dramatic visit, and is immediately in a vortex of incidents. A very picturesque and moving story is first written by one of the staff of distinguished novelists who are at present hard at work in the adjoining room. Yours, Major Brown (designed by our Mr Grigsby), I consider peculiarly forcible and pointed; it is almost a pity you did not see the end of it."

One of the best-known fictional representations of ARG-like games is *The Game* (David Fincher, 1997). As with our previous examples, the main character, Nicholas Van Orton, plays and is played by a game embedded within his life and environment. The many puzzles and plot elements are mixed with out-of-game details, and distributed across reality itself, undermining the possibility of defining anything as "out of game". As with any ludic text, Van Orton must play the game for its plot to advance, questioning strangers, investigating mysteries, and traveling to new locations. If he had ceased to play, the rest of the narrative would have been suspended (and the film ended quite early, or transformed into a truly strange, other story). Also consonant with our other antecedent texts is the ethical drive of the game, since the film is in many ways about Van Orton's improvement as a human being. He begins as a cold, isolated, wealth-obsessed shell of a man, and grows out of that state as the game intensifies.

William Gibson's *Pattern Recognition* (2003) is arguably the most significant description in fiction of an internet-age ARG. While the previous examples mentioned used costumes, actors, paint, and even a CNN hack as content, *Pattern Recognition*'s ARG-like entity is built on digital video, distributed through the internet, and discussed in classic ARG fashion on discussion boards. The plot concerns The Footage, a fragmentary series of film clips apparently produced by the same source, but whose interrelationships are unclear. The distributed communities obsessed with The Footage research its components, closely analyzing them, extrapolating, testing, and revising assessments which coalesce into a sense of the films' plot. TINAG appears once more, as The Footage is published secretively, in no single location, and is discovered in a distributed, uneven way. Debates occur around ruling content in-Footage and out-. Even the name, *The Footage*, is provisional and unofficial. Newcomers to ARGs who gradually realize that these games lack clearly defined boundaries around who is and who isn't a player would recognize Cayce's interaction with Footage players. Some of these players suddenly appear in face-to-face meetings, even though they are are strangers to the protagonist, such as a restaurant worker who recognizes Cayce as a fellow player:

> "You follow the footage." His eyes narrowing within their brackets of black Italian plastic.

ARGs teach us to heighten our ability to winnow patterns out of the otherwise seemingly random and meaningless data in the wider world. Gibson's novel stretches between these two poles, as Cayce investigates The Footage (among other things), while seeking to avoid her mother's obsession with electronic voice phenomena.

Beyond ARG-like games themselves, key elements of ARG design have appeared in fiction for some time. For example, Jorge Luis Borges' *Tlon, Uqbar, Orbis Tertius* (1940) concerns the

insertion of fictive content into nonfiction. A group of academics, puppet-master equivalents, create an encyclopedia of an imaginary world, then sneak small pieces of it into conventional encyclopedias. Then that fictive world, Tlon, starts intruding its descriptions into our world on its own - the content escapes its creators. Beyond proving a delightful example for Wikipedia critics, this story brings to mind the tensions and thrills of seeing reality and fiction discovered alongside each other. Readers of H. P. Lovecraft's fiction experience something similar when they realize that the *Necronomicon* is a fictional book cited in Lovecraft's stories, whereas *The Witch-Cult in Modern Europe* (1921), which also appears in those tales, is so real that it can be purchased from Amazon.com[10]. Fans, hoaxers, and the ingenious have created print editions of the *Necronomicon*, winning the right to claim that Alhazred's book is real, blurring the fact-fiction line still further. Similarly, in the ARG-world, most games have player-built documentary sites describing game content. To an enterprising outsider, a secondary game of discerning reality from fiction may be played.

ARG-like Games

Moving beyond texts about games to games themselves, a series of games before and after *The Beast* launched used major ARG elements. Most evident here is the insertion of game content into everyday life and structuring a quest-like search using non-game content. For example, Assassin consists of players trying to "kill" other players, but while living lives in a non-game-playing society. College students stalk each other through residence halls and cafeterias, brandishing toy weapons at targets selected by a game system. The game exists all around nonplayers, operating silently or erupting suddenly into a classroom or quad. While Assassin, which dates reliably back to the 1980s, does have game boundaries in space and time, they are not apparent to nonplayers; moreover, the point is to intertwine life and game. Live Action Role Playing games, or LARPs, operate in a similar fashion by embedding players and game content into a larger social world, such as a convention or campus. LARPs greatly expand game content over Assassin, adding character background, rules for physical interaction, and so on. The How to Host a Murder game offers a smaller but still useful example of this embedding strategy, as players take on roles within an unrelated social setting. Role-playing here blends elements of the fictional character with perceptions of actual players.

Performance Art

Beyond games and texts about games, performative art has sometimes used ARG strategies to break Brecht's "fourth wall." The traditions of performance art and guerrilla theater have, in retrospect, resembled ARGs in this way. This historical connection suggests a possible ideology for ARGs, in terms of performance art's political and psychological activism. One may detect a trace of this in Jane McGonical's account of ARG players wanting to participate in the war on terror[11]. Ray Johnson's Zen-like practice of sending his art to galleries and correspondents is relevant here. As depicted in the biographical documentary *How to Draw a Bunny* (2002), Johnson's mail art struck recipients as puzzles to be solved. The boundaries of each piece, like a good ARG puzzle, had to be determined in the course of exploration – what was a pun, what a bagatelle, what connected to which external referent?

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[10] The HPLA site has a nice list of real books placed alongside the fictional at
      http://www.hplovecraft.com/creation/tomes.asp#nonfiction .

[11] "'This Is Not a Game': Immersive Aesthetics and Collective Play", delivered 2003.
        "We can solve the puzzle of who the terrorists are," one member wrote [3]. Another agreed: "We have the means, resources, and experience to put a picture together from a vast wealth of knowledge and personal intuition"[43]. One Cloudmaker suggested: "Let's become a resource.
        Utilize your computer & analytical talents to generate leads" [7]. Someone else implored: "We like to flout [sic] our 7,000 members and our voracious appetite for difficult problems, but when the chips are down can we really make a difference?"

Performative art can also intertwine an artist's content with everyday life beyond either street theater or the gallery. For examples, Janet Cardiff has developed her Walks series since 1991. The audience experiences sounds through portable recorders as they walk through locations, the contents of which are largely or entirely native, rather than created as part of the project. As the description of a 2005 instance reads, Cardiff creates augmented realities:

> interactive works where visitors are asked to touch, listen and move through environments layered with visual and aural narratives[12]

At a less avant-garde level, historical reenactments resemble both ARGs and performance art. Their encampments, fairs, spectacles are not as intrusive to outsiders as performance art can be, since they are formally and clearly demarcated. But the plunging down a rabbit hole of ARG play, the sense of immersion into a world extending very far beyond one's ability to encompass, is a key part of the reenactor experience. Summoning up a historical moment, be it the seventh century, the American Civil War, or Jane Austen's time, literally creates an alternate reality within our own.

Literary Hoaxes

Having touched on performative art, gaming, and stories about ARGs, let us briefly return to our earlier discussion of hoaxes. While literary fakes have a long tradition, some instances are remarkably ARG-like. These are not works which seek to disguise authorship, such as the Donation of Constantine (eighth century) or the first edition of *The Castle of Otranto* (attributed to one "Onuphrio Muralto", 1765), but attempts to pass off fictional work as nonfiction. The most spectacular bibliophilic example is the *Codex Seraphinianus*, an illustrated book describing what seems to be an alien world. All of the text is written in an alphabet not used by any human civilization. The illustrations are strange, unnerving, macabre, funny, and surreal. It appears without authorship or secondary material in its earliest printings (1981), like a found document from a lost culture. It became the subject of discussion for some time, like Gibson's Footage, but was revealed to be the work of Luigi Serafini, an Italian designer. Like Borges' Tlonish encyclopedia, the Codex appears on bookshelves as if snuck into our world from an alternative reality.

The Sokal hoax took this theme and reversed it as a statement of public critique and obloquy. Alan Sokal (physics, New York University), appalled by the rise of science studies, placed a paper in a leading journal addressing that field. The paper, "Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity," was accepted by Social Text in 1996. It fulfills many requirements for a scholarly paper, including detailed citation and a steady flow of specialists' discourse. But it was deliberately riddled with fantasies, gaffes, errors, and flights from reality. Once it was accepted and published in Social Text, Sokal strode out from behind the curtain in the pages of another journal, *Lingua Franca*, to explain his game.[13] A related public academic hoax from a previous generation, *The Report from Iron Mountain* (1967), outlined a pro-war domestic policy, and was published as a serious argument.

Such texts should bring to mind earlier satires, not always understood as such, including Jonathan's Swift's "A Modest Proposal: For Preventing the Children of Poor People in Ireland from Being a Burden to Their Parents..." (1729) and Daniel Defoe's "Shortest Way With Dissenters" (1703). Each of these texts purports to have serious intent, and appeals to two audiences: those who get the joke, and those who do not. ARGs are predicated upon such bimodal reception of game content. ARG players alone "got" the numbers added to an A.I. poster, or tried to get into the Metacortechs company's directory. Indeed, we can infer that ARG play is predicated on

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[12] http://www.deltaaxis.org/powerhouse/exhibitions/cardiff.html

[13] One copy reliably available at http://www.physics.nyu.edu/~as2/transgress_v2/transgress_v2_singlefile.html .

players grasping a secret not appreciated by their peers.

We can locate a similar interpretive dynamic in the long tradition of "decoding" cultural texts. This includes putatively discovering numerological significance in documents, like *The Bible Code* (a best-seller in the United States), as well as applying such discoveries to everyday life, as when Russian priests determine that Napoleon Bonaparte's name, suitably decoded via the French alphabet, yields "666" in *War and Peace*. Conspiracy theories in general partake of this interpretive approach. Such "analyses" separate the audience into the illuminated and the un-clued, which claiming some authority for the speaker.

ARGs and Politics

The creation of two levels of readers is a very political act, especially as ARGs win larger audiences. But the politics may in fact be very personal, despite the practice of collaborative play. Consider: one benefit of playing a game is, as with most fiction, the enjoyment of a character. Many ARG plots, like mysteries, turn on the death or disappearance of a single person, whom we get to know through play. In fact, the number of characters in an ARG is quite limited, resembling again the cast of a mystery novel, in contrast to, say, the teeming social strata of an epic or historical novel. Although we play ARGs collectively, we thrive on and give applause for our individual achievements. We each bring our unique perspectives and skill sets to bear on puzzles. The thrill of discovering a cryptogram, the joy in solving it, the sheer kick of having a game respond to you – these are ultimately deeply individual experiences. The process of playing this sort of collaborative game is also a celebration of the individual player.

ARG antecedents similarly celebrate the individual. John Fowles' *Magus* is ultimately about the transformation of a single mind, focused on one point. *The Game* concerns the redemption of its main character, turning him into more of a human being. *The Codex Seriphinianus* was the work of one designer. Gibson's *Footage* is played as, and ultimately revealed to be, the inspired work of one creator. Although it goes against the grain of the "collective detective" concept, the ARG ancestry teaches us that this field may be more deeply individualistic than we thought. Such individualism, if this hypothesis is right, makes the politics of ARG play richer, or perhaps more contradictory, than the rhetoric of collective action which is usually applied to it.

A collective problem remains. The preservation of ARG content and play remains an open, unsolved, and tragic problem. Game content web sites lose their hosting, player-created resources vanish, forums disappear, phone numbers cease to work, email addresses die quietly. ARGs are at worst as evanescent as early film, or dance performance. We are in desperate need of an archiving system so that we can in some way preserve game contents, and also record the experience of play. The fact that so much of the ARG antecedent world remains accessible signals the importance of working to preserve this rising field, before too much of it disappears, and the games become too mysterious.

There are antecedents to this problem, which the ARG community may draw upon. Libraries and archives have fought to preserve the written record for millennia, and remain at the forefront of concerns about preserving digital documents. Film historians increasingly work to maintain and expand our access to older movies, transferring content into other storage devices, reprinting obscure titles, editing improved versions of important works. Director Martin Scorcese has been a leader in this field for decades. Preserving live performance has been partly the responsibility of recording technologies, as film and video recorded music, dance, and theater productions.

The field of ARG antecedents offers a mixed record in terms of preservation. The books and movies we've discussed are fairly widely available, and ultimately appear in copies at key sites (Library of Congress). Performance art is less well recorded, especially when we consider how difficult it is to record performers and audience simultaneously. Dance ultimately developed

notation systems to record dance designs, when readers had no access to their performance (Benesh Movement, Kinetography Laban),

Some ARG antecedents are partially preserved – we can find many *Choose Your Own Adventure* books, but how do we access the experience of playing/reading those? Live-action role-playing games face a similar problem, with game documents preserved (not always), but play hard to find in archival forms. How many people have watched a full LARP in video? Computer games in general face a difficult preservation road, between hardware and software succession and the problem of archiving game play. Imagine trying to present *World of Warcraft* to an audience fifty years from now. Consider the variety of ARG content: should we attempt to save every scrap of interaction, each forum post, IRQ chat transcript? What about the interactions between players? This may be a good time to start thinking about an ARG archiving selection protocol.

This is not a new problem, and partial solutions have been implemented. The ARG community has preserved a variety of game pieces over time. The Internet Archive[14] contains a growing set of game web pages. Individual players no doubt possess a large number of game content items. Perhaps the ARG ethos of collaborative action, and a growing awareness of the genre's historical depth and importance, can combine to form a larger ARG preservation movement.

Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature*. Baltimore: Johns Hopkins, 1997.

Manovich, Lev. *The Language of New Media*. Cambridge: MIT Press, 2001.

Murray, Janet. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Cambridge: MIT, 1997.

David Szulborski, *This is Not A Game*. Lulu: 2006.

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[14] http://www.archive.org

Types of ARG

Nova Barlow

Introduction

Originally funded and developed by independent game-makers, the popularity of the Alternate Reality Gaming genre (ARG) has grown in a way that lends itself to a further breakdown into several sub-genres. This section is intended to cover a large variety of games within ARG, in order to find examples to help define each category by comparing and contrasting the different sub-genres present in the field. Not only can ARGs be used to just tell a story, but players can also be taking part in team-building activities, educating themselves on Internet use, or merely participating in a publicity or advertising campaign.

By defining sub-genres within the ARG field it helps observers understand what is currently available in context of other games (both present and past) that may be similar in nature. There are five main sub-genres used for this purpose, although some games understandably (and in some cases, intentionally) blur the lines between categories:

- Promotional
- Grassroots
- Productized/Commercial
- Single-Player
- Training/Educational

What all of these games have in common is a level of interactivity, although how in-depth that interactivity is expressed tends to vary. *Perplex City* creator Michael Smith aptly and succinctly described the ARG genre when he was asked what *Perplex City* was: "part story, part game, part puzzle". Longer definitions of the genre as a whole incorporate the compelling community elements that players flock toward and the use of multiple forms of media such as e-mail, websites, text/voice messaging, live events, and similar strategies for content delivery.

Collective intelligence efforts also have ARG elements to them – websites often crop up to engage in collaborative interpretation and debate, but a web board discussing JK Rowling's hints for the last volume of Harry Potter falls well short of the definition of an ARG. It is only when these efforts are taken to the next level, and the mediums being discussed react to the community's actions that the above categories spring to life to tease and delight the audience with yet another bit of information. Over time, people have referred to all kinds of collective play activities as 'an ARG' or 'ARG-like', however not all these activities are ARGs. An example of this would be treasure hunts. Treasure hunts by themselves are not an ARG because they are simply a sub-genre of puzzles that can in turn, be incorporated into a larger story/game/puzzle that is commonly known as an ARG. While puzzles are by nature two-dimensional (even *pacManhattan*, with an emphasis on recreating Pac Man in three dimensional space, still falls 'flat' due to the singular game-style focus, and limited scope) with clearly defined rules, ARGs enjoy a certain freedom by not spelling out all of the "rules of the game" in advance. In fact, once inside the game, the often recited mantra of "this is not a game" becomes the only "real" rule in order to preserve the alternative reality setting. When rules are presented in an ARG, such as *Perplex City*, they are done in an in-character and in a way that does not break the flow of the setting[15]. ARGs also tend to require a voluntary suspension of disbelief to enjoy. Does a person need to suspend disbelief to enjoy the experience of *A Treasure Trove* and its underlying story? Certainly not, the story is presented as a beautiful illustrated fairy tale that also happens to provide clues to a now-found real world group of

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[15] http://www.perplexcity.com/help/terms/index.qbuild

treasures. Does a person need to suspend disbelief to enjoy *Perplex City*, which is arguably another sort of treasure hunt? It isn't necessary – the game already does that for the player. Additionally, immersive play such as "Street Wars" falls short of being an ARG – no reality is suspended, as the understood rules do not allow interference with day-to-day activities except within defined parameters (no one is going to "assassinate" a player during/at work, where an ARG such as *Majestic* could send you a fax or call a player at work, during normal 'business hours').

While it is possible to draw up categories similar to books, movies, and even massive multiplayer games (sci-fi, horror, fantasy), this style of genre definition fails quickly due to the puzzle based nature of ARGs. All ARGs at heart are mysteries – things appear "out of nowhere", clues lead to puzzles that lead to solutions (that often lead to even more puzzles). It is easy to draw up a quick list in an attempt to define sub-genres by predominant content style – puzzles, multimedia, interactive/real time, and the like. This list also leads to a rapid quagmire as over the course of an ARG the game may appear to be predominantly one thing and change instantly into another – a series of flashy multimedia may morph into a series of puzzles leading to a string of real-time events, giving each style of content "equal time". Finally, it is almost too simplistic to define sub-genres of ARGs according to if they are "professionally" run (by a media company or marketing department within a company) or not, as four of the above categories can be run by "professionals" (grassroots being the exception), and four of the above categories can be run by "independent" efforts, but those definitions don't say much about the games and are better loaned to a discussion of business models, found later in this paper.

Promotional

This sub-genre is the one that started it all, and are often what people mean when they refer to ARGs as a whole due to their high profile nature. These are the games that everyone can name due to media exposure – articles about ARGs do not fail to mention *I Love Bees*, for example. Promotional games are at the core designed to push a product to the audience in a way that does not necessarily require off-screen interaction with that product to a large degree. As product tie-ins, this medium lends itself nicely to video games (Halo 2's *I Love Bees;* Gun's *Last Call Poker*), movies (A.I.'s *The Beast*) and television shows (*Push, Nevada; Lost; ReGenesis*), although games like *Art of the Heist* (Audi) illustrated the potential for raising brand awareness in other products.

These games also can be enjoyed independently of the product itself, but are occasionally more transparently ad-like then other sub-genres, especially in the later stages when the game is reaching its conclusion. *I Love Bees* culminated in large scale events that allowed "crew members" to play *Halo 2* before the official release – and launched itself by sending out jars of honey with the phrase "I love bees" floating inside at the same time the URL to the first site (in ARG terminology, the "rabbit hole") flashed on Cineplex screens at the end of a theatrical trailer for *Halo 2*. *The LOST Experience* was launched after the television series *LOST* was well underway (towards the end of its second season), not before – and made no pretense of covertly announcing itself to the world[16].

Designed for large scale audiences and funded accordingly, these efforts attract audiences anywhere from 10,000 to 3 million. Promotional efforts are considered "officially approved" original stories that take place in an existing fictional universe, providing consistency in content, making them different in presentation from "fan based" grassroots efforts that must neatly skirt around IP issues while at the same time presenting a compelling "hook" for the story that they wish to engage players with. At the same time promotional efforts also have the potential to be but are not necessarily to date less flexible than grassroots efforts in storytelling due to the nature of scale involved.

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[16] http://gizmodo.com/gadgets/home-entertainment/the-lost-experience-alternate-reality-game-168184.php

The two compelling stand out feature of this category is often the presence of outside funding to the team that is creating the ARG, and the degree of interactivity with a product. The funding feature sets it apart from Grassroots ("self" or small group funding), and Productized ARGs (where the funding comes from a product being sold concurrently to the game). The degree of interactivity sets it apart from Productized ARGs. Promotional games can be Single-Player or multiplayer, as well.

Grassroots

This sub-genre of ARGs began to surface shortly after the end of "*The Beast*" in an effort to keep the newly established community thriving as well as attempt to recapture the magic that the first major ARG was able to do so well.

Grassroots games, as they have come to be called, are designed by individuals (or likely teams) either as a bit of fandom work, or as a stand alone work of fiction. Generally, these games operate with a much smaller budget than Promotional efforts. Depending on the type of game, reported costs range from around $150 (*Exocog*) to over $2000 USD (*Chasing the Wish*). They can be done for free, but the bar has already been raised by many high quality efforts and it is likely any aspiring ARGtist/ARGitect/"puppetmaster" will end up investing at least a minor sum in order to implement a game that will attract a fair size audience and be worth doing. The audience these games attract is often smaller and forms a more tightly-knit community as well, although there are exceptions to the rule that compare to fully-funded Promotional efforts. Notably *Last Call Poker* (Promotional) attracted approximately 10,000 players, while quoted numbers for *MetaCortechs* (Grassroots) fall around 12,000, although they both ran for similar timeframes (*Last Call Poker* ran 90 days, *MetaCortechs*, 80)[17].

The fact that these games are funded privately also means they are run as volunteer efforts, which can occasionally lead to turn over of staff or a higher risk of failure or the ARG itself due to the circumstances or just the nature of the team assembled. Even wildly successful games such as *Lockjaw* had had turnover in staff before they even launch. ARG failure is not notably new – *Majestic* is held up as a shining example of a Commercial/Productized ARG that failed in a very public way. With Grassroots efforts, the risk of failure (often dubbed "implosion") is much higher. Grassroots games have no corporate backing so when they lean on existing IP for inspiration (such as Matrix-based *MetaCortechs*, or other films) they may be mistaken for official efforts by players. Early efforts in the Grassroots area include the notable *Ravenwatchers*, which appeared to gain more notoriety for its failed start than much else and *Lockjaw*. *Lockjaw* catapulted Grassroots ARGs into the media's eye with a short (but tantalizing) teaser article in Wired magazine prior to launch[18].

Even with a smaller budget, a Grassroots ARG that appears smooth, professionally done, and presented by a well skilled (and often genre experienced) team can gather a lot of attention quickly. *Urban Hunt* blurred the line between a Promotional ARG and Grassroots by appearing to promote a reality TV show. Games in this sub-genre also can diverge wildly in content, and allow previously unexplored boundaries in content delivery to be explored with a wider range of freedom. *Chasing the Wish* included dozens of game related artifacts, expanding upon the idea of a small metal disk that found itself part of *Majestic*-world based *ChangeAgents: Out of Control*. When the disk proved to be an incredible hit with players, incorporating real items into a very internet and media based strategy for content delivery became yet another way ARG makers could touch their audience. Unlike Promotional ARGs, where the "point" is most often related to the product being pitched, and Productized ARGs, in which the purchase of a product is highly tied into the game itself, Grassroots games use these items as a means to an end. The item(s) in question for a

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17   http://www.mssv.net/archives/000705.shtml
18   http://www.wired.com/news/games/0,2101,46672,00.html

Grassroots game usually contains a clue, or must be delivered somewhere. These items tend not to cost the player anything other than the effort required to get them. Grassroots games can also be more flexible, since they are not officially endorsed by a company in their efforts.

The motives for engaging in the creation of Grassroots games have been clearly diverse. *Exocog*, for example, began as an exercise launched by Miramontes Studios and Jim Miller to learn how to conduct an interactive marketing campaign. *Exocog* is an example of a "fan homage" style game, as it tied in to the then upcoming release of the film *Minority Report*, but *Lockjaw* established an entirely independent storyline wrapped around fictional biotech company GanMed and a group of urban explorers named DCMetroCrawlers. But what is the draw for creators to spend a significant amount of personal money to establish an alternative universe?

Author Dave Szulborski (and puppetmaster of many games, including *Urban Hunt*, *ChangeAgents*, and *Chasing the Wish*) comments in his book on the compelling phenomena of ARG creation in *This Is Not A Game*, "Even without being actively involved in the genre for a couple months though, I couldn't stop ideas for new games from percolating around inside my head."

Over the years and to the present day, the grassroots sub-genre is by far the largest one in the Alternate Gaming reality sphere, most likely due to reasons similar to those expressed by Mr. Szulborksi. A very small look at a long list of grassroots efforts chronicled at the "unforums" include successfully concluded games *Acheron*, *Alias: Omnifam*, *Metacortechs*, *Anyone seen James?*, *The Carer*, *Rookery Tower*, *Strange Dreams* Pts 1 & 2, *Wildfire Industries*, and an even longer list of efforts that have either "imploded" or suffered a "meltdown" and did not come to a "successful conclusion".

Productized

This genre is most clearly defined with a product as the driving effort of game or critical to puzzle solving within the game. This category also includes commercial efforts designed to fix a business model on top of an ARG experience.

While developed at the same time as *The Beast*, Electronic Arts' *Majestic* (2001) differed on several levels. Unlike *The Beast* which was free to play, *Majestic* was designed to be a commercial product from the outset[19], announcing itself to the world many months before it launched, and quickly having to re-establish itself as "not a game" once it did. How did *Majestic* fare in the market? Dismally - by all public reports.

> "Majestic" drew such an anemic audience that Electronic Arts abandoned the story half-way through. Of the 800,000 people who started to register for the free, first installment of the game, only 71,200 completed the process. That number fell to 10,000 to 15,000 subscribers when it came time to pay. It was a grand experiment, but one that ultimately cost EA between $5 million and $7 million. – Chris Morris, CNN, "Innovation at Risk?", December 2001[20]

While business models are discussed elsewhere in this paper, recent examples of Productized ARGs include Mind Candy's *Perplex City* and *EDOC Laundry*'s line of clothing.

Single-Player

Single-Player games merit their own category, as the nature of these games are often (but not always) promotional in nature (example: *ReGenesis*, *The LOST Experience*) but are tailored to be

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19 http://archives.cnn.com/2001/TECH/computing/01/08/majestic.idg/
20 http://money.cnn.com/2001/12/19/technology/column_gaming/

played entirely by an individual. The stand out ARG in this category is *Jamie Kane*, created by Cross-Media Entertainment for BBC. *Jamie Kane* can be started at any time and lasts for approximately two weeks, start to finish[21].

While it is possible for larger scale ARGs to be played individually, they are designed to benefit from collaborative community interaction. Single-Player ARGs also can be designed to be free of traditional time constraints, allowing them to be played whenever they are stumbled upon. These games are also designed to rely more on generic and predictable reactions to the puzzles presented. It is true that ARGs can be played in a single or collaborative fashion, but it is the strength of this sub-genre that the games are designed to be played in such a fashion that anyone with enough diligence can solve the puzzles within by themselves, making single-player ARGs a bit easier to follow and ideal for genre newcomers. ARG creators in large-scale games in other sub-genres have come out on record admitting that many puzzles were designed so that one player could not solve everything due to the wide range of knowledge required. Single-Player ARGs often do not stay that way for long – as fans learn about the game, information is swapped and shared. The fans usually collaborate to solve all the puzzles as teams and post their findings as rapidly as possible - once the puzzles are solved, players who are "late" to the game can simply read a walkthrough with all the available solutions, making the game as "easy" or "difficult" as the solo player wishes to make things. There is no "new" content to discover, unless the game has been updated or a puzzle within the game was never solved by the "first wave" of players. Instead of using live actors, or having the expense of relying on live events to move the action in the story forward, this sub-genre can leverage "chat bots" such as Alice bots if "live interaction" with a story character is required and websites to move the story towards a conclusion. However, the more automated the interaction is, the more superficial and slightly less personal the experience becomes regardless of the sophistication of the technology used.

Educational/Training

Another small category, this category illustrates the growing flexibility of the ARG medium to be used for training and team building. Noted ARG expert Brooke Thompson parlayed her skill in ARG creation to take employees on a journey into a world where corporate communication led to humorous results, while subtly attempting to train players in skills designed to increase interdepartmental communication[22]. Titled SMB: Missed Steaks, the game was tailored for a specific audience, yet similar to most corporate training in that it imparted lessons that can easily be exported to other departments and companies. While Educational/Training efforts are the least talked about sub-genre in ARGs, they do exist, and are a natural and sensible extension of the genre due to the pervasiveness of technology and collaborative efforts often needed in other types of ARGs. In recent years, mobile and PC technology have increasingly been viewed as a yet another delivery platform for all sorts of content on a day to day basis – something that ARGs discovered early on. In education and training efforts, collaboration is encouraged and welcome. Societal pressure and the pervasiveness of varying forms of media in general have led educators to adopt new strategies to leverage existing and in many cases, emerging technology to capture and engage students' minds. Many higher education campuses require computers, enticing students with steep discounts with the help of manufacturers and software companies – some even require cell-phones[23]. Educational/Training ARGs can share elements of the Single-Player category, but instead, they promote a non-traditional product. The product isn't a movie, or a shirt you can wear, or a card to keep – it is simply knowledge.

Comparatively speaking, the massive multiplayer genre has also seen similar outgrowth in use, and this category shows the most potential for consistent growth in both ARGs and massive

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[21] http://www.bbc.co.uk/jamiekane/
[22] http://www.mirlandano.com/portfolio/arg/smb/index.html
[23] http://www.newlaunches.com/archives/new_jersey_college_requires_cell_phone_with_tracer.php

multiplayer worlds. Linden Labs actively encourages the use of *Second Life* for learning by distributing free accounts to teachers at universities and colleges for students to use though the Campus: Second Life program. *Second Life* then becomes a real-time collaboration tool to engage distant learners in ways traditional online learning does not offer, and ARGs become another way for people to learn while having fun. As this is a relatively small and new category, it has the most in common with the Single-Player ARGs and is still finding its place as a sub-genre as it grows in popularity.

Current & Recent Games

Brooke Thompson

Introduction

Over the past five years, alternate reality games have captured the imaginations of millions of people by getting them to play with worlds that are as fantastic as they are real. The ease of communication brought about in this digital age has driven story tellers and game designers to explore new ways in which their audience can participate with the interaction between fictional and real worlds. What started as experiments with two of the biggest companies in the game industry, Microsoft and EA, have moved on and combined efforts between advertising agencies, movie studios, television networks. This resulted in promotional campaigns and games that extended the story universe off of the big or small screen and into the hands of the audience. Today, not only are the big industries still looking into the possibilities but also small independent companies with a desire to create healthy financial models around this new genre of entertainment. Looking at a number of the games that have appeared in the past year shows trends such as playing with funding possibilities, exploring the relationships between fictional and real world spaces, and investigating new ways to interact with stories shown on the small screen.

Mind Candy has sent players in London, New York, and San Francisco on large city wide scavenger hunts and provided a physical artifact for players to come together in order to trade and share. That physical artifact is a collectable puzzle card which, sold in stores online and off and in a number of countries, helps to support the alternate reality game. Likewise, *EDOC Laundry* has built itself around a clothing line and New Fiction has published a comic book to support *Catching the Wish*. With Sean Stewart and Jordan Weisman's *Cathy's Book* soon to hit shelves, it appears that we are seeing the rise of alternate reality games built up around their own products with their own intellectual property.

Mind Candy is far from the only company that has encouraged players to gather together to play in real world spaces. Two years ago, 42 Entertainment took gamers away from their computers and sent them on a quest to answer payphones in order to hear a compelling audio drama. They returned this year with *Last Call Poker* which, again, took players away from their computers and sent them cemeteries throughout the country to engage in active games of Tombstone Hold'em and to explore a real world space in a new or different way. Players and designers alike are embracing the trend of exploring real world spaces and there is no doubt that we'll continue to see it rise.

Television has been exploring the possibility of extending the story beyond the small screen and onto the internet since Fox first aired *Freaky Links* in 1999. They were not alone in seeing the potential of the new media and were quickly followed by ABC which experimented with several extended realities prior to this year's *The LOST Experience*. Designed to carry US viewers of the popular and mysterious *LOST* throughout the summer hiatus, it also engaged players in the UK and Australia. ABC Family teamed up with Xenophile Media to extend the reality of this summer's *Fallen Miniseries*. Xenophile had plenty of experience prior to this summer. Their multiple award wining *ReGenesis* was renewed for a second season this year. As broadband internet becomes more widespread and digital video recorders more common, networks will continue to experiment with ways in which they can engage viewers both on and off the small screen.

With all of this activity, it is an exciting time in the world of alternate reality gaming. While this past year has been filled with games created by teams experienced with alternate reality games, more and more people are discovering and exploring the possibilities. It's just a matter of time before we see what they have come up with.

Catching the Wish

1. Game Overview

- Running dates: May, 2006 – September 2006
- Design Team: Dave Szulborski
- Funding Model: Supported through sales of a graphic novel
- Website: http://www.chasingthewish.net/

2. Game Description

Catching the Wish took players to the fictional Aglaura, NJ where mysterious forces seemed to follow residents wherever they went. Dale Sprague, community activist and web designer, was plagued by dreams that seemed so familiar and real that he was driven to document them in a series of graphic novels. Unbeknownst to Dale, the events actually occurred three years earlier and were explored by players in *Chasing the Wish*, a previous alternate reality game by Dave Szulborski.

The game was designed to support a series of three graphic novels which refer to previous events as well as direct players to websites and characters in the current alternate reality game. With an experience as rich in characters and events as *Chasing the Wish*, this creative blending of print and online media allowed players new to the series an easy way to familiarize themselves with the events that the designers felt were important to the experience.

Following in the footsteps of the previous alternate reality game, which was praised and criticised for its heavy reliance on personal email interaction, *Catching the Wish* was a character-driven narrative where personal communication with the characters that populated the fictional world was rewarded in kind. Players participated in conference calls, communicated via email, and even met characters in person. The vast amount of text generated from all of this communication could be intimidating to players entering the experience late in the game. Therefore the designers provided a comprehensive guide to the experience on a website that was outside of the game universe.

The game was designed to appeal to players who placed an emphasis on character interactions and realism. If someone unaware of the game happened upon the online experience, they may never have known that they were interacting with a fictional world. Events occurred in real time and as naturally as they do in our everyday experiences. The town and people that inhabited it could be anywhere or anyone. And, even though players were interacting with the characters, it was a voyeuristic experience of getting pleasure from observing a world so like our own. Well, aside from the strange mystical happenings.

EDOC Laundry

Game Overview

- Running dates: March, 2006 – (anticipate run through 2008)
- Design Team: EDOC Laundry
- Funding Model: Supported through clothing sales
- Websites: http://www.edoclaundry.com/

Game Description

Founded by Dawne Weisman, *EDOC Laundry* is a clothing label that specializes in apparel for the

smart and stylish hipster while also delivering a large interactive story that unfolds online. While the interactive story is accessed through codes discovered on the apparel, the clothing and the online elements can stand apart. Not only are the clothes so stylish that people have purchased them with little to no knowledge of the online elements, but players are encouraged to share the information that they have discovered forming an active community that does not require people to purchase every article in order to uncover the story.

On the inside of each article of clothing the phrase "nothing to hide" is printed in code. That code is used as a key to reveal a secret phrase hidden within the bold graphic design. Players take the secret phrase to the *EDOC Laundry* website where they can then input the code which will provide them with a video, audio, image, or text based clip that reveals a part of the story. On the surface, the story is a classic mystery plot that revolves around the murder of the band manager for Poor Richard, a very popular yet fictional band. On a deeper level, the story mirrors that of the American Revolution. While most of the story can be revealed through those assets, it is backed up by several other websites.

As with all fashion, the clothing line follows seasons and each season brings new items with new codes that unlock even more of the story. This allows the designers to pace the story delivery throughout the expected two year run. However, the limited number of articles in each season makes the game move at a slow pace. In order to engage the active players, especially once the season's clothing has revealed its secrets and the next season has yet to come, the characters provide regular updates and weekly puzzles on their respective websites. Through a mix of static web pages and forums, they are providing areas for players to both explore and come together as a community.

The game makes heavy use of multimedia with many video and audio clips. Reviews have been positive and players are responding well to the high production quality. It is very obvious that it is a game, however, in true ARG fashion, the game itself presents a very consistent world and the interactions between the players and characters help to further blend the boundaries between the game's world and ours.

Last Call Poker

Game Overview

- Running dates: September, 2005 – November, 2005
- Design Team: 42 Entertainment
- Funding Model: Promotional
- Websites: http://www.lastcallpoker.com/

Game Description

At first glance, the *Last Call Poker* website provides free flash-based online poker and, in fact, was promoted as such through various press releases. However, hidden not too deeply under the surface was a complex alternate reality game that included a wide array of story and play opportunities for casual and devoted players. Launched in the fall of 2005 as a promotion for Activision's Gun, the website and story took players through a span of 150 years as they traced the history of a cursed Navy Colt.

With casual or competitive online poker games, deeply immersive narratives, and ample opportunities for real world creative or active mission-based play, players could engage with the game in a variety of ways. Through episodic storytelling that provided a game long story arc occurring in present time as well as weekly stories that took players back in time to trace the gun's history with both fictional and historical figures, *Last Call Poker* was one of the first alternate reality

games to effectively consider various levels of engagement. Players that could only devote a short time in a single week and players that were heavily involved for then entire eight weeks were both rewarded with a complete story.

The online story discovery highlighted an exciting dichotomy of collaborative and competitive play. Twice a week at assigned times, the website would update with new information being made available for players together. Players, aware of the time, gathered together for the event in a race to be the first to find new characters by working through story clues and inputting names into a search engine. When a character was discovered, the player would receive recognition on the website and new pieces of the story would become available. While dozens of other players were searching for the same character, the excitement over discovering new pieces of the story encouraged players to cheer on their competitors helping to solidify the community surrounding the game.

Last Call Poker was also very innovative in the way in which it utilized play in real world environments. The website was created by the fictional Lucky Brown, an avid poker player who had passed away. Early on in the story, players learned of a game that he created called Tombstone Hold'em. Based on a popular poker variant, the game was played in cemeteries and utilized tombstones as part of their poker hand. Lucky's estate set aside money to run various Tombstone Hold'em tournaments at locations throughout the United States. The events were held on Saturdays throughout the game run and attracted upwards of 200 players. Players were also encouraged throughout the game to visit local cemeteries and complete simple open-ended missions such as cleaning up gravesites, leaving flowers, and writing letters to people who had passed away. These events became deeply meaningful to players who participated. Additionally, this generated much conversation about the historic use of cemeteries as parks, the state of older cemeteries, and how to best remember and honor life.

While the alternate reality game is no longer being played, the story and game play is detailed on the website which still exists and continues to provide free online poker games.

The LOST Experience

Game Overview

- Running dates: April, 2006 – September, 2006
- Design Team: ABC
- Funding Model: advertising supported/promotional
- Websites: http://www.insidetheexperience.com/

Game Description

About to begin its third season, the popular television program LOST has always had a loyal online following intent on discovering the secrets behind the mysterious show. This made it an ideal property for an experiment in combining alternate reality gaming with a television show so it should have been no surprise when *The LOST Experience* was announced last spring – just in time for the US summer hiatus.

Produced by the networks that carry LOST in the United States, United Kingdom, and Australia, the online experience provided players with a storyline that runs parallel to the television program while also hinting at and even revealing some of the shows deeper mysteries. While the experience contained the alternate reality game standards of cryptic websites, video clips, and intriguing voice mail messages, it took it a step or two further with a character appearing on a late night talk show, a massive chocolate giveaway, and even a book available on Amazon.com and written by a fictional author who died in the plane crash that started the television series. .

The game also experimented with new advertising methods. Since the advent of digital video recorders, such as TiVo, that allow viewers to easily skip commercials, networks have been struggling with ways in which they can appeal to advertisers. During several episodes of the television program, ABC aired commercials relating to *The LOST Experience.* Players, not wanting to miss clues to the Experience, sat through the commercial breaks. Additionally, sponsors of the television show were provided the opportunity to be involved with *The LOST Experience*. Sprite, Jeep, Monster.com, and Verizon participated with websites that contained clues and additional story information, while also including a marketing message, i.e. the website sponsored by Jeep, letyourcompassguideyou.com, contains one of the slogans for the Jeep Compass.

With a strong online community already in place, fans of *The LOST Experience* can be found on any number of websites and forums devoted to the television show as well as forums devoted to gaming and alternate reality gaming. To assure that players are all working at the same level, *The LOST Experience* had an official guide that provided regular updates. While this was successful in keeping players informed of what is happening, there were some complaints that it was just leading players and discouraging the actual discovery process.

Ocular Effect

Game Overview

- Running dates: July, 2006 – (currently running as of August, 2006)
- Design Team: Xenophile Media, Matt Wolf
- Funding Model: promotional
- Websites: http://www.oculareffect.com

Game Description

Ocular Effect was created as an interactive tie-in for the ABC Family television movie *Fallen* which premiered on July 23rd, 2006.   The game began with a mysterious countdown that tempted players until Fallen aired, at which point the website changed and delivered interested players to a message board which was monitored and maintained by the creative team as a means to help to facilitate discussion and deliver content. By utilizing complex Flash content and on-location videos featuring the main characters, the game took players on a virtual journey around the world as they followed the characters to six cities in three different countries. While the game did not feature characters from the TV movie, or the books upon which it was based on, it was set in the same story reality where nephilim (mythical/biblical offspring of angels and humans) exist in our world.

The story of *Ocular Effect* was complex and simple at the same time -- help Faith, an orphaned teenage tattoo artist who has always been obsessed with specific rune-like symbols, on her voyage of discovery, learning more about herself and the meaning behind the mysterious symbols. Early on in the game, Faith was given money by an anonymous source which she used to finance her trips to various locales across the world. Along the way, she found out that the symbols had connections to others who had experienced death, and by the end, Faith was able to put the pieces together to solve the mystery. An interesting and unique element in the game was the Oculus, a spheroid covered with rune-engraved plates, which provided players the ability to see both into characters' pasts and the future of the game plot. Having the Oculus as a reference, coupled with an open line of interactive communication with Faith, players were able to help Faith with decisions, such as where to go next.

The game designers went out of their way to make sure that visual design was aesthetically pleasing while also serving the players needs. To this end, the *Ocular Effect* website underwent a dramatic cosmetic change about halfway through the game which made it easier to track Faith's

progress. The Oculus, an interactive Flash animation, was eerily beautiful and menacing and provided the creators a means to include interesting puzzles in a meaningful way. The videos and 360º panoramic photographs showcased on the main character's blog were carefully framed and edited in such a way that suggested professionalism while still appearing to be created by an amateur. The game web sites were easy to read and with themes and styles carefully chosen to appropriately represent the site's purpose.

While it is not known yet whether *Fallen* will make it back to the small screen in the future, the *Ocular Effect* game served its purpose well, providing an interesting interactive story that included a number of the key elements of the *Fallen* universe. From the accounts of the active player base posting messages at the in-game forums, the experience was an enjoyable one and interest in the Fallen franchise has increased because of the game.

Omnifam

Game Overview

- Running dates: May, 2005 – December, 2005
- Design Team:
- Funding Model: none - grassroots
- Websites: http://www.omnifam.org/

Game Description

Omnifam was designed and executed by several genre enthusiasts as a fan-fiction piece revolving around the story universe of ABC's *Alias*. While not the first alternate reality game to be written independently by fans for an existing media property, it was the first to do so for a television property and, more importantly, for a television property that had played with ARG-like aspects in the past. It went much deeper than the previous official efforts and included stronger interactivity and a richer narrative experience.

As a piece of fan art, the creators did not have access to the current and future story lines. As such, they built off existing backstory creating their own adjacent but wholly separate storyline with new characters and events. This allowed them a certain amount of freedom while not conflicting with the show or upsetting fan expectations and understandings.

While the alternate reality game did not mirror or support the events in the broadcast show, it did follow a similar episodic arc. The initial vision was that players would be faced with a series of missions that would take a week to complete. The first mission was a set up as a qualifying test to allow the player access to the future missions. It was simple enough for anyone to complete and, essentially, served as an introduction to the play experience. That initial mission was available to players no matter how far along in the experience they happened to join the game and, after completing it, players would join in with the existing game audience as new missions were made available. Each additional mission would provide a specific goal that would advance the overall story arc.

The game was relatively ignored by the active alternate reality gaming audience at web sites such as unfiction. In part, this was due to the reputation of the earlier *Alias* web games among ARG fans as being light on both the interaction and narrative. However, missing the existing ARG audience did not hurt the experience. The game was embraced by fans of the television show and actively played on a website dedicated to the series. These fans had no experience with alternate reality games and their level of engagement with the game, despite it not being "official story" or "canon", showcases the desire of fans of the story world, not just fans of alternate reality games, to participate with the story world beyond the small screen.

Orbital Colony

Game Overview

- Running dates: November, 2005 – January, 2006
- Design Team:
- Funding Model: none - grassroots
- Websites: http://www.orbitalcolony.com/

Game Description

Orbital Colony was initially conceived as a way in which active players in the unfiction community could learn how to design and produce an alternate reality game. The goal was to maintain an open development group that received aid from experienced developers. However, they quickly realized the inability to keep the group visible while still allowing for a unaware player base that could become steeped in the mystery. Once the group closed itself to wandering eyes, the volunteer team struggled to stay together and it took almost two years before the game would launch.

As they had played dozens of games between them, they had a strong idea of what worked from a player's perspective and this helped them tremendously. Despite a non-existent budget, they utilized their various interests, skills, experience, and locations to build a dynamic experience that included a variety of online communications as well as hidden cache locations in four different countries creating a truly global experience. To supplement their knowledge and create a game based in factual fantasy, they contacted a number of people in the space industry, gaining access to official images and information that would only add to the realism of the experience.

Initially envisioned as two one-week long mini-games, the complex story grew into a full blown alternate reality game that was played out over a town month period and fifteen different websites. With a series of difficult puzzles attracting those that enjoy the complex problems, a sweet story of a little girl on an orbital colony surrounded by mystery and missing her father grabbing the hearts of story specialists, and enough personal email and chat to drive any character interactor wild, the game engaged a large number of players with little to no promotional effort and over the stigma of being a "training arg".

Perplex City

Game Overview

- Running dates: March, 2005 – (currently running as of November, 2006)
- Design Team: Mind Candy
- Funding Model: Supported through collectable trading cards and merchandise
- Websites: http://www.perplexcity.com

Game Description

Perplex City, created by London-based Mind Candy, is one of the first successful self-supported alternate reality games. The game finances itself through the sale of collectable puzzle cards that provide insight into the *Perplex City* universe. The cards also direct players to the massive online world where the story of *Perplex City* unfolds. But the story isn't just told online, there have been a number of live events, primarily in the form of city wide scavenger hunts, that have provided some of the most talked about story events. Who wouldn't talk about a helicopter whisking away a mole that had infiltrated your group?

The fictional *Perplex City* is a large city in an unknown universe that has recently connected to Earth. *Perplex City*'s priceless artefact, the Receda Cube, has been stolen and is hidden somewhere on Earth. In order to recover the cube, one of the city's residents enlisted the help of Mind Candy to spread the word on Earth. As the *Perplex City* culture revolves around puzzles, where they compete in puzzle contests much as we on Earth compete in sport, he proposed the puzzle cards as a way to familiarize the citizens of Earth with the world of *Perplex City* and offered a £100,000 (approx. $200,000 or €150,000) reward for the safe retrieval of the cube.

Despite some initial controversy over whether players would need to purchase the cards in order to participate with the alternate reality game or discover the location of the cube, neither is true. The cards support the game both monetarily and story-wise, but the game is free to any who wish to participate. Though, it is undeniable that the cards have become a source of community building with players meeting both on and offline to trade the cards, solve puzzles, and discuss the game.

The fourth and final wave of puzzle cards was released in July, 2006 and, as far as those outside of Mind Candy know, the cube could be found any day now. Capitalizing on the success of the puzzle cards, Mind Candy has announced that *Perplex City* will be continuing in another episode and that a board game based on the world will be arriving at stores mid-late September, 2006. The designers of the game have also expressed a desire to take the *Perplex City* universe as far as possible, including books and film.

ReGenesis

Game Overview

- Running dates: March, 2006 – June, 2006
- Design Team: Xenophile Media
- Funding Model: Promotional
- Websites: http://www.regenesistv.com/

Game Description

The *ReGenesis Extended Reality* (commonly referred to as just *ReGenesis*) is an alternate reality game that runs along with the popular Canadian television show, ReGenesis. Extending the one-hour bio-threat drama over multiple platforms, including websites, email, video-on-demand, voicemail, and real world events, the game allows players to explore the world as agents aiding NorBAC, the North American Biotechnology Advisory Commission. After the award-winning first season, Xenophile Media, the design and production team behind the experience, did something that had never been done – they redeployed an alternate reality game when the programme was syndicated.

When the television programme was picked up for another year, it was no surprise that they wanted to include the extended reality. Learning lessons from the first season, they made the experience more accessible to wider range of player types. For example, they included a flash based game that introduced players to the scientists at the NorBAC lab that required minimal time commitment and provided another entrance into the alternate reality game. Through video-on-demand, viewers interested in the extended reality story but without access to the internet or the time to commit to the experience were able to receive story updates. A mission based play scenario provided direction to players who were overwhelmed by the freedom of exploration. The only people that lose out on the extended reality are casual browsers and information seekers, but that is by design.

Because the game is designed to be deployed multiple times as the series is aired in additional markets or in syndication, the designers need to control who accesses the websites and minimize

the discussion about the experience elsewhere on the internet. As the websites are designed to change throughout the experience and in sync with the television episodes, they need to be displayed on a user by user basis. Additionally, website access is blocked to visitors that have not registered to the site to both minimize discussion and avoid search engines and archival websites from copying, or caching, the websites at various stages of the game play. The unfortunate side effect is that casual browsers and information seekers often include people that would tell others about the game or that would register once they were sufficiently intrigued by the experience.

In order to contain the discussion that is inevitable in a collaborative play experience, the extended reality makes use of message boards within the game reality. Players may find that they are reacting with both players and characters as the game progresses which adds an interesting dynamic to the game play. And, because the game environment is so controlled and all of the players understand they are interacting with a fictional world, the typical confusion found on in-game message boards is drastically reduced.

Studio Cyphers

Game Overview

- Running dates: May, 2006 – ongoing
- Design Team: Studio Cyphers, LLC
- Funding Model: Pay to play
- Websites: http://www.studiocyphers.com/

Game Description

Studio Cyphers is a serial based game with game episodes lasting about a month long each. It utilizes an interesting subscription based model that allows those who subscribe to an episode access to additional content and interaction while anyone may follow along with the story and work through the puzzles for free.

The story universe revolves around the Cyphers, a team of paranormal investigators and conservators, who have operated independently with no problem for years. However, things have changed and psychic forces being what they are, they need help and created the Wakefield Agent program in order to get it. Against this backdrop, the series lays down episodes which contain individual mysteries for players to solve while also delivering clues to the larger game story.

Though the episodes are part of a larger series, players must subscribe to each one individually. The US based company charges $9.99 to players within the United States and $13.99 for those outside of the country, presumably to cover the additional communication and shipping costs. Players who subscribe are given the title of "Wakefield Agent" and, in addition to the interaction, are granted access to game and story updates prior to those who do not subscribe.

The two episodes launched thus far (Out in the Cold, Perfect Friends Forever, and Descry.us) have received mixed reviews with players who paid for the additional interaction feeling more satisfied with the overall experience. However, the company behind the game, which maintains a blog on their website for company announcements and post mortems, has actively listened to and addressed player complaints.

Who Is Benjamin Stove

Game Overview

- Running dates: January, 2006 – April, 2006

- Design Team: Campbell-Ewald & GMD Studios
- Funding Model: Promotional
- Websites: http://www.whoisbenjaminstove.com/

Game Description

As a promotional campaign, *Who Is Benjamin Stove?* was unusual. It was not designed to promote a specific product and nor was the client revealed until several months into the campaign when they suddenly found themselves in the campaign. It's confusing, but it worked.

Designed by Campbell-Ewald and executed by GMD Studios, *Who Is Benjamin Stove?* launched in early January with a character who had discovered an odd painting while was visiting his parents for the holidays. The painting was of a crop circle in a corn field that had the shape of an ethanol molecule; a shape that would reappear a number of times throughout the campaign. Players immediately recognized the ethanol connection and, while trying to uncover the game's mystery as well as who might be backing the campaign, discussed the benefits and uses of the fuel. Several weeks later, when a Live Green, Go Yellow commercial appeared during the Superbowl, active players quickly determined that General Motors was likely behind the campaign. It would be several more weeks before they would receive confirmation.

The game's mystery revolved around the original owner of the painting, Benjamin Stove, with players and characters trying to discover who he was, where he might be, and, eventually, what led to his interest in ethanol. Tracking down Mr. Stove, required players to communicate with a character in Brazil and uncover notes he had left hidden in libraries throughout the United States. At one point, clues led one of the characters to Campbell-Ewald's offices in Detroit and, from there, players received more confirmation that General Motors might be involved. The big reveal, however, took place in late April when Benjamin Stove published an open letter to General Motors with General Motors responding in ads in the USAToday as well as a number of popular websites directing people to their Live Green, Go Yellow campaign website for more information.

The community for the game gathered on forums hosted on WhoIsBenjaminStove.com, a website created and maintained by one of the central characters. While this is nothing new to alternate reality games, the control that the game gave to players was unique. The forums were hosted and maintained by a character, but they were moderated by players who showed leadership and previous experience in moderating forums focused on alternate reality games. This allowed players to deal with questions and comments relating to the game reality without involving a character who might be suddenly confronted with the reality that they were, in fact, fictional. More importantly, it allowed the players to maintain control over the space and feel as if it was truly their community. This had the added benefit of inviting a strong shared culture and experience which has, in some ways, followed the players as they have joined other forums and games.

Methods and Mechanics

Andrea Phillips

This section of the white paper addresses the specific details and design choices faced when developing an ARG. There are a number of routine challenges faced by every ARG team, and a number of common mechanisms have come into play to solve them. There is no need to reinvent the wheel with each game. Each development team should use caution, however, before relying on the methods described here as their sole resource. The games widely credited as the most successful usually blaze trails by inventing new methods and mechanics and implementing them to provide a player experience unique to the game.

The basic recipe for an ARG could be boiled down to Exposition + Interaction + Challenges. Each of these components must be present for any given game to be widely accepted as an ARG, but the amounts in which they must be represented and the weight on each leg of the tripod vary widely from game to game.

One could also use a model of challenge-reward to understand ARG game flow, though this is very similar to the model used in many kinds of traditional video gaming already. (In an average first-person-shooter game, for example, the typical flow is: clear a level, fight a boss creature, and then get a cut scene of exposition as your reward.) However, because of the multithreaded nature of ARGs and the fact that very many players participate concurrently, it is difficult to break up ARG elements into simply "challenges and rewards", and we have instead used "exposition-interaction-challenge".

Please also note that each specific mechanic described here has been given one of three categories (exposition, interaction, challenges) in order to simplify this document. This is, however, only a semantic distinction, at best. In the real world, the lines between these categories are indistinct, and any given element of an ARG could serve two or even all three of these purposes.

No simple list will cover every single possible mechanic to be found in every game, because the mechanics are constrained only by real-world limitations and resources, and by the designers' imaginations. Providing an exhaustive list of methods and mechanics that could be used in an ARG would be no less difficult than providing such a list of all of the ways that human beings use to interact with one another.

Exposition

The primary problem of storytelling in an ARG is how to convey expository information. In order to run an ARG, you need to present a cast of characters and their motivations, flesh out the world they live in, and deliver information about backstory and real-time story action simultaneously. In traditional video game development, exposition has been increasingly relegated to cut scenes and informational box inserts, but in an ARG, a much richer array of narrative mechanisms is available.

As in more traditional narrative-form games, expository content is often used as a reward for reaching a significant achievement. However, the balance of gameplay vs. narrative content is usually much heavier on the side of narrative content in an ARG, as the interactive elements of a game are typically more cost-intensive to create, in terms of both development time and money, and because of the relative level of difficulty involved in naturally integrating those narrative elements. ARGs can be significantly more text-heavy than modern PC and console games, in some cases far outstripping the number of words written for a typical text adventure. Integrating narrative elements into a comprehensive whole is also, arguably, a part of the game mechanism itself, in an ARG. Many ARGs rely on players to scour content carefully multiple times for clues in order to solve some underlying mystery. Contract this with the average cut scene, which is only

viewed once and rarely if ever heavily scrutinized thereafter.

Exposition regarding the action is, moreover, significantly more necessary in an ARG than in traditional video gaming. This is because the individual player is typically not "present" to witness the action directly, and so another means must be found to convey that information. (If the player is not the one directly striking down the evil overlord, then some means of describing the hard-won battle with the evil overlord is necessary simply to keep the player engaged.)

Blogs

Character blogs are the bread and butter most ARGs use for exposition, as the cut scene is in traditional video gaming. This is the simplest and easiest method to convey direct verbatim information, initiate challenges, provide color, and explain the progress of a story. The blog can be considered the dev team's 'voice' in the game, and is sometimes the only way to present information furthering character-development goals.

Blogs also present a fairly simple way for players to catch up to current events and understand past game events quickly, as the blog acts as something of a self-encapsulated summary of events-to-date. The chronological nature of a blog means that content is retained in a hierarchical and easily grasped fashion, and a new player drawn into the game well after it has begun will be able to read blog archives and begin to participate I nthe game after a fairly short research period. Players have a much reduced risk of simply missing out on significant chunks of story, as would be the case if one began to watch a film or play a PC game from someone else's saved game.

Considerations when using a blog include update frequency vs. available writing resources and the level of 'secrecy' of the blog. It is sometimes beneficial for the dev team to present the blog as unavailable to other characters within the story, though this approach should be used cautiously. Players are not always reliable at keeping secrets. Most major ARGs to date have eliminated this possibility by not making available paths through which the players could significantly betray the game's protagonists, but if the game is not carefully crafted, this could become a big problem. For example, if your game allows email contact with a man and his wife, and the man is blogging about extramarital affairs he is engaging in, there is a high likelihood that the players will email the wife and give her the blog's URL, as well as any significant details of the adultery. If your story relies on the wife not knowing about the husband's illicit activities, your team will be left scrambling for how to react. Conversely, if your villains are blogging their plans openly and you rely on the protagonists not being aware of these schemes, your dramatic tension will be shot as soon as even one player emails the details to the protagonists. These problems are typically avoidable with some forethought, but every experienced ARG dev team will tell you that no matter how well you plan, the players will always think of something you did not.

Most ARGs update blog content once a week or more frequently. Some are on a regular and predictable schedule, while others update more sporadically; this is a design choice that does not seem to impact the perceived quality of the game as a whole.

Audio/Video

These gems have a much higher production cost than straight text, and are therefore often used sparingly. 4orty2wo Entertainment has a history of creating entire narratives in these formats (a radio play in *I Love Bees*, and multiple video segments in *Last Call Poker*) doled out in small segments as players reached significant milestones. These elements are most often used as rewards in the challenge/reward structure, and can be very exciting discoveries for the players, and can be used to convey information that would be difficult to plausibly propagate by other means within the story framework, such as characterization information that a character would not explicitly state in a first-person blog.

Audio and video have often been used to create large secondary puzzles, in which players must reconstruct a single narrative from fragments of a prerecorded whole. In this process, a single narrative is written and recorded, and then the whole is edited into smaller sections and revealed to players through multiple means, typically (though not always) over a long period of time. This larger meta-puzzle was a primary part of the structure of *I Love Bees*, and has more recently been used in *The LOST Experience*, as well.

Non-blog Websites

Many ARGs have also had success using in-game created websites for multiple purposes. Common other websites you might find in an ARG include in-game news organizations and companies. Some proto-ARGs (cross-media content that does not emerge into a full-blown interactive narrative) consist solely of a few web sites for companies or organizations featured in a TV show or film, Alias being one of the most widely-known examples of this.

One danger of using static websites is the possibility that they will confuse players who come across them for the first time late in a game, particularly if information or interaction with that site has ceased. It is a best practice to clean up behind the action of your game such that remaining content is not misleading. When designing a static site, it is wise to critically examine components such as news sections, calendars, and announcements, to be sure that the absence of updates does not overly damage suspension of disbelief.

Other Media

ARGs have used or could use countless other media for propagating information and for setting challenges. Here is a select list of a few of them:

- Newspapers or magazines (usually classified or display advertising)
- Television (commercials or tie-ins with existing programming)
- Billboards
- Movies
- Posters/stickers/flyers

Interaction

This is quite possibly the defining characteristic of an ARG. By "interaction" we mean both direct conversation with story characters and with the game world. Through interaction, players have the chance to influence the progress of the story even when there is no specific challenge at hand. Interaction provides a deep level of immersion with the game's story, and it is participation in the kinds of interaction described here that hooks the most dedicated and passionate players into your game, far moreso than solving any challenge or reading any amount of static content. Unfortunately, interaction can be costly in both cash and production energy, and so it is usually significantly limited in scope.

Chat

Use of chat has two main approaches: bot-style and true-human interaction. Chat can include IRC or any other form of instant messaging. In non-commercial efforts, a common way to announce the launch of a game has been to target prospective players and engage them in a short but cryptic chat conversation.

Bot-style chat has been used successfully by a number of ARGs, including *The Beast* and *Jamie Kane*. In this form, a character is available for online chat, but the entity behind it is a program set up with pre-written responses to keywords in advance. Many readers will be familiar with the

pregenitors of such bots, the Alice or psychotherapy bots that have been a diversion of artificial intelligence researchers for many years.

While this approach is more efficient in respect to human energy and significantly more scalable to a larger audience, it can be very easy for a player to tell that he or she is chatting with a bot, and this can lead to a loss of suspension of disbelief and decreased engagement in the story. Still, this approach can be useful in an ARG because such automated bots are typically excellent provided they are questioned regarding a fairly narrow range of subject matter, and can be skillfully written so that semantic failures become characterization rather than error. *The Beast*'s Eliza very successfully engaged in limited chat through this means.

There have also been cases where story characters are available on chat, typically for a short time, though sometimes for longer periods, as played by actual human responders 'acting' the part. This is a more cost-intensive method of interaction, because the person representing the character in the chat can't do much else during the time of availability. That person of necessity must be someone with intensive familiarity with the story, and is typically one of the team of story writers, as opposed to a hired actor.

Telephone

Again as with chat, there are two basic levels of telephone interaction: the recorded message and the live human being. Recorded messages scale more easily, but nothing makes for a compelling interaction like talking on the phone to a real human being.

In a human-mediated telephone interaction, the person answering the phone is more likely to be a voice actor than in chat. If this is so, the dev team should take care to very thoroughly brief the actor regarding anything the in-game character would know or think. These interaction can be heavily scripted, but room should always be left for some improvisational reaction, as there is no way to cover all contingencies in any script.

A more dramatic way to use the telephone, however, is by having the game call the players. For reasons of scale and timing, this is almost always a pre-recorded message. This is a very high-impact interaction; the difficulty is in finding a discreet way within the game to obtain telephone numbers. This data collection can be done through a number of 'required registrations' or user-submitted profiles on in-game sites. Many games, including *Jamie Kane* and *The Beast*, have collected contact data as part of an early subplot in the game, and encouraged the players to believe that that part of the interaction was complete. But contact information can be used much later on for shock value; a common device is a mysterious phone call with a pre-recorded message, in which the player may at first not even recall when he or she gave out that phone number.

Some games have also used telephone interaction as an opportunity for a challenge, by creating voice mail boxes to be 'broken into'' or complicated call routing trees to navigate. *The Beast* relied on players listening to voice mail messages left in Jeanine and Laia Salla's voice mail boxes as rewards after reasoning out the access codes for those boxes (which in both cases were essentially T9 representations of parts of the women's names). And *Perplex City* used an elaborate call routing tree as a part of its Receda Trail, wherein a wrong step caused the system to hang up on the player; but each when a caller successfully navigated the call tree, the reward was a GPS location for the next clue in the trail.

Email

There are three basic uses for email in an ARG, with varying levels of interaction; the autoresponse, the mass email, and conversational email.

At its most basic, the development team uses email in a primarily expository fashion, by providing an email address and then setting up an autoresponder that includes information not otherwise available in the story. In a typical game, nearly every email address mentioned or even hinted at in an ARG will have such an autoresponder set up.

A slightly more advanced approach involves use of code to examine the incoming email for keywords, and selecting a response email from a number of pre-written choices based on keyword presence or absence. This keyword approach has not stepped up into common usage, probably in part because of some difficulty (as with chat) in maintaining the illusion that the response was not auto-generated, and possibly because of the difficulty of implementing such a system. (This difficulty lies not so much in the technical implementation, however, but in executing the writing in a believable fashion, so that story elements are not sent to individual players in nonsensical or anti-causative order.) If it becomes obvious to the players that a keyword mechanism is being used, there is also a risk that players may try gaming the system for hidden information by sending random strings of keywords to the address.

The mass email approach is one in which a character or other in-game entity periodically sends out email to all players, or to a subset of players known to that character/entity. This approach was favored in *The Beast*, in which the character of Laia Salla sent out a weekly update email detailing her thoughts and plans. This type of email has largely been superseded by use of blogs, instead. Blogs do suffer the disadavantage of being a passive form of communication, relatively speaking, and the perceived level of excitement when players receive email is generally much higher. This passive vs. active communication level has been used to advantage, though, by combining multiple forms of communication. For example, *Perplex City* pushed out urgent SMS messages to players to push them toward breaking newspaper site updates during a real-time live event in which a major character was potentially killed in an explosion.

Some characters and game entities can be tagged to respond to email individually, though this is a process that is very difficult to scale as the size of the audience increases. This is also a very rewarding type of interaction for players. There is, however, some difficulty in managing expectation for this type of reply. The level of individual correspondence any one player can expect when a game has fifty players will be quite different from that in a fifty thousand player game, and early players may be disappointed if a highly interactive character becomes much quieter over the course of a game. Anticipated future player numbers should be taken into account when determining whether and how to respond to individual emails.

SMS/TXT

To date, few games have made truly extensive use of SMS or text messaging, probably in some part due to poor penetration of this technology into the United States. *Perplex City* has used SMS during real-time action in the story in order to drive players to a specific URL in order to take part in a live event that was not pre-announced, and also to send out simultaneous time-limited SMS challenges to all participants during such live events. As SMS and MMS become more common in the United States, its adoption as a regular tool of the ARG dev team will probably grow in pace.

Live Events

While not every ARG conducts live events, they are one of the elements that get a playerbase very excited. Live events have two main breeds: online and physical. Every live event requires a player to take part in a specific activity within a specific time frame. Most have aspects of both interaction and challenge.

Online live events call together groups of players to simultaneously engage in, typically, a coordinated activity: 'overloading' an in-game security system, for example, or participating in a

group chat, or taking part in a high-stakes poker tournament. These can be tremendously scalable, provided they are planned and implemented well.

Physical live events are probably the single most expensive type of game element to use, in terms of time and money. Physical live events are very intense for participants, but necessarily scale poorly based on venue size and available pool of players. After all, in a potentially global game, only a fraction of players can even theoretically make it to a specific location on a specific day – your game may have ten thousand players, but only fifty of them may live near or be willing to travel to, say, Chicago. Similarly, the venue you would choose for those fifty players would not be the same one you would require if all ten thousand players were unaccountably able to participate, physical building capacity being subject to static laws of physics. One must be able to determine anticipated participation numbers in advance, for planning purposes.

However, the possibilities for narrative and challenges available in a physical live event are limited only by the resources and imagination of the team. ARGs have successfully used a number of guises for this variety of event, including protest rallies, puzzle tournaments, and planned auto thefts. Dramatic elements occurring at these events have included choreographed fist fights on the part of actors, as occurred at E3 during *Art of the Heist*; mysterious messages found in the venues, a technique used during the Anti-Robot Militia Rallies held by *The Beast* and during *Perplex City* Academy Games events held by *Perplex City*; and in one notable case, the 'death' of a player, also in *Art of the Heist*.

Dev teams wishing to produce a live event would do well to study the best practices of other kinds of live event planners, such as wedding or party organizers, and the principles and practices of live improvisational theater.

Challenges

In a traditional video game, this would be the part labeled as 'game play,' in which the player shoots zombies, jumps over ravines, stacks blocks, etc. Challenges in an ARG take on varied forms, and are rarely very similar from challenge to challenge even within the same game.

Cryptography

ARGs have deep roots in cryptography and puzzles that require deciphering encoded text. This is one of the challenge categories in which difficulty should be very carefully measured against player ability level. Traditional methods used include Morse code, simple Caesar or other ROT ciphers, Braille, and even more complicated schemes such as Enigma. Double encryption is not rare, with a Morse message consisting entirely of numbers that correspond to ASCII character codes, for example.

The ARG community tends to expect a lot of this variety of challenge, for better or for worse, so expect all graphical design elements to be scrutinized as potential codes, and expect all digital images to be examined for signs of steganography, at least to begin with, until the community has determined to what degree your game in particular is played on this level.

Games

Some ARGs have successfully used familiar pre-existing games as challenges within their game structure. *Last Call Poker* participants played, of course, a considerable amount of poker. *The Beast* featured an online game of Go and live jigsaw puzzles. The advantage to this is a familiar rule set, though integrating such a game in a plausible fashion can be more challenging than the alternatives.

Achievements

Some challenges issued to the players are not games or puzzles as such; notable examples include in *Perplex City*, when the players collaboratively wrote a book of (mainly) short fiction to further the story. In *I Love Bees*, players answered ringing payphones and gave keywords to the caller to unlock story elements. This sort of challenge is generally aimed at getting a large number of players over a wide area to work together for a common cause, sometimes for an extended period of time.

Social Engineering

This variety of challenge could just as easily fall under the 'interaction' category. Social engineering tasks are interactions in which the player must achieve a goal by convincing an in-game character to behave in a certain way, or to provide specific information. The first and most famous social engineering puzzle was the Mike Royal telephone interaction in *The Beast*, in which players convinced a security guard to intervene and rescue a teen boy from his captors by using information gleaned about the guard from other sources.

Other uses for social engineering puzzles are convincing a character that a player is a legitimate contact for a password or other privileged information, or simply establishing a rapport with the character such that he or she 'feels comfortable' passing on information that may be crucial to the story.

Puzzles

The word 'puzzles' is a catch-all term that, in this context, includes any challenge in which the players are presented with information, an interface, or a situation lacking context or explanatory information and must figure out what to do in order to surmount the challenge. These can take any number of forms, some of the most common being:

- Obscurity puzzles (searching through masses of information for patterns or specific data)
- Guessing passwords/subdirectories/URLs
- Understanding and using unfamiliar and undocumented interfaces

Other Challenges

Challenges can be both real-world and online. The only limit is the imagination, and challenges that players have surmounted have included or could include the following, plus more:

- Locating a geocache or other hidden real-world object
- Playing through a text adventure
- Performing a special service for an in-game character (proven with photographs)
- Identifying or completing literary references
- Translating from obscure languages
- Interpreting highly specific information or notation from a specialized field

Integrating the Pieces

The art and artifice in developing an ARG, of course, is in pulling all of these specific mechanics together to create a cohesive, compelling, and internally consistent player experience. Following are a number of guiding principles regarded as a best-practice by most ARG teams.

Attention to Detail

A large part of creating a successful ARG hinges on the same kind of suspension-of-disbelief required for cinema or video games. In an ARG, much of this can be accomplished through subtle world-building or color. Some of this depth is simple and not even time-consuming to create. Any organization for which there is a website can have contact information, such as an email address (and probably an autoresponder). Any character can have an email address. Restaurants can have menus, banks can have login forms (even if they don't work), consulting agencies can have news announcements about their latest big deals. A fairly small investment in time and resources will result in a much more colorful and believable gamespace.

Another level of detail to pay attention to, though, is the inner workings of your own plot. Managing information flow can be a tricky battle, particularly with interaction, and particularly if you are simultaneously presenting the viewpoints of multiple factions or opposing interests in your story. Keeping careful track of who-knows-what for the sake of internal consistency is a vital task, and one you cannot always rely on your players to keep straight.

Playing in Real Time

An early lesson learned by every ARG team is this: there will never be such a thing as enough content for a dedicated audience. That said, it is wise to meter the amount of content you plan to provide to your players, so that you reach a volume that keeps interest high, but doesn't result in early burnout for the dev team. There are several approaches to this, including updating web sites and providing new content at set times; or updating periodically, depending on player progress (or internal development progress.) Some easy mechanism to increase tension in the story are to do multiple updates very rapidly, or to miss regularly schedules updates, or to introduce finite time limits on challenges presented to the players.

A problem with the real-time nature of an ARG, though, is the fact that for any given global audience, a large number will be asleep or unavailable any time of day you choose to schedule updates or live events, and will be accordingly unhappy.

Hinting Strategies

It is absolutely crucial to have a fallback plan if you are providing a challenge to the players and the reward is pivotal to further your story. It is very decidedly a best-practice to never rely on your players to solve any specific puzzle, regardless of how simple it may seem to be, if the reward lying on the other side of it is absolutely necessary and not feasibly available through any other means. The specifics of a hinting strategy are something every development team should give time and discussion to as early in the project as possible. If possible, it is wise to cultivate potential channels for providing hints to a stuck playerbase in advance.

Suspension of Disbelief

A few commonly-accepted conventions have grown up regarding the varieties of story that can be told in an ARG and how they unfold. Common tropes involve sci-fi or horror elements (time travel, ghosts, advanced A.I., etc.), conspiracy themes (secret government agencies, fanatical religious groups) or both. While not all games use these elements, the simple fact is that it is very simple to tie these types of story into the other elements of an ARG. For example, an organization whose existence depends on secrecy might plausibly have developed elaborate systems of codes and pass phrases, thus presenting the audience with puzzles to solve.

Audience

There are two major approaches to an ARG audience: catering to a standalone player, or catering to a hive-mind community. The second approach is by far the most common, and some would argue that the community element is part of the definition of an ARG. That said, there has been

one notable case of an ARG targeted at the standalone player, the BBC's *Jamie Kane* project. This style of game is typically given to less branching, as the flow and outcome of the game are not as affected by individual players. On the other hand, this style of game is typically more accessible to late-comers, and may be designed to be replayable from the beginning by an individual at any time.

Because it is the more common approach, most of this Methods & Mechanics section is written assuming the audience is an information-sharing and collaborative community. Language aside, most of this information applies equally to both situations.

Assessing Player Skill Level

In the early days of a game, analyzing and meeting player expectations and abilities is probably the most difficult task. This is, however, a crucial task to complete.

Missteps in difficulty on the side of too-simple can lead to the players burning through content at a much faster rate than expected. This in turn leads to a breakneck development pace for the development team to stay far enough ahead of the audience that they can devote adequate time to quality assurance and testing, while ensuring that the game does not stagger to a halt in the interim. Too-difficult games will also throw off the pacing of the game, especially if the players are unable to progress and grow frustrated. (See the Hinting Strategies section for more discussion of coping with frustrated players.)

In some cases, the audience you attract may not be the audience you had expected during your pregame development phase. This can lead to an early mismatch between the actual skill level of the players and the skill level at which the game is conducted, in which case it is even more important to adjust expectations quickly.

In order to assess the skill level of the players, it can be helpful to set a number of challenges of widely varying difficulty early on in the game to discover which ones seem the most popular and how quickly they are solved.

Expectation Management

Expectation management is a tricky business, as many an ARG development team will attest. For the sake of your relationship with your players and for the health and sanity of your team, one of the most important planning tasks of an ARG is determining the weight of work your team can shoulder over the anticipated duration of the game.

Once a development team has set a precedent, players will expect that level of pace or difficulty to be maintained. For example, as with *The Beast*, if your game starts out pushing multiple content updates including blog posts, email, and at least one or two brand-new web sites every Tuesday, your playerbase will be extremely unforgiving if a Tuesday goes by with no updates at all. This can set up a grueling workload for all of your developers, writers and designers; and while this may be acceptable for a game planned to run only 6 to 8 weeks, it may be completely unsustainable for a game planned to last several months.

Similarly, if you avoid giving players a certain type of update or puzzle for very long, one should not be surprised when they cease to pursue that avenue, even to the point of missing it when you finally use it. For example, if a static in-game 'corporate' web site persists unchanged for three months, it would be unsurprising if the players do not notice when it is finally updated.

Expectations can be altered after they have been set – and one could argue that every game has to struggle against the preconceived expectations players hold based on prior games they have played or heard about – but it is not a simple task. Some care up front can avoid loss of audience

goodwill later on.

Love Your Audience

Always love your players. It's easy to get drawn into a combative relationship with the players, as the players often tend toward an adversarial relationship with the development team. It is seductive to set challenges and tangle plot with the sole intent of stumping the players, but this is not conducive to an enjoyable game experience for them.

Also keep in mind that the audience your game attracts may not be the one you had initially wanted or envisioned. Foster affection and especially respect for them regardless; they are the audience you have, and this means they are the people who really enjoy the creative effort you are putting into your game. Your players will probably be able to tell if you think of them unfavorably, and you won't have them for very long.

Constraints

Geography

Physical geography, not typically a constraint for other varieties of gaming, becomes a problem for the ARG on three separate levels. First, there is the inherent tension between the global nature of the internet, over which much of an ARG typically unfolds, vs. player availability by time zone. Then there is the universal problem of globalizing any sort of game – breaching language barriers and still providing a great game experience.

An even greater geographic problem comes from providing interaction, particularly for physical live events and some forms of interaction. For example, a phone number is a local construct, and choosing to whom it should be local may exclude players who lack the capacity, money, or willingness to call long-distance, especially internationally. Moreover, physical live events such as *Perplex City*'s PCAG tournaments limit those portions of the game to players either local to the area, or those who have the funds and time to travel to the area for the event.

Some teams have tried to downplay this angle of the problem by making these kinds of events of relatively small consequence to game play, or, as in the case of *Art of the Heist* and *I Love Bees*, by running a larger number of very similar small events across a large geographic area. It is strongly advised, however, to specify the target geographic area of your audience in your initial project specification.

Time

In many ARGs, development of the game continues concurrently with game play after the game launches. Every team presumably does as much work as possible before launch. Still, for most teams, a significant share of work is done post-launch in reaction to player activity and progress. This is especially true in games with longer run times.

Because development and play are concurrent, there is a very high risk of team burnout. Very carefully weigh the planned story schedule and pace against the projected ongoing burden on the development team.

Money

Every game has a budgetary consideration, and ARGs are no different. Several non-commercial games have run successfully on shoestring budgets by using volunteered time and resources of the dev team, donated time from voice or live actors, free online hosting and blogging services, and so forth.

Greater resources permit a team to introduce more dramatic elements to a game (phone calls, significant programming projects, helicopters). A bigger budget also allows a team to invest in professionals for video and audio production, web design, coding, and writing, and can lead to faster development times and a more intense pace of gameplay.

It is very likely that the budget is one of the first known factors about the game development. When planning the budget spend, important factors will include burn rate vs. projected run time, ongoing maintenance costs, and estimates of available funds for heavy development and live events.

Physical live events, in particular, pose a hairy budgetary problem, because they are by nature only accessible to a subset of players. Total player participation and impact of the experience on both them and on non-participating players should be considered when establishing the budget for such a live event. In some cases, it may simply not be beneficial from a cost point of view to conduct a physical event.

Project Goals

Many ARGs are produced as an ancillary effort rather than standalone projects. When an ARG is produced as a public relations or marketing effort, additional challenges will be present in complying with the canon of existing intellectual property, or working with a separate group who may exercise significant creative control. On the other hand, a commercial standalone ARG faces the problem of constructing a profitable business model. These topics are addressed in greater detail in a separate section of this white paper.

Risk Management

An ARG brings legal considerations into the field of game development to perhaps an unprecedented degree, because of the very real-world nature of the playing field. No lawsuits have been filed as of this writing, and it is entirely possible that none will be for years to come. Still, in the interest of providing both the players and developers with as safe an experience as possible, a dev team should always use caution in designing game parameters, particularly for live events. Games should always be designed with due consideration toward non-participants who could be affected by the course of play. (A game of tag might be a terrific in-game device, but not through the streets of midtown Manhattan at 5pm on a Tuesday. An example of great risk-management to protect bystanders was found in *Art of the Heist*, who provided the VIN of each vehicle to be 'robbed' – imagine if this information were absent or ambiguous and the players tried to steal SD cards from an out-of-game car!)

The first and most obvious step: don't require your players to do anything dangerous, illegal, or otherwise unconscionable in order to further the game. Moreover, because an ARG does not come with a rule book (at least, not to date) the challenge is even more compelling. It is possible, as with the Art of the Heist example above, to create the illusion that the players must do something legally shady in order to further the game, but in these cases, the boundaries between the in-game elements and out-of-game law should be clear to the players. Throughout the development process, the team must look, not only at the intended flow of the game, but also at how the game parameters might be misconstrued. The last thing a dev team needs is for a group of players to be arrested while fulfilling what they believed to be a necessary role in the game, be it hacking into a server that wasn't in game after all or removing a 'clue' from private property that was unrelated to the game.

No player has thus far been injured in the process of fulfilling a necessary game function, although there have been some close calls. Players have put themselves into potentially risky situations due to inclement weather (*I Love Bees*). Players have also entered areas where they reported feeling threatened by non-players present on the scene (*Art of the Heist*). It is not clear whether a

development company could be held liable in the event of such an injury, but some caution should be exercised to avoid the question at all, if possible.

Understanding your Audience

Brooke Thompson

In any game design, the audience needs to be carefully considered. Whether the goal is to appeal to a mass audience or targeted set of users, players need to be allowed to participate in the experience at a level they find comfortable. This is a challenge for alternate reality games which tend to have a loose structure that blends real and game world elements through a variety of media. Collaborative community play, various levels of engagement, and player roles all combine to engage players.

Community Play

Alternate reality games can be complex, and are often lengthy experiences, played over a number of weeks. Additionally, most promote a collaborative game play system which encourages communities to form. With online communication being what it is, there are a number of resources that players have created utilized in the past that are seen, in some form, in the majority of games.

Unfiction & ARGN

There are several websites that focus on alternate reality gaming, but there are two that stand out: unfiction (http://www.unfiction.com) and ARGN (http://www.argn.com).

ARGN serves as a news portal informing readers of new games, reporting on major game or genre events, and interviewing various game designers. For players, press, and academics looking for a brief overview of the current events, this is the place to go.

Unfiction is home to the largest forums devoted to alternate reality games. Many forum regulars are genre enthusiasts who have participated in a number of games and, because of this, they are very adept at organizing themselves and creating resources shortly after games are discovered. This can be rather intimidating at first, because they are so quick to work through the process of discovery. However, their experience also allows them to support a strong player community, one that can quickly help newcomers become involved and engaged in the game world by explaining the game concepts and answering their questions. With sections devoted to specific games and active, experienced moderators, the forums tend to remain focused and on topic even with the busiest of games.

Forums

Forums or message boards are central pillars of player community. It is on the forums that players meet other players, discuss the game and story play, and create or promote other player created resources. Forums may exist as a part of the game world or completely separate from it, they may or may not be officially sanctioned, and they may be created solely for the game or created as an extension within a larger community. The various types of forums all have their advantages and disadvantages that, when developing or analyzing a game, should be considered.

A number of games include forums within the game environment. Notable examples of this from the past year would include *ReGenesis* and *Who Is Benjamin Stove*. Both games provided players with forums on a website that had a primary focus of uncovering the story and exploring the mystery. The forums, while under the control of the game designers, are officiated by a character. Therefore, it is not unusual for players to interact with characters on in-game forums. While a number of players thrive on this level of interaction, it does create several issues. Not only does it increase the work load on the development team by requiring online actors to interact with the players, but it also requires that they maintain the forums. Additionally, it can make it difficult to

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maintain the players' suspension of disbelief when players want or need to discuss higher level issues such as story speculation and game mechanics.

Forums outside of the game environment are typically player created and maintained. They appear on websites which focus on alternate reality game play, on websites created by fans specifically for the game, or as a part of other pre-existing community websites which may focus on subject matter or intellectual property found within the game (conspiracy websites, existing fan forums, etc). Discussions on these forums tend to be more open as players feel comfortable discussing higher level game and story topics without fear that it may affect relationships with game characters. However, because these online forums are not a part of the game environment, they may be playing at different speeds and levels of understanding.

Chat

While online chat is typically engaged in by only the most active and devoted players, it has been used effectively both within and outside of the game environment to the benefit of the community. Chat may occur one-on-one between a player and character, but due to logistics and the desire to disseminate the information to as many people as possible, when a character is involved, it tends to be an open group chat. While these chats may occur in traditional chat environments such as Internet Relay Chat (IRC) or other chat rooms, innovative contexts such as the online poker rooms in *Last Call Poker* have been utilized. However, chat is not reserved solely for player-character interaction. A number of players enjoy chatting about the game with other players, especially when there is a time sensitive mission that requires collaboration between players.

Players at unfiction, for example, congregate on a number of game specific IRC channels as well as a general unfiction channel that is utilized primarily for non-game discussion. The website includes a browser based applet to make the somewhat intimidating IRC platform approachable by players new to the environment. While the numbers in chat are a small proportion of all players, reaching in the hundreds only on the busiest days of the biggest games, those in chat often drive the discovery process and then report their findings on the forums or other player created resources.

Wikis & Other player guides

One of the most important resources is what players refer to as a "guide." The guide serves as the alternate reality game version of a player manual or walk-thru. While this may not seem essential to the aspect of community play, they provide a catalogue of information that not only helps players catch up to the others playing the game, but provides details for players to discuss. Additionally, they provide another outlet for collaboration, as those maintaining the resources solicit the help from others in order to keep it current. While some guides are maintained by a single person on a static website, players have been exploring the use of blogs and wikis in this process.

Blogs are websites which present information in reverse chronological order. This makes them ideal for players wishing to provide other players with a linear walk-thru of the discovery process. Additionally, unlike static websites, they have built-in search functions and the ability to set up a small number of authors who can easily update the website.

Wikis are websites which allow users to add and edit content collectively through their web browser. Unlike forums and message boards, which require users to create and reply in linear threaded discussion, wikis are similar to a traditional website where pages stand alone and may be linked to any number of other pages. This allows them to serve as a searchable reference for the game.

Another form of a guide is a "Story So Far" which may be created by the players but typically exists in the game environment and is maintained by a single character. This is a brief and, often, linear discussion of what has occurred in the game from a character's perspective. This provides players, both new and familiar, with a quick place to learn the basics of the story in order to dig deeper into the experience.

A well established guide is not only beneficial to the player community, but also to the development team. The guide provides a quick resource for the team to ascertain what information players have discovered, as well as their basic interpretation of that information. Because games are played in real time, tracking the focus of the players can assure that the game remains on course.

Levels of Engagement

With the open nature of alternate reality games, engagement levels can span from a casual internet browser that happened upon a game site, to a hardcore player that puts 60 hours a week into their game play. Designing a game with such a wide range of engagement is difficult. Looking at levels of engagement and how to support that engagement allows for an easier design process and, potentially, a better understanding of the potential player figures as they relate to registrations versus unique IP addresses versus community participation.

Devotees

The devotees, often called "hardcore players," are a very small but very vocal subset of the user base. They may be a minority of the actual player base, but you would never know that by looking at the player communities where they make up the bulk of the communication. As strong collaborators, they are very willing to share their opinions, discoveries, and theories. And, because of this, they take an active, though often accidental, role in community development, both by creating player resources and encouraging active discussion. Because of the time that they devote to playing the game, creating content, and participating with a game community, they often develop a passionate bond to the game experience. As they tend to lead the game play by discovering and reporting new facts or speculating on the details, they may overwhelm under-prepared developers.

Active Players

Active players are dedicated to the game experience and enjoy interacting with the game world, but they do so at their own pace. Because of the diversity of player interests, be it puzzles or story or community, active players may participate in a variety of ways. Some may explore the game world on a regular basis and make use of player-created resource, but communicate only minimally with other players. Others may focus more of their attention on sharing information and ideas with the greater player community. Wherever they may fall on that spectrum, these players will make up the core of the audience.

Casual Players

Casual players explore the websites and player resources, but they tend to shy away from two-way interaction. In other words, they'll read player forums for the latest information, but they won't contribute their theories or information. They are also less likely to provide contact information or register, if registration is required. This is not to say that they are not committed to the game, because they are, but to a lesser degree. They want to know the story or solve some of the puzzles, but they may not have the time or desire to commit to a more active level of play. They make up a large percentage of the player base. Unfortunately, many games do not provide opportunities for these players forcing them, instead, to rely on player created guides.

Curious Browsers & Information Seekers

Browsers and information seekers make up the majority in any game experience. While most players start at this stage, the bulk will not actively participate and never had the intention to do so. They have heard about the game and are just curious to learn more. They may check in several times throughout the game run, but the story details, game play, or puzzles are often lost to them. However, they are likely to tell others about the game, either because they are writing an article on it, or they want to be "in the know" with their friends, associates, blog readers, etc. Engaging them on some level will provide them with the information that they need in order to do so with a certain amount excitement.

Player Roles

Along with levels of engagement, players often take on roles that mirror their game play style. Some roles require little to no interaction with the actual game, but provide the player with a strong feeling of participation. Roles such as Community Support or Puzzle Solver may overlap and, while some will self identify with such roles, many will not. However, awareness of the roles that occur within player communities allows designers to encourage community development and allow others a greater understanding of the community dynamics. As the strength of the game community is often used as a visible measure of the game's success, having a strong game community (or communities) can be important both in earning additional press and gathering more players.

Character Interactor

Character interactors are intrigued by the possibilities of interacting with the characters from the story world. They enjoy sending email, making phone calls, and even participating in live game play events. Taking part in the performance nature of the alternate reality experience is highly motivating for character interactors. While it may seem as though personalized communication through the media is essential for the character interactors to become engaged with the story world, this is not necessarily the case. Simply including their interactions (either individually or as a group) in the story world often satisfies their seemingly insatiable appetite.

Community Support

Community supporters tend to be of two types: extremely casual players that have only the slightest grasp of the game and are playing more for the friendships formed, or highly attentive players that are so involved that they become instrumental to the community. These players may also take on roles such as a chat room or forum moderator, and they tend to try to bring new players and lurkers into the community through fun and welcoming discussion.

Information Specialist

Information specialists are essential to a large popular campaign, as they catalogue all of the various information presented in the game world. While a few may take such efforts to an extreme by creating or maintaining well designed guide or wiki, the majority of information specialists store the information locally and/or create smaller, yet vital, websites. By providing the information either on the forums or by request, they are essential in helping casual players follow along with the game developments. This aids new players by getting them up to speed quickly which often helps them to become engaged with the game experience.

Puzzle Solver

Puzzle solvers enjoy the mental exercises provided by the mystery. While they come in all shapes

and sizes, they tend to be rather analytical, and drawn to the more analytical characters and story elements. Many puzzle solvers will only follow the story enough to be able to work through the puzzles, and some may not visit the related websites unless it has a puzzle that has been brought to their attention. With the more difficult puzzles, their participation is often required. And, because of the difficult puzzles, puzzle solvers will often congregate and build on the work of others. With proper placement of puzzles in a variety of topics and skill levels, puzzle solvers can be drawn into the story. If engaged, may become strong story specialists, as the ultimate puzzle is figuring out where the story is going.

Reader

Readers are, by far, the majority of participants. They browse the various websites, both in-game and out-of-game, following up on the story narrative and reading what other players are doing and saying. To best engage the readers, the narrative must be strong, and participation in some of the more interactive components should not be mandatory. Readers are essential in marketing the game offline where they may be more willing to point friends, family, and co-workers to the "interesting website". This is possibly because they are not so involved (and possibly embarrassed by that involvement) to be unwilling to point others to it. While many readers may peruse out-of-game community sites, a welcoming community with easily accessible information may increase the likelihood of readers turning into more active online participants.

Story Hackers

Story hackers, like character interactors, are fascinated by the possibilities of interacting with and influencing the story and game play. Taking part in the performance nature of the alternate reality experience is highly motivating for the story hackers. As they tend to be outgoing, at least behind their online identities, they can be quite vocal about their (dis)satisfaction. Hackers often enjoy playing with the game and story boundaries. This occasionally leads to them creating websites or other assets that extend the game universe. Providing possibilities include their creative additions or opportunities for them to feel as though they have impacted the story may encourage them to participate with the game experience.

Story Specialist

Story specialists actively attempt to figure out the overall story arc. They spend their time engrossed in the story that is presented, and speculate on where that will lead in the future. A strong consistent story that provides hints at information and relationships is key to engaging the story specialist. This provides outlets for speculation, while not being so open ended that speculation is a futile exercise. Like puzzle solvers, story specialists tend to congregate and build off of each others ideas and so those that are active in the player community tend to share their ideas. Those that are active in the player community tend to share their ideas with one another. Though they may not think of themselves as puzzle solvers, they tend to excel in puzzles that require slight logical leaps and/or social engineering, as they are more familiar with the intricacies of the story. Story specialists tend to be the most passionate about the experience, and often hold onto that passion long after the experience has concluded.

The Audience Relationship

Alternate reality games tend involve three to four months of intense work and play, and a relationship does form between the audience and the developers, with the characters, story, and game play serving as conduit. As with any relationship, there needs to be a mutual level of trust, respect, and consideration. Because there is no direct interaction between the two groups, the only way that those essential bonds can be built is through the game. A consistent story with regular updates and solid game play is the base line. When puzzles fail or are solved by the characters for

the players, the level of respect drops. When the game updates slow down or fall off schedule, the level of trust drops. When the live events are not as promised or the websites fail, the level of consideration drops. And, as these levels drop, players become hesitant to donate more of their time and energy to the experience. However, players can be very forgiving when the problems are fixed and worked into the game story. Some of the most memorable game events were created by teams that were familiar with their audience, and were able to react appropriately to fix problems on the fly.

Business Models

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ARGs excel at providing a rich and rewarding cross-media experience to players, usually with a uniquely strong story and enthralling gameplay. Their creators rarely have problems coming up with ideas and content, but a frequent early problem is that of how to secure income to support the creative process. Without a traditional retail box (as per mainstream computer games) and little or no out-of-game relationship with the players (as per any broadcast content) it can be hard to see how to monetize the content being produced and delivered.

Yet there are businesses thriving in this space, such as 4orty2wo Entertainment and Mind Candy, each of whom is bringing in more than a million dollars a year in revenue from their ARG products. This section looks in detail at the past, present, and possible future business models that are driving the ARG industry forwards, and offers some analysis on how and when each may be appropriate.

Current and Recent Models

Since the first ARGs in 2001, there have been many innovative attempts at producing ARGs. Amongst the successful ARGs, there have been approximately four waves of similar types of model, starting at first with very low-risk but low-reward models. As developers have become more experienced with ARG production and learnt from the experiments of their own and other games, the lower risks have allowed them to try less conservative models with greater and greater potential upside.

There is always a mix of the different types of model in play at any given moment, but generally speaking the trend over time is away from flat profit and short-term products towards sustainable, high-margin products. Obviously there will always be a market for each of the different types, and which model is most appropriate for a game is a function of the team developing the game and the game experience they are aiming for, but there is an increasingly wide variety of examples to look to for guidance.

First Wave: Marketing Campaigns

The first successful ARGs were marketing efforts for other products. In particular, their revenue came from a corporate client in the form of a fee for running the game. This is a very stable business model, providing instant revenue, guaranteed payment (often up-front or in the form of milestones), and a cost/profit that can be chosen before the game launches (the client is charged according to the cost of producing the planned game).

These games are intended as marketing vehicles and as such tend to seek out significant attention from the press. Marketing efforts for separate entertainment products often use intellectual property belonging to the client, though this is not always the case.

There is an argument that the day of the marketing ARG is coming to a close, because an increasingly savvy audience will become cynical and lose interest in the ARG model. As of yet, there is little evidence that this is actually occurring, and it seems just as likely if not more so that marketing ARGs will become a permanent option in the array of devices used by marketing agencies.

The Beast/ILB/Last Call Poker

These three games are all offerings from very similar production teams, and all shared the trait of

being marketing efforts for a second-party entertainment product.

The Beast is famously the first successful marketing ARG, and it was produced by a small team in Microsoft in 2001 as a marketing effort for the Steven Spielberg film A.I.

I Love Bees and *Last Call Poker* were both marketing efforts for Xbox games; Halo 2 and Gun, respectively.

Art of the Heist

Art of the Heist was one of the first marketing efforts for a physical product. In this case, the game was a part of the North American launch of the Audi A6. The game was designed and executed by Haxan, and was most notable for a series of live events in which small selected groups of players were instructed to "steal" SD cards from specific Audi vehicles left in prominent venues such as the Coachella music festival and E3 (the annual computer games conference).

Second Wave: Non-profit Games

The first ARGs provided such a rich and rewarding experience for their players that, as they drew to a close, many players were inspired to start work on their own non-profit games, providing new entertainment for those now bereft of an ARG to play. Known widely throughout the industry as "grassroots" games, these have comfortably run alongside the first-wave games ever since, providing a very complimentary gameplay experience.

Grassroots games are the freeware, shareware, and demo reels of the ARG world all mixed together. These games owe much of their genesis and success to the way that ARGs of great incidental complexity can be produced at very low financial cost (the cost in developer time still tends to be very large). Typically costing around $500-$1000 at the low end, and around 1-4 months part-time pre-production work for 2-4 people followed by a further 3-6 months of part-time work whilst the game is running, grassroots games are well within the grasp of pretty much any group of friends with dedication and good ideas.

Generally there is no steady revenue stream to speak of, though some do accrue very small income through advertising or affiliate relationships. Grassroots games typically have short run times and small budgets. They rely on free services, volunteer work from writers and developers, and whatever funds that the development team feels it can spare out-of-pocket in the interests of the game. Grassroots efforts often provide a more personal experience to the players, as the audiences are typically smaller than commercial efforts; as a result, difficult-to-scale experiences such as email or IM and phone conversations have a more limited role in these games than in commercial ARGs.

Many grassroots designers have gone on to subsequently join commercial ventures.

While some grassroots efforts create their own intellectual property, some borrow IP from existing material from other sources, in the manner of fan fiction, such as Metacortechs (based upon the first film of the *Matrix* trilogy).

The grassroots games go through periods of being viewed with some suspicion in the ARG player community, because they vary so wildly in quality and because a significant number of them derail midgame and end without giving the audience the closure they might desire. Some players, though, prefer the intimate feeling of a smaller-scale ARG, and the number of grassroots games being produced continues to increase steadily year on year.

Third Wave: Productized mini-ARGs

With the first wave of ARGs demonstrating largescale player numbers and the presence of funding up to around $1million for marketing-based games, and the grassroots games showing a relentlessly growing and widespread interest from the player community, several companies looked at ways of monetizing gamers directly. ARGs were loosely defined in terms of features and content, and the first challenge was choosing what to focus on in any new game. One recurrent feature of ARGs at the time was the notion of an interactive plotline driven towards a climax by puzzle-solving on the behalf of players - something generically recognizable as a traditional treasure-hunt, only played out in public on the internet. In the past, many organizations had run puzzle-based treasure hunts in real-life, ranging from one-day affairs such as Easter-Egg hunts all the way up to the best-selling Masquerade book, whose solution identifed the location of a buried gold necklace in the shape of a hare, worth almost a hundred thousand dollars. One of the problems of these hunts was scaling up to more than a hundred or so players, and ARGs provided inspiration to several companies for a more modern way of doing this.

Generally, however, the successful players in this area are rarely considered - even by themselves - as ARGs per se, and prefer to be categorized as games that mix public life with private play. Terms used include: "street games"[24], "hybrid games" and "mixed reality games". This also contributed to an unfortunate blurring in the press between the concept of ARGs and live-event games to the extent of frequently misidentifying one as the other, or attempting to subsume all live gameplay as "just a form of ARG".

Whilst each game took its inspiration in different ways, examples of productized games that do consider themselves ARGs are treasure-hunt based games such as *Push, Nevada* and *Perplex City*, both of which provided actual cash prizes to the first person to solve the final puzzles. This lead to much debate within the player community over the possibly destructive effect of a single prize upon the highly collaborative gameplay of ARGs to date, and the possible destruction of inclusive, collaborative player communities. In the long run, this doesn't seem to have proved a problem so far, with most players taking the perspective that the game is played for the fun of the game. A frequently presented comparison in the player community is made between the treasure-hunt grand prize and a lottery ticket: you know you won't win, but you don't mind buying-in since there's always a small ray of hope - someone has to win, and it might just be you.

Fourth Wave: Indirect Revenue

Despite the low overall cost of previous models and the critical successes of the games produced, a remaining problem was the lack of any long-term sustainable revenue streams from ARGs. In particular, the profit from any given ARG remained constrained by the core feature of the bespoke business model: you only got to charge a small margin on top of the cost of producing the game. Taking some lessons from mainstream media, where the merchandising of a primary product can often earn more income than the product itself, several ARG companies have recently tried similar direct-to-consumer, indirect-revenue models for their businesses.

These games are run with the intention of selling to the players a secondary product - hence the revenue from the game is derived indirectly from the game itself. These games differ from marketing efforts, however, because the game and product are produced by the same company. Because the ARG company is reliant on only itself, sales of the product must support the ARG content; a merchandising ARG that sells $5000 of merchandise but incurs $50,000 in development fees each month will not last terribly long.

One interesting side effect of an ARG intended to move a product has been seen in the anticipated play time of the games in question. In both major merchandising ARGs to date, game duration is

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[24]   http://www.comeoutandplay.org/ - Come Out and Play Festival: "dedicated to street games. It is three days of play, talks, and celebration, all focused on new types of games and play."

measured in years rather than mere weeks or months. This is presumably because a prolonged run time gives the actual merchandise a longer opportunity to achieve distribution and market penetration.

Perplex City

Perplex City was the first successful merchandising ARG. *Perplex City* is the product of Mind Candy, a British company that has tied in the ARG elements of the game to the sales of a physical set of collectible puzzle cards. The game's content launched in earnest in March of 2005, and the first season is still running as of September of 2006. Mind Candy has publicly acknowledged that a second season of *Perplex City* is already in its planning stages.

EDOC Laundry

EDOC Laundry is a merchandising effort that is intended to drive the sales of t-shirts and other personal apparel. The items are designed with coded clues in them that direct players to online information telling a story of rock and roll and politics in the America of the 1770s.

Other Models

In parallel with the clear waves of models in the industry, several other models have surfaced briefly, and are worth considering as possible major players in the future.

Subscription

The earliest of these is the subscription, or "pay-for-play", model. In this model, the revenue stream is a set fee from each player, as is commonly found in MMORPGs. This model has a poor reputation in the ARG community because of the fate of *Majestic*, often considered a bomb within the industry. However, more modest efforts have been springing up in recent months, presumably involving smaller development teams and lower overhead per game.

The rebirth of the subscription model is concurrent with a dawning interest in video gaming as a whole in episodic content.

Majestic

Majestic launched in 2001 after Electronic Arts spent an estimated circa $20-30 million on development. The game was arguably one of the most significant advances in the history of video gaming, and in some ways was too early for its market.

Majestic has been much derided, but the team was really striking out into unknown territory, and many of its mistakes are only clear in retrospect. For example, a prime complaint that many players had in *Majestic* was that only a very limited amount of playtime was available each week, and after a fairly short period of participation, players were forced to wait until enough realtime had elapsed to make the next phase of the game available. Interestingly, this is a model attracting new interest in the video gaming world as the idea of episodic content becomes fashionable.

Majestic's pricepoint of $10 per weekly episode is also considered too high for the volume of material provided.

New speculation suggests that *Majestic*'s primary error was not in providing episodic content, but in providing insufficient content per episode to satiate the player until the next episode was ready and make the player feel he had received sufficient value-for-money.

Majestic was shut down in Sept. of 2001 after concern that the Sept. 11 plane hijackings would render the game too controversial or threatening to continue.

Private-Client Games

Another model is the private ARG, generally of a much smaller scale (as few as 20 players), but otherwise almost identical to a traditional ARG. These are a distinct entity from the smaller street-games and similar that do not consciously follow the conventions of ARGs, and provide an exeprience closer to a LARP or Murder-Mystery evening. There is arguably a significant market for private ARGs, run as corporate team-building or educational efforts. Because these games are targeted at smaller and more specific markets, they rarely garner as much press attention as other kinds of games.

Private client-based games are by nature much shorter than other kinds of commercial venture, and would ideally make heavy use of reusable elements to keep design and production costs down.

The Go Game

The Go Game is a product of Wink Back, Inc., and is primarily a single-day limmersive live event. In the Go Game, competing teams from a single organization work to fulfill missions, and in a post-game event, all the teams are brought together to determine a winner.

Fundamental Issues

Development and Production Costs

One of the common features of ARGs is that they tend to be extremely cheap to run. Further, with ARGs "cheap" rarely means "low quality", and new developers are often pleasantly shocked at how much previous ARGs have managed with how little resource (measured in terms of exposure, depth of gameplay, effect on players (emotional, educational, or otherwise), etc). Certainly the budget for an ARG does materially affect the overall quality, but the effect tends to be substantially exceeded by that of an experienced and creative development team.

The main effect of budget tends to be not to limit what the ARG can do, or to reduce the quality substantially, but to limit how much can be done at once, or within a given time frame. The primary distinguisher between ARGs of radically different budgets tends to be the volume of content being pumped out each week, or the number of different story-arcs that are running in parallel (each with their own independent player/actor interactions).

Generally, the largest cost for an ARG is the manpower needed to invent, research, design, and run each part of the plot. Unlike many forms of entertainment, there is often as much time spent actually running the pre-made content as making it, so that the content reacts as much as possible - and as realistically as possible - to the unpredictable actions of players. For instance, conversations between in-game characters and the players are rarely scripted, rather they are storyboarded in broad terms and then it is up to the developers to invent the actual conversation on-the-spot once they are talking to the players (posing as the in-game character). Fortunately, many techniques have been developed to provide content for large numbers of people (from hundreds up to tens of thousands) with relatively little effort from the developers. For more information, see the section on Methods and Mechanics in this paper. The overall effect is again to reduce or even eliminate budget as a major issue for the business model.

Finally, one of the fundamental features of ARGs, that of spreading virally by word-of-mouth from player to player, is extremely hard to retain in the presence of a heavily-monetized experience. Unfortunately, even models that extract relatively small amounts of money from the average player tend to massively harm or destroy the effectiveness of the ARG's viral marketing, with the net result that a lot of extra money needs to be set aside to fund the marketing and promotion of the

game. This is a cost that usually is not present for an ARG, and in the context of the other generally-low running costs can inflate the overall cost by a large amount.

Revenue Streams - Service

Most of the interest and experimentation in ARG business models is with how they bring in money - and how much. Although the grassroots games are largely unaffected by these issues (due to the extremely low costs of running an ARG), even they often attempt to generate some revenue to fund occasional richer and more detailed arcs within the game.

At the generic commercial level, ARGs are fundamentally a service, rather than a product, and this affects all the revenue streams. Services are easy to charge for, but have high ongoing costs and generally scale poorly in terms of number of consumers and ease of satisfying demand, which substantially limits the growth potential for a business. The only major attempt at a subscription-based ARG, EA's *Majestic*, proved both a critical and commercial failure, despite many strengths as a game, and this appears to have dissuaded most developers from following that model. However, *Majestic* only very narrowly missed-out on being the first major ARG, and as such was experimenting with many different things, only one of which was the business model. By comparison to *The Beast*, it fared poorly in the market, and the subscription model was one of the most obvious differences, but only one of many fundamental differences in the games. Recently, as ARG developers have become more experienced, confident, and understanding of their art, there has been renewed interest in the subscription model. Although this seems a natural choice if you assume the service-nature of ARGs, other issues suggest that focussing on ARG-as-service is not necessarily the best way to go.

The features of ARGs that mark them out as a service include:

- Lack of a constrained and/or clearly delineated (e.g. single-medium) consumer experience
- Lack of a concrete physical product
- No part of the experience is a standalone entity that - once purchased - can function without further invovlement of the manufacturer/developer

Each of these is part of the core value of an ARG to the players, from the lack of constraints to the inherently cross-media experience, and the reactivity of a game which is run in real-time by the authors.

Problems with providing ARGs as a service include:

- Any direct-billing service model implicitly delineates the boundaries of the game (between that which is chargeable and that which is not)
- Pay-to-play, generically, reduces the eagerness of players to recruit friends and reduces the inclusiveness of the player audience
- The "this is not a game" element of ARGs, although generally not considered essential, is weakened to the point of complete destruction by the use of a direct-billing model

To date, some ARGs have successfully used ARG-as-service models, but generally by avoiding the billing aspect. For instance, Xenophile Media's *Regenesis* uses the broadcast-TV model where the core of their game is a TV show, and their service is syndicated to different TV networks, but provided free to the consumers.

Revenue Streams - Product

The main alternative to service business-models is product models. As noted previously, the typical ARG is not inherently a product in this sense, which can cause a lot of difficulties with these models. However, the pay-off for using product revenue models with an ARG and getting them to

work is that the core gameplay manages to happily co-exist with the needs of a commercial entity (profit, scalability, etc).

The third and fourth wave ARGs both take this approach. Treasure-hunts simply pick a sub-part of the ARG service which is clearly itself a product, and then charge for it or fund it appropriately. Merchandising games instead take the approach of trying to use the ARG as the primary IP to drive sales of a secondary product - merchandise - in much the same way that modern films can make more money from selling toys and branded stationery than from the ticket receipts.

With both routes, the revenue is effectively coming from an indirect source - rather than monetizing every consumer, only a percentage of consumers is being tapped. This is how these models circumvent the problems of direct-charging. Because a substantial portion of the playerbase will be playing "for free" the ARPU (Average Revenue Per User) for those that are paying needs to be substantially higher than with any direct model in order to make up the difference.

Equally, the playerbase usually needs to be a lot larger in order for the minority of customers who do pay to generate enough revenue to go above the minimum threshold to keep the game self-sustaining.

Audience Management and Plot Control

Distinct from the core issues of profit and expenditure, yet still extremely important to the choice of business model, are issues surrounding the nature and context of the game itself. The first of these is the relative youth of the ARG genre, such that each new game has to cope with as many as 50% or more of its playerbase being people who have never played - or even heard of - an ARG before. This places many requirements for consumer-education upon the ARG, and these need to be woven into the business model, particular in terms of the marketing, target audience, and product-positioning of the game.

This need to educate the audience can lead to an assumption that the audience will be reluctant to embrace the new form of entertainment. Games such as *The LOST Experience* show some of the potentially fatal dangers inherent in this: provided as a link between successive seasons of the TV show *LOST,* the ARG did not in any way significantly advance the plot and provided only very limited interaction with the few core characters that were even present. The game ended up leaving many people feeling let down, both ARG players and *LOST* fans alike, probably because it broke a cardinal rule of ARGs: artificially restricting the game within a set of media and a small set of plot directions. The ideal approach from an ARG perspective would have been to allow the story to flow freely through the game, although this would have forced TV viewers to at least read summaries of the game if not actively participate, merely in order to carry on watching the next season. It was already a risky and brave decision to run something as uncontrolled as an ARG for such a major IP as *LOST*, and "making the ideal ARG" was almost certainly far from being a driving issue for those managing the *LOST* business model. However, this underlines the need to be careful with ARGs, and not to assume that the game can and will conveniently sit within external artificial boundaries.

A related issue that comes up quite often with people moving into the ARG space from other media industries is that of audience and plot control. Generally speaking, ARG developers can only control the broad plot direction, and can exert little if any control over the details. There is little they can do, for instance, to prevent any one of the potentially hundreds of thousands of players from befriending a key character then betraying them by emailing their enemies. This is not a problem that traditional novel authors and screenwriters are used to dealing with! There are many examples of this happening in the games to date, and a wide variety of tricks have been employed by the developers to try and limit the damage done - including sometimes simply running with the betrayal, and weaving it into the larger plot.

Current Trends

The range of successful business models for ARGs is still increasing each year. New models continue to come both from evolution of existing models and from previously untried approaches. Whilst we cannot predict what will come next, we can make some broad observations about the directions the industry is currently moving in.

Less adherence to This Is Not A Game (TINAG)

This phrase was originally coined at the start of *The Beast*, within the game itself, and quickly became strongly associated with ARGs in general. As one of the major differentiators between *The Beast* and *Majestic* (see earlier), with the former a runaway success and the latter comparitively a severe failure, the TINAG concept gained a reputation for being core to any successful ARG. The underlying concept was that the game itself must never in any way recognise that it was, indeed, a game - it must consistently pretend to be real. The Lead Developer, Elan Lee, later explained the intended meaning:

> Players were never meant to believe the "This is not a game" rhetoric, he explained, but rather to be baited by it. "It was obviously a game," Lee said. "There was nothing we could do about that. What we could do was make it a game with an identity crisis. If I know it's a game, and you know it's a game, but IT doesn't know it's a game, then we've got a conflict."[25]

The first book dedicated to ARGs even took the phrase as its title (*This Is Not A Game*, Dave Szulborksi, 2005) and argued strongly in favour of TINAG as the first rule of ARG design.

Of late, ARG developers have become less obsessive about this concept, certainly driven on the comercial side at least by the need to provide a more inclusive gaming experience. For instance, several games have started to provide developer-created introductions to the game and plot-summaries whilst the game is still running. These directly contravene the most orthodox interpretation of TINAG since they inherently sooner or later (usually sooner) reveal "secret" information that is not known to the in-game characters - or by directly referencing the out-of-game activities of the players. Usually, such summaries quickly end up providing things the players know about the characters but which the characters themselves must not hear (such as current plans by the players to entrap an enemy in-game character). So far, this lessening of the TINAG experience seems to have had little or no negative effect on the games themselves, whilst greatly increasing the ease with which new players with no prior ARG experience can get into the game.

Greater use of different media

ARGs are inherently a cross-media product with content spread widely and wildly through many different media. Unlike almost any other form of entertainment, it is not only expected that an ARG could switch from the web to a phone call to real-life to a TV-advert, etc - but a lot of the play experience derives from this free-form use of any and all available channels.

As the industry matures and the risks and costs of development drop (due to more experienced, better resourced developers) games have branched out even further across the different media. In the past year alone we have seen extensive use of YouTube (*TheHumanPet*[26]), Podcasts(*Perplex City - The Story So Far*[27]), social networking sites (*Perplex City - The Scarlett Code*[28] on Myspace),

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[25] http://www.avantgame.com/MCGONIGAL%20A%20Real%20Little%20Game%20DiGRA%202003.pdf

[26] *thehumanpet*, http://www.youtube.com/profile?user=thehumanpet

[27] *Perplex City - The Story So Far*, http://story.perplexcity.com/podcast/

[28] *The Scarlett Code*, http://www.myspace.com/thescarlettcode

and even published books (*Cathy's Book*[29]). Some of these media are clearly very cheap to provide content for, making them almost an inevitable path for ARGs to tread sooner or later. Others require much more time and effort, but the repeated use of them suggests that ARG developers are finding them cost-effective to produce. It would appear that we can expect upcoming ARGs to explode even more widely across different media, gathering more players and attention with each branching out.

Advertising ARGs still strong

The last year has seen a clutch of successful new private-client/marketing campaign games, such as *Ocular Effect*, *Who is Benjamin Stove*, and especially *Last Call Poker*. The business model that started the ARG genre appears to be as robust as ever, and set to be a permanent part of the ARG landscape. As well as proving the continued low-risk (albeit low reward to the developer) of these types of games, this is good news for the industry as a whole. A stable market for high-profile, low-risk games will ensure there is always a straightforward way for new, relatively inexperienced, companies to break into commercial ARG development.

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[29]   *Cathy's Book: If Found Call 650-266-8233*, Running Press Kids, 2006

ARGs and Academia

Christy Dena

You may be wondering what a section on the academic research of ARGs is doing in a whitepaper. You should be asking why a section of academic research hasn't been included in a whitepaper previously. Academics play ARGs, they design them and watch them afar. All the academics, regardless of their level of participation, share a fascination with ARGs and want to understand the emerging form. Their research offers insights into what an ARG is, how they differ from other forms and how the design and experience of them can be utilised in other forms of entertainment and education. In short, they provide unique contributions for the benefit of players, designers, researchers, industry and media.

The Obligatory Notes on Method

In the interests of accountability, academic writing usually does not acknowledge non-refereed publications. But since ARGs are an emerging area and because we wanted to provide you with the most up-to-date information, we decided to include substantial blog posts and give participants the chance to comment informally on their recent findings and insights. There is one contributor in this section too, that is not an academic, but has presented an academic paper as an independent scholar.

There are also some researchers that, for various reasons, were not able to be covered in this whitepaper. Of note is the ARG Ares Station[30], a Masters project for Nathan Mishler and Will Emigh at the Department of Telecommunications, Indiana University Bloomington. That thesis is in the process of being written. Drew Davidson, the Director of the Entertainment Technology Center (Pittsburgh) at Carnegie Mellon University, will be discussing ARGs along with contributions from Jane McGonigal and Christy Dena in his forthcoming book: Cross-Media Communications: an Introduction to the Art of Creating Integrated Media Experiences .

Background or How Academics & ARGs Fell For Each Other

Jane McGonigal was the first academic to come across ARGs and be inspired to include them in her PhD (forthcoming). Over the last couple of years, however, more academics are finding ARGs a rich subject for analysis. They have stumbled across ARGs or been grabbed by the ear and shown them, but regardless of their point of entry all have found them to be an unusual and inspiring confluence of ideas. ARGs are subject to such a diverse range of influences and yet have a strong community driver. If there is ever an artistic form that is moulded by the hands of many, this is it. The academics featured here have clay under their fingernails too.

For many of the academics, ARGs are the manifestation of theories they have been exploring for a long time. ARGs provide, therefore, the unique opportunity to see many theories in action. Popular topics of interest have been the notion of fictionality, the notion of a game space, interactive narrative, commerciality and player dynamics. They have entered the realm of ARGs informed by particular key ideas which are exemplified in the following texts:

For notions of 'play' see the pre-digital works: Johan Huizinga's Homo Ludens (1998 (1950)); Roger Caillois' Man, Play and Games (2001, (1958)) and Brian Sutton-Smith's The Ambiguity of Play (2001). For game studies in the digital era, see Katie Salen and Eric Zimmerman's Rules of Play: Game Design Fundamentals (2003) and Jesper Juul's Half-Real: Video Games between Real Rules and Fictional Worlds (2005). For narrative, look at Marie-Laure Ryan's Narrative Across Media (2004) and for those looking at treatments of both game and narrative see Espen

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[30] *Ares Station* online archive available at: http://www.aresstation.com/.

Aarseth's Cybertext: Perspectives of Ergodic Literature (1997) and Noah Wardrip-Fruin and Pat Harrigan's (eds) First Person: New Media as Story Performance and Game (2004) and their forthcoming Second Person: Role Playing and Story in Games and Playable Media. For the history of artforms in general see Randall Packer and Ken Jordan's (eds) Multimedia: From Wagner to Virtual Reality (2001). For group dynamics and the like see Pierre Levy's Collective Intelligence: Mankind's Emerging World in Cyberspace (1997).

The academics were asked what reading they would recommend for ARG researchers and designers. The following are their suggestions:

- Howard Rheingold's Smart Mobs: the Next Social Revolution (2003) [Alexander]
- David Szulborski's This Is Not A Game: A Guide to Alternate Reality Gaming (2005) [Alexander]
- David Weinberger's Small Pieces, Loosely Joined: a Unified Theory of the Web (2002) [Alexander]
- Nicolas Bourriaud's Relational Aesthetics (1998) [Dena]
- Shawn James Rosenheim's The Cryptographic Imagination: Secret Writing from Edgar Poe to the Internet (1997) [Dena]
- Textual Studies works by D. McKenzie, J. McGann and G. Genette. [Jones]
- 'Matt Webb's weblog www.interconnected.org is one of the more thoughtful weblogs that reminds of ARG thinking too.' [Losowsky]
- The introduction and two first chapters of Norbert Elias and Eric Dunning's The Quest for Excitement: Sport and Leisure in the Civilizing Process (1986) [Örnebring]
- The writings of James Joyce [Morrison]
- University of Virginia's 'Directory of Webquests': http://curry.edschool.virginia.edu/go/edis771/webquests/directory_of_webquests.html [Purushotma]
- Salen & Zimmerman's Rules of Play [Reynolds]
- Marie-Laure Ryan's Narrative Across Media (2003) [Ruppel]

Current research

The following section provides a snapshot of the most recent research into ARGs. All of the academics showcased here are interdisciplinary, so they use a variety of methods and look at many aspects of ARGs. For the sake of clarity, however, we have grouped the research into categories that are representative of the main concerns of all the investigators. Within each category the academics are listed in alphabetical order according to surname and their publications are listed at the end of this section.

ARG Communities: Why They're the Best Gang in Town

The community of ARG players is widely admired by those within it and those observing it. What makes the ARG community unique begins with the design characteristic of ARGs: they are collaborative. They are so vast and layered in complexity that no single person can possibly find all the texts and unlock them in time and with their own knowledge alone. ARG players rely on each like no other community therefore. An ARG doesn't come alive until it is played. An ARG does not persist without the work of many players, often worldwide. Ironically, because of the no-interference policy of producers of ARGs, it is up to the players to work how they communicate, share, analyse and act. It is for these reasons, and many more, that the ARG communities are a fascination to many academics from a variety of fields. They believe that the unique activities of ARGs communities can enlighten producers of media on how to design for participation, provide

insight into tools for empowerment, are ideal marketing hubs and also illuminate the nature of communication and networks in general.

Henry Jenkins

Henry Jenkins is Co-Director of the Comparative Media Studies Program and the DeFlorz Professor of Humanities, MIT. He is the principle investigator for the MIT-Microsoft Games-to-Teach project, co-faculty investigator of the Convergence Culture Consortium (C3) and one of the founders and directors of The Education Arcade. At C3, Jenkins is investigating transmedia entertainment, participatory culture and experiential marketing. He has published monthly columns at the Technology Review Online and Computer Games magazine, and at the Media Center's 'We Imagine' section of Morph. He is the author of numerous books, chapters and articles, including Textual Poachers: Television Fans and Participatory Culture, Hop on Pop: The Politics and Pleasures of Popular Culture and From Barbie to Mortal Kombat: Gender and Computer Games. Jenkins has two books forthcoming: Convergence Culture: Where Old and New Media Collide and Fans, Bloggers and Gamers: Exploring Participatory Culture.

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Jenkins & ARGs

Jenkins first heard about ARGs through an undergraduate student, a Cloudmaker, who was on the educational games design project. He spoke with Neil Young at EA about his experiences with *Majestic* and then finally connected with Jane McGonigal. ARGs contributed to his ongoing research into 'collective intelligence issues' for his forthcoming book Convergence Culture, the research he has been conducting for Project New Media Literacies (commissioned by the MacArthur Foundation) and his journalism at Technology Review Online. In Convergence Culture, Jenkins discusses three core ideas: convergence, participatory culture and collective intelligence (Jenkins, forthcoming). Convergence is the 'flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behaviour of media audiences' (ibid.). Participatory culture is the inverse of 'older notions of passive media spectatorship' where media producers and consumers interchange their roles. Jenkins invokes Pierre Levy's notion of 'collective intelligence' to frame 'an alternative source of media'. It is world where '[n]one of us can know everything; each of us knows something; and we can put the pieces together if we pool our resources and combine our skills'.

> Alternative reality games operate across all three of these spaces [convergence, participatory culture and collective intelligence]. First, they are informational scavenger hunts which disperse information across a broad range of different media channels. This goes back to the pioneering work which Neil Young did for Majestic, arguably one of the earliest and most influential examples of this practice. Second, they encourage players to create new media tools which they can use to process and communicate information. And third, they can only be solved by people working together as teams and tapping the power of social networks to solve problems. So Alternative reality games are, in a sense, the perfect illustration of all of the principles which I see shaping the media landscape at the present time .

In Convergence Culture Jenkins augments the insights of Jane McGonigal with observations about the ways players are affected by ARGs:

A well-designed ARG also changes the ways participants think about themselves, giving them a taste of what it is like to work together in massive teams, pooling their expertise towards a common cause. They develop an ethic based on sharing rather than hording knowledge; they learn how to decide what knowledge to trust and what to discard (Jenkins, forthcoming).

Jenkins is encouraged by the ARG players applying their investigative skills onto real world problems — such as the Cloudmakers approach to September 11 and the Collective Detective's think tank on corruption in US Federal spending. What he finds interesting

is the connection the group is drawing between game play and civic engagement and also the ways this group, composed of people who share common cultural interests but not necessarily ideological perspectives, might work together to arrive at "rational" solutions to complex policy issues (ibid.).

He notes in his article in the Technology Review, 'Chasing Bees, Without the Hive Mind', that 'the sense of empowerment players discover through participating in such robust knowledge communities' was prefigured by Pierre Levy and his notion of 'collective intelligence':

Levy has predicted that such knowledge cultures represent an alternative source of power that exists alongside the political authority of the nation state or the global reach of commodity capitalism. We will someday learn to use this power to change the world (Jenkins, 2004).

Jenkins also extends his 'collective intelligence' lens to its implications and applications in education with the Project New Media Literacies Project (Jenkins, et. al, forthcoming). See the section on Ravi Purushotma for further details about this project. Jenkins' book Convergence Culture (2006) provides an extensive analysis of ARGs and their communities.

Jane McGonigal

Jane McGonigal is a pervasive game designer with 42 Entertainment and a games researcher at UC Berkeley. As a designer, she specializes in real-world, multiplayer games for public spaces and serious places, including cemeteries, downtown urban centers, city and national parks, airports and public transportation systems. Most recently, she produced Hex168 (2005), which asked Xbox gamers to game their own everyday, real-world environments. Previously, she was a lead designer for 42 Entertainment's *I Love Bees* (2004), which received the Innovation Awards from the International Game Developers Association, the games Webby Award from the International Academy of Digital Arts and Sciences, and recognition from the New York Times' 2004 Year in Review as one of the most significant cultural phenomena of the year. She is also well-known for her design work on flash mobs (2003), urban superhero games like the Go Game (2001 - present), and alternate reality games like *Last Call Poker* (2005).

Her research focuses on systems and interfaces for massively collaborative play, both in game environments and in everyday life. She consults frequently for technology companies like Intel, Microsoft and Nokia, and for organizations such as the MacArthur Foundation and the Institute for the Future. When not puppet mastering games, she teaches game design (San Francisco Art Institute) and contemporary games culture (UC Berkeley), with an emphasis on how these two fields intersect with public policy, social networks and live performance.

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ARGs & McGonigal

McGonigal describes her forthcoming dissertation, the first PhD with an extensive treatment of ARGs, as aimed at the fields of digital game studies, ubiquitous computing and performance studies. Her research emphasizes, she adds, the performance aspects of both the games and the culture of ubicomp research and so predominately contributes to performance studies. Her PhD, 'This Might Be a Game', 'examines the historical intersection of ubiquitous computing and multi-modal digital gaming, circa 2001 AD' (McGonigal, 2006b).

> In order to mark the heterogeneity of this experimental design space at the turn of the twenty-first century, I propose three distinct categories of ubiquitous play and performance. They are ubiquitous computer gaming, in which academic research games are deployed to colonize new objects, environments, and users in the name of ubiquitous computing; pervasive gaming, in which spectacular art games aim to critique and to disrupt the social conventions of public spaces; and ubiquitous gaming, in which commercial, massively-multiplayer games work to materially replicate the interactive affordances of traditional digital games in the real world.

> Using design statements, original gameplay media, and first-person player accounts, I explore the aesthetics and socio-technological visions of seminal games from each of these three categories, including Can You See Me Now? (Blast Theory and the Mixed Reality Lab, 2001); the Big Urban Game (The Design Institute and Playground, 2003); and The Beast (Microsoft, 2001), respectively. I focus in particular on the category of ubiquitous gaming, which of the three has produced to date the most scalable, reproducible and popular vision of a games-infused, everyday life (ibid., original emphasis).

Besides the comprehensive case studies of *The Beast* and *I Love Bees* that McGonigal's writing and presentations offer, she also works as a mediator between ARG designers and players and academia. In her paper, 'A Real Little Game', McGonigal describes the horror of academics that hear about the immersive effects of ARGs and who then deem them "schizophrenic machines" (McGonigal, 2003b). She juxtaposes the rhetoric around the supposed 'dangerous' immersion of players who apparently mistake ARGs for real life with the now debunked views of screaming audiences who first experienced cinema. She interrogates the notion of players 'stumbling' into something and treating it as real. From an interview with Elan Lee, she illustrates the original intentions behind the TING philosophy, a philosophy that forces all designers and participants to never indicate that they are playing a game:

> Players were never meant to believe the "This is not a game" rhetoric, he explained, but rather to be baited by it. "It was obviously a game," Lee said. "There was nothing we could do about that. What we could do was make it a game with an identity crisis. If I know it's a game, and you know it's a game, but IT doesn't know it's a game, then we've got a conflict (ibid.).

Players of *The Beast*, she adds, self-regulated themselves when they thought they had done something too real (for instance: believed they had hacked into a real person's email).Of the relationship between players and puppet masters McGonigal notes:

> The key to immersive design, we agreed, is to realize that the clear visibility of the puppetmasters' work behind the curtain does not lessen the players' enjoyment. Rather, a beautifully crafted and always visible frame for the play heightens (and

makes possible in the first place) the players' pleasure – just as long as the audience can play along, wink back at the puppetmasters and pretend to believe (ibid.).

In 'This Is Not a Game', McGonigal outlined the 'immersive aesthetics' of ARGs: the use of the real world, and everyday devices; the play was in the online and offline lives of the players and the websites had 'every functional hallmark of nonfictional sites'; (McGongial, 2003, 112). She elaborates here:

> Aesthetically, technologically and phenomenologically speaking, there was no difference at all between the look, function or accessibility of the in-game sites and non-game sites' (ibid.).

Other devices are having the real world times and game times correspond: midnight was midnight in both, despite the gap in over one hundred years. Another characteristic she popularised is the now well-known "TING"/'sub-dermal' method (not acknowledging it is a game).

In 'Supergaming!', McGonigal provides a case study of four projects from the San Francisco area that she describes as indicative of a 'techno-cultural hub'. She bundles these works under the rubric of 'supergaming':

> The term "supergaming" is intended to invoke four key attributes of the trend. Supergaming is massively scaled, as in supersized gaming. Supergaming is embedded in and projected onto everyday public environments, as in superimposed gaming. Supergaming heightens the power and capabilities of its players, as in superhero gaming. Finally, supergaming harnesses the play of distributed individuals in a high-performance problem-solving unit, as in supercomputing gaming. In other words, supergaming is both a robust design solution to the community-scaling problem and a potential catalyst for redefining what we mean by and expect of "community" in a new-media context (ibid.).

The purpose of supergaming is to attract audiences: local, online and through media outlets. Supergames can be massively scaled, she argues, contrary to Clay Shirky's 2002 claim that communities cannot scale.

More recently, in her chapter for the forthcoming book Second Person, McGonigal introduces the notion of 'power play' (McGongial, forthcoming). Through a description of the activity of ILB players — who attended GPS coordinates around the world on a certain day and waited to see what would happen — a 'new mode of digital gaming' is explained:

> Power plays are a kind of cross between a digital dare and street theater. They are live gaming events, conducted in public places and organized via digital network technologies, in which players are directed via clues to show up at a real-world location (ibid.).

McGonigal cites 'smart mobs' and the Go Game as fitting this category too. Power plays are engineered to be 'public performances' that address players, people on the street and the unseen 'puppet masters'. Interestingly, the first use of the term 'puppet master,' McGonigal informs, was uttered by a player, Sean Michaels, in the Cloudmakers listserv on the 16th April 2001. She unpacks just what a 'puppet master' is, describing how they are never revealed 'until the game is finished—if ever'; how they differ from Dungeon and Game Masters by not interfering with the live play; how they are not contactable for discussion and how they completely control player actions.

In a sense, then, the gameplay of a puppet mastered experience boils down to a high-stakes challenge: Perform—or else. Or else what? Or else, be denied the opportunity to play. Be left out. Be left behind. There is simply no optionality to the power play—do exactly what you're told, or there's no play for you. This underlying power structure requires a level of overt submission from gamers that is simply unprecedented in game culture. And so the players' definition acknowledges: It is the puppet masters, not the players, who "control the game" (ibid.).

She compares this phenomenon with the many pervasive games such as The Big Urban Game (2003) and Uncle Roy All Around You (2004) where the 'participants are online directors rather than pervasive performers' (ibid.). To explain the motivation behind wanting to participate in a puppet mastered game, McGonigal claims that players

have discovered a new criterion for digital realism—a kind of psychological realism that perfectly complements the 'immersed in reality' framework of real-world, mission based gaming (ibid.).

Rather than engage in 'realistic' 3D graphics, players jump straight to real life and engage in a conceptual immersion. Indeed, McGonigal claims that for a game to be real it must not offer 'optionality,' the choices that many games seek to offer. This powerlessness, she continues, gives the immersive gamers pleasure and is definitely wilful. She notes how the players of ILB instructed (through their actions) the puppet masters on what they wanted, and the puppet masters responded by giving it to them.

For players, the pleasures and challenges of real-world gaming missions are the pleasures and challenges of dramatic performance. And for puppet masters, writing real-world mission scripts is very much the same process as writing dramatic texts; redesigning them in real-time is very much the process of directing live actors on stage (ibid.).

McGonigal has just completed her PhD thesis.

Jeremy Reynolds

Jeremy Reynolds is a recent M.A. recipient from Purdue University's Professional Communication program. He now works as an Art Director and Writer for Floyd and Partners, a full-service advertising agency in Fort Wayne, IN. Reynolds first discovered ARGs through a post about I Love Bees at Penny Arcade. He subsequently played ILB and was surprised by how well the community worked together and the depth of resources the players developed on short notice. Although the player base was large, diverse, grassroots and almost entirely computer-mediated, Reynolds explains, the community was polite, self-correcting, focused and incredibly efficient. ARGs, he observes, contain examples and illustrate concepts of community and culture building, computer-mediated communication, conflict, persuasion, avant-garde media, semiotics, and cultural studies.

In his Masters synthesis paper, 'Formation of Shared Group Consciousness through Play', Reynolds studies ARGs in relation to organizational communication in action (Reynolds, 2006). He draws on Ernest Borman's Symbolic Convergence Theory (1985) to examine the development of group culture and shared consciousness within communities. Fundamentally, a group experiences a common event, with each dramatized communication they create a group social reality which is evidenced in metaphors, in-jokes and so on. These shared fantasy communications recall the original experience and shape the community. Reynolds explained that ARGs are powerful culture-building mechanisms because they bring people together and specifically task the group with

creating the building blocks of a strong group culture. Beyond simply illustrating SCT, Reynolds argued, ARGs are one of the most effective methods conceivable for actively generating the sort of communicative and cultural interactions that Symbolic Convergence Theory describes. In ARGs, one of the shared fantasy themes is 'This Is Not A Game' (TINAG or TING).

> As much as an ARG performs at not being a game, players perform at not playing a game (ibid., 9).

Among the benefits to players, he notes the 'sense of empowerment that players feel from taking part in a vast network of similarly-minded, networked individuals' (ibid., 10). For Reynolds, the signs of a shared group consciousness are in the adoption of special group names: 'Cloudmakers' for *The Beast*, 'Beekeepers', 'Crewmembers' and 'Sleeping Princess Army' for *I Love Bees* and 'Retrievers' for *Art of the Heist*. Although ARGs run for a few months, Reynolds notes that players stay in the shared consciousness long after and often identify themselves with a previous group name. Indeed, Reynolds recognises that the Cloudmakers have a special status as 'sagely veterans' and, because of their swift puzzle-solving skills, 'above-average intelligence'.

Reynolds believes his research can benefit the marketing industry, and is pursuing non-academic exploration of the marketing aspect of ARGs. He observed in his thesis that:

> ARGs are an effective form of marketing; the games build an entire narrative around the product, players create new viral content about the product and the spectacle that ensues draws a large audience from the outside world (ibid., 11).

He adds that 'as marketing tools ARGs are excellent because they not only require extended exposure to the advertised product, but they encourage participants to build an authentic group culture that is interwoven with brand communication'.

ARGs & Philosophy: How ARGs Battleaxe Boundaries

No-one in the ARG community, academia or industry has settled on a description of what an ARG is. This is understandable considering it is an emerging form, but also because it is a hybrid of so many areas previously believed to be clearly delineated. Some argue ARGs are nothing but marketing campaigns, others they are the epitome of interactive fiction; others believe them to transcend reality and some think they're virtual worlds; some think they're stories, games or performances and others are trying to understand how they're all of them. Either way, ARGs challenge boundaries. Here are some of the attempts to knock down, shift and walk through those ephemeral walls.

Steven E. Jones

Steven E. Jones is Professor of English at Loyola University Chicago. He is author of a number of articles and books on romantic-period literature and culture, including Shelley's Satire (Northern Illinois UP, 1994), Satire and Romanticism (Palgrave Macmillan, 2000), and (as editor), The Satiric Eye: Forms of Satire in the Romantic Period (Palgrave Macmillan 2003). His most recent book is Against Technology: from the Luddites to Neo-Luddism (Routledge, 2006), and he is currently working on a new book on Video Games and Textual Studies.

University Blog: http://www.rc.umd.edu/sjones/blog/

ARGs & Jones

As a textual scholar, Jones is interested in ARGs as examples of multilayered and cross-platform media events. He argues for a textual analysis approach to videogame studies but believes his research contributes most to cultural studies. In his paper presented at MLA, 'This Medium will Metastasize', Jones invokes D.F. McKenzie and Jerome Gann's notion of a 'text' — that is, one that is multimodal and encompassing of many environmental forces and dynamics — and argues that these should be the lens to analyse videogames with (Jones, 2005).

> This kind of textual studies seems particularly suited to the study of the porous and quantum objects of attention that today's video games are, and might encourage us to stop treating games as formal, self-contained objects (even if "interactive" ones) and start recognizing that they are always played within dynamic material and social circumstances that necessarily include not only their encoding and platform […] but also the social networks of players, different overlapping gaming subcultures, and even what we might call "paratextual" events, including but not limited to their marketing and reception (ibid.).

To illustrate, Jones describes how *I Love Bees* and Halo 2 should be included in any analysis of each.

> The story of their relationship is much more interesting than can be revealed by either a focus on formalist or phenomenological gameplay in Halo 2 or an old-fashioned cultural-studies approach to the ARG as mass marketing. I Love Bees was clearly more than merely a marketing device, or rather, it was a marketing device meant to blur the boundaries of marketing and gameplay, in both directions–and it succeeded (ibid.).

Jones observes correlations between the ARG and the videogame, including how both encourage a 'more or less playful paranoia'. In addition to the textual analysis he offers, Jones notes that players of ARGs are also using textual analysis themselves:

> Actually, players of this composite game phenomenon were prompted to act remarkably like textual studies scholars–were in effect coaxed into editing or piecing together fragments of printed and spoken words, but also game-world and real-world actions, locations, and mappings, in order to make sense of their own and others' emergent gameplay. They were potentially engaged in performing a whole series of what we might view as editorial or–in this broad sense–textual-critical interactions (ibid.).

His future research will also investigate where gameplay and storytelling meet commodification. He is currently writing a book that includes chapters on *I Love Bees* and *The LOST Experience*.

Eva Nieuwdorp

Eva Nieuwdorp is a PhD candidate in New Media and Digital Culture in the Faculty of Arts and Humanities at Utrecht University, The Netherlands, where she participates in a research project called 'Playful Identities: From Narrative to Ludic Self-Construction'. This project looks at identity construction in relation to an increasingly technologically mediated society and the possibilities this yields for personal and cultural expression and self-reflection. At the moment Nieuwdorp focuses her research on the construction of personal and cultural identity in and through games, and especially pervasive games, looking at concepts such as embodiment, convergence and performance, as well as investigating new terminological approaches to

'pervasive games'. She has spent a period as a guest researcher in January-May 2005 with the Trans-Reality Gaming Laboratory at Gotland University (HGO) in Sweden, as part of the European Integrated Project on Pervasive Gaming (IperG), where she has done research on defining pervasive gaming. She is active in assisting the teaching staff in developing syllabuses and curricula for several courses on digital games, as well as regularly performing junior teaching duties in seminars.

ARGs & Nieuwdorp

Nieuwdorp is interested in ARGs because, she explains, of the intriguing relation between the player and game world. In a paper she delivered at DiGRA last year, 'The Pervasive Interface: Tracing the Magic Circle', Nieuwdorp interrogates the notion of an 'interface' in relation to pervasive games, including *I Love Bees* (Nieuwdorp, 2005). Since pervasive games, with their use of real world devices and everyday life, do not necessarily have screens Nieuwdorp concludes that the 'main facilitating factor in creating and entering the pervasive game world lies not solely within the hard- and software, but also in the player him/herself' (ibid., 4). For Nieuwdorp, the player enters a game world through a 'switch' in their head. This switch, which Nieuwdorp explains with semiotics, is an 'active mental shift' where the player accepts new conventions and meanings. Basically, they look at things differently, according to how the 'game' constructs it. Usually a game space, or magic circle, is delineated from real life with 'boundary-maintaining mechanisms' (Erving Goffman) that Nieuwdorp describes as transformation rules.

> Transformation rules tell us what part objects in the lifeworld domain can play in the existence of the game world; when we think back to the example from The Go Game that we looked at before, we can see that the transformation rules in that particular instance are very loosely defined, making it difficult for the player to discern what is still part of the game world and what is not. This means that the realised resources in the game world are potentially and seemingly infinite to all players, because they cannot be sure what objects are intended to play a role in the game world and which do not (ibid., 7).

Nieuwdorp then addresses the under-researched area of 'the instance when this change in mental state actually occurs, which in turn denotes the coming-into-being of the game world' (ibid., 7). Developing anthropologist Victor Turner's term, Nieuwdorp labels 'the semiotic switch between the lifeworld domain and the semiotic domain of the pervasive game' as the 'liminal interface' (ibid., 8). Invoking Roger Caillois' notions of paidia (play) and ludus (game), the liminal interface is explained as having two levels. The 'paratelic interface' is the first step when 'a person becomes playful and lets go of the restraints and cultural conventions' (ibid., 9). They then move through the 'paraludic interface,' a state where 'he/she must learn to understand the rules of the game' (ibid.). Nieuwdorp reiterates that these shifts are not strictly delineated either:

> These shifts from non-play to play into game require a very active stance of the player, who needs to realise on a meta-level the qualities of all three: something is play because it is not reality, something is a game because it is not play and consequently not reality. This constant threefold reiteration of a game of its own status as a game means that the player of a pervasive game will always in some form be reminded of the game being a construct. However, accepting the game world as a separate semiotic domain implies accepting the conventions within that domain as dominant and thus as "real" (ibid., 9-10).

Nieuwdorp is currently writing her PhD on pervasive gaming.

ARGS & Education: Why No School Should Be Without One

Thankfully for students, academics have been looking at the benefits of running ARGs in schools. They have discovered that students are more likely to participate if they're playing an ARG (of course!), the skills ARG players have to learn are highly appropriate for what students need to know in this new media world, and that the low-tech nature of ARGs means they are accessible to students and can be created using limited resources. ARGs are described by one of the following academics as the 'the quintessential teaching mechanism'.

Bryan Alexander

Bryan Alexander is Director for Research at the National Institute for Technology and Liberal Education, working from offices at Middlebury College, where he researches the advanced uses of information technology in liberal education. A PhD graduate of the University of Michigan, he taught English and information technology studies as faculty at Centenary College of Louisiana. His primary research interests concern mobile and wireless computing, digital gaming, and social software.

Other interests include digital writing, copyright and intellectual property, information literacy, project management, information design, and interdisciplinary collaboration. Committed to exploring computer-mediated pedagogy, he continues to research and write on the critical uses of computers and teaching in terms of interdisciplinary liberal arts and the contemporary development of cyberculture.

Website: NITLE Liberal Education Today: http://www.nitle.org/

Website: Smartmobs: http://www.smartmobs.com

Weblog: Infocult: http://infocult.typepad.com

ARGs & Alexander

Alexander discovered ARGs through rumours around the Web, places like Ain't It Cool and other virtual communities. He has been studying ARGs in terms of literary analysis since 2002. ARGs are part of his research portfolio and he has created a sample game for educators in academia. He is particularly interested in the emergence of a new way of telling stories, web 2.0 stories; the pedagogical implications and how they challenge popular perceptions of computer gaming.

In his talk presented at the New Media Consortium, 'Alternate Reality Games', Alexander discussed changes in the field of ARGs in 2005, provided a case study of Metacortechs and presented principles for digital gaming and learning which included the interdisciplinary and collaborative nature of ARGs and the fact they have no heroic central position (Alexander, 2005a). He also describes the differences between ARGs and other digital games: there is a permeability of game boundary (space and time); a focus on distributed, collaborative cognition; increased ephemerality; a constructivist narrative model; unstable emergence and a fanfiction model. In his presentation at the ELI Annual Meeting, 'A New Approach to Gaming and Education', Alexander provided detail about how ARGs can be used for deep learning, interdisciplinary multimedia inquiry and are inexpensive and engaging (Alexander, 2006a). ARGs, Alexander continues, offer rich case studies for media studies and information literacy. At the same conference, Alexander also ran a workshop, which was actually a demo ARG, Kate Schedoni, he created for the event.

Alexander played and analysed the independent ARG Metacortechs (Alexander, 2005a, 2006a), observed the use of web 2.0 tactics in BBC's *Jamie Kane* (Alexander, 2006c) and more recently has been documenting the process of playing ABC's *The LOST Experience* on his personal blog (Alexander, 2006e-i). Of note, however, is Alexander's open and ongoing publishing of what he

considers being the creative antecedents of ARGs (Alexander, 2005a, 2005b, 2006d). Alexander includes in the list, along with other contributors, a mix of hoaxes, immersive education games, novels depicting multiple realities, performance stories, LARPs, How to Host a Murder Parties, videogames that use real world settings and participatory dinner theatre. In the future, Alexander will be publishing on his observations of Metacortechs and ARGs as they related to literacy.

Ravi Purushotma

Ravi Purushotma is a Masters candidate in the MIT Comparative Media Studies program, where he works as a researcher on their New Media Literacies and Education Arcade projects. Formerly a student in the UCLA Teaching English as a Second Language program and English teacher in southern China, his interests are in how foreign language learning will need to be re conceptualized to take advantage of the instantaneous access to foreign culture and media available with today's technologies.

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ARGs & Purushotma

Purushotma first had heard about *I Love Bees* and was, he explains, interested in the reports of the levels of peer learning that was going on among players within the game. Specifically, the idea that since the games used everyday technologies the skills learned playing the games would apply to other tasks in real life. Purushotma is now a co-researcher on the Mac Arthur Foundation funded New Media Literacies (NML) project. The NML project seeks to identify the various skills necessary to operate in the information age.

In the forthcoming Project New Media Literacies whitepaper that Purushotma contributed to, 'Confronting Challenges of Participatory Culture', ARGs are offered as examples of collective intelligence (Jenkins, et. al., forthcoming). See Henry Jenkins' section for more about this theory. Of particular interest was the approach to problem solving as team-orientated, inverting the contemporary approach of creating autonomous problem solvers; and peer-to-peer learning. The report includes ARGs as a potential classroom practice to 'help children to learn what they need to know to become fuller participants in the new media landscape' (ibid.).

Purushotma describes ARGS as the quintessential teaching mechanisms for many of the skills listed in the whitepaper. He is pursuing ARG research and its application in education in a few ways: a comparative analysis of ARGs and webquests; identification and extrusion of ARG design principles to apply to educational webquests; investigate the skills acquired whilst playing an ARG and how these techniques can be applied in curricula in general and specifically for foreign language subjects.

Jane Turner (truna)

Jane Turner (aka truna) is a game design researcher, teacher and artist. Turner is chapter auntie of the Brisbane IGDA and a researcher for the Australian CRC for Interaction Design (ACID), exploring cultural interfaces in game design in particular. She is currently also a lecturer in Immersion and Game Design.

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Design Website: http://making-games.net

Ann Morrison

Ann Morrison lectures in studio process, interactive environments and visualisation within the Information Environments Program, School of ITEE, at the University of Queensland. Morrison is

an installation and new media artist with a 17 year exhibition history and 9 years multimedia industry experience. Morrison is currently writing, working with locative experience projects and constructing a context containment interactive environment.

Personal Webpage: http://anmore.com.au

University Webpage: http://www.itee.uq.edu.au/~morrison/

ARGs & Turner & Morrison

In their paper, 'Suit Keen Renovator', Turner and Morrison provide a case study of an ARG created as a pedagogical tool for undergraduate students (Turner and A. Morrison, 2005). Their ARG, which they term as '[Alt] real', was developed to 'test the potential of exploiting a rich immersive multiplayer environment' and to 'engage and develop self-directing learning processes' (ibid., p: 209). It was funded by The University Teaching and Learning body and the Australian CRC for Interaction Design. The subject, Creative Industries, aimed to guide students in designing solutions for real world problems. 300 students in the first semester and 120-150 in the second-semester participated. The project, Creative Town, was a simulation of a Queensland town, Our Ipskay, in need of planning assistance.

In groups of 3-4 they interrogated the various in-game websites to find 'gaps and opportunities they can turn into business or art design proposals' (ibid., p: 211). They then presented posters of their pitch and submitted written proposals to a fictional Business and Arts Council. The proposals are discussed in enactments of council meetings with tutors playing council officials. The meetings helped provide the conflict needed for gameplay, they explain, but also provided feedback to students as to their progression through tasks. Turner and Morrison observed that students could see how the theory was relevant, treated the town and therefore their proposal as 'real' and participated in the production of the imaginary town and the cultural and economic implications of design. Future iterations will have a greater adherence to the real life rules of council meetings. In summary:

> The strengths of [Alt] real design, as opposed to use of more graphic or technologically rich environments, so tempting in projects like these, are the strengths of the dream of interface design: that the task can be achieved without noticing the technology, that the environment doesn't coerce any particular style of activity and the imaginations of the players are allowed full reign (ibid., p: 213).

> The contribution this case study makes is two-fold: Firstly, it targets and implements a way to engage students with theoretical concepts by giving them a practice-based and relevant pathway with which to engage. And secondly, it also uses simple technologies to achieve a game environment that the students become very involved in. More complex technologies would alienate non-technical, non gaming students, and disadvantage those without access to higher-end machines (ibid.).

> For education departments this is of some significance, making these forms of learning environments a cost effective and easy to implement learning tool (ibid.).

Turner is working on a paper at present that will include an analysis of ARGs, and Morrison will have ARGs figure in her forthcoming thesis.

ARGs & Entertainment: "The Citizen Kane of Online Entertainment"

In 2001, Internet Life magazine described *The Beast* as the "Citizen Kane of online entertainment"[31]. Many academics share a belief that ARGs signal the emergence of a unique form of entertainment that should be observed if not employed by those working in the entertainment industry. ARGs have, to varying degrees, an unprecedented mix of narrative complexity, gameplay, performance and participation without the use of artificial intelligence engines, high-end graphics, blood splatter and cut-scenes. They attract thousands of players and hundreds of thousands of people watching at the sidelines. The following academics bravely venture into the mechanisations of ARGs and emerge, bright eyed and wind-blown, waving what they believe to be the secrets of this new form of art.

Christy Dena

Christy Dena is a cross-media entertainment researcher, consultant and creator. She is researching cross-media entertainment for a PhD at the School of Letters, Art and Media, University of Sydney. She is a consultant to film, TV and new media practitioners in Australia and overseas and has mentored at Australia's cross-media lab: Australian Film, Television and Radio Schools' Laboratory of Advanced Media Production (AFTRS' LAMP). She currently creates what she terms miniARGs for entertainment industry training, research and her own cross-media stories. She has given numerous presentations on ARGs to industry and academia and also is a lecturer and tutor of new media arts theory to tertiary students and a new media arts reviewer. Dena is a public speaker on cross-media design who has delivered presentations to organisations such as the Australian Broadcasting Corporation and the Australian Council for the Arts. She is on the Board of one of Australia's key new media arts organisations dLux Media Arts and is a member of the IGDA ARG SIG.

Main Website: http://www.cross-mediaentertainment.com

ARGs & Dena

Dena entered ARGs through a serendipitous search on the Net in 2001 and then later returned through the papers of Jane McGonigal. She has played parts of *Jamie Kane*, *Art of the Heist*, *ReGenesis II*, *The LOST Experience* and *Catching the Wish*. ARGs are a part of her research into cross-media entertainment for she investigates the changes to the design and experience of a work that is distributed across multiple platforms and arts types. For Dena, ARGs fall into a particular part of this emerging form (Dena, 2004a) and are identified by, among other characteristics, the high degree of dependency between all the components distributed across time and space. For an invited report on the 'Current State of Cross-Media Storytelling' presented at the European Information Society Technologies event, Dena extruded design principles from McGonigal's observations and argued they are factors for the moderate-to-high-diffusion-and-acceptance of cross-media entertainment (Dena, 2004b). In 'Texts, Worlds, Realms and Channels', Dena posits a taxonomy of multi-platform works as illustrated through *ReGenesis II* and *The Beast* (Dena, 2005b). In 'Elements of Interactive Drama', Dena draws the parallel between ARG design principles — such as the use of everyday devices, blending of fiction and reality and the flesh-responsiveness of puppet masters as opposed to electronic responsiveness — and the traits of contemporary interactive narratives in general (Dena, 2005a). At her 'Clustering Consciousness' talk she illustrated some of the codes of cross-media entertainment through an analysis of *ReGenesis II* (Dena, 2006a).

Of note, however, is her upcoming talk for the Association of Internet Researchers Conference: 'How the Internet is Holding the Center of Conjured Universes' (Dena, 2006b). In this paper Dena presents a narrative- and ludic-agnostic terminology through a description of the components of *ReGenesis II*. She argues that the creation of Trails and Guides by ARG players are a necessary

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[31]   Sourced from: http://www.seanstewart.org/news/

response to the non-networked state of most transmedia entertainment. 'Orphaned entertainment' is presented as a design flaw that cross-media designers need to address. She also makes the observation that contrary to the romantic view of fan communities, that when playing and interpreting fans make a strong distinction between official and unofficial production. She then argues that the phenomenon of 'frame-less' content (no indicator as to the producer or whether it is ingame) has forced ARG players to develop specialised skills such as advanced IP checks and discourse analysis.

In her blog post and subsequent comments at Writer Response Theory, 'Bots Just Wanna Chat', Dena discussed her chatbot interactions in *Jamie Kane*, highlighting the conflict between game goals and socialising, the personalisation approaches of the game and how this affected the experience, task feedback and the observation that interaction is so much easier as an ARG player because they play themselves (Dena, 2005c). In her post, 'Top ARGs, with Stats', Dena aggregates the player statistics and media responses that have been published for a selection of key ARGs (Dena, 2006c). In a post about *The LOST Experience*, 'It's Alive!', Dena frames the information published in media articles according to design principles she believes were being developed: tiered audience targeting; facilitating inter-country global collaboration; use of old and new media, recent and new LOST releases; providing narrative depth to the overall LOST universe; confluence between TV and ARG storylines; rewarding emerging media use and facilitating branded entertainment (Dena, 2006d).

ARGs will feature prominently in her PhD.

Andrew Losowsky

Andrew Losowsky is a British freelance writer and editor based in Madrid, Spain. He writes for publications such as The Guardian and Grafik, mostly about technology and design. He is also editorial director of the international publishing company le cool. He does not have a university affiliation but has presented an academic paper as an independent scholar.

Website: http://www.losowsky.com

ARGs & Losowsky

Losowsky played *NokiaGame* (1999), *The Beast* (2001), and then kept an eye on the subsequent communities and games that built up from there. He describes the attraction as a fascination with the unpredictable nature of the development of story, both in mixed media and in pace of development, as well as the puzzle elements contained within. Losowsky is keenly interested in new methods of storytelling, both as a writer and reader.

In his paper, 'Alternate Reality Games and the Future of Narrative', Losowsky offers what he sees as common features of ARGs: use of mixed media (multiple media platforms); unpredictability; story as event; player interaction and new publishing models (Losowsky, 2005a). Player interaction is observed as being non-competitive, essential for the existence of the work and influential on the plot. The new publishing models of ARGs include anonymous authorship and free game-play. For Losowsky, an ARG is 'part theatre, part cinema, part the film The Game, part conspiracy theory, part online chat and part old fashioned story telling' (Losowsky, 2005a, 10).

In his 'Puppet Masters' article for The Guardian, Losowsky highlights how some ARGs are created by fans to extend the fictional world of an existing property, and the potential conflicts this can cause (Losowsky, 2003). Also published in The Guardian was an article on BBC's *Jamie Kane* (Losowsky, 2005b). Losowsky cites how the BBC sees *Jamie Kane* as a form of interactive fiction that was designed for 14-18 year olds and is accessible both technically and morally. Losowsky also blogs occasionally on ARGS, and has contemplated the fiction and truth status of them in his 'Separating Truth from Reality' post (Losowsky, 2006).

Jason Mittell

Jason Mittell is Assistant Professor of American Studies and Film & Media Culture at Middlebury College, Vermont. His book, Genre and Television: From Cop Shows to Cartoons in American Culture (Routledge, 2004) offers a new approach to exploring television genres as cultural categories, as exemplified by a number of historical case studies. He has published essays in Cinema Journal, The Velvet Light Trap, Television and New Media, Film History, Journal of Popular Film and Television, and a number of anthologies. He is currently writing a textbook on television and American culture, and a book on narrative complexity in contemporary American television.

Website: http://seguecommunity.middlebury.edu/sites/jmittell

ARGs & Mittell

Mittell looks at ARGS as part of research project for publication and for industry consulting. He is interested in new developments in storytelling within television and digital gaming and so looks specifically at tie-in games like *The LOST Experience*. In his lengthy article published at Flow, Mittell shares the first publication of his close play analysis of ABC's *The LOST Experience* (Mittell, 2006b). Mittell believes the ARG was not living up to expectations and offers the 'competing industrial and narrative norms of television' as the influential agents. The difficulty, Mittell observes, is the need for the producers to 'sustain two storytelling modes'.

> Producers must ensure that whatever is revealed in the ARG is not needed to comprehend the TV series, as the audience of millions for the latter will certainly dwarf the number of players who will stick through "Experience" until its conclusion this fall. Additionally, "Experience" is running simultaneously across the globe, but Lost's schedule outside the US is significantly lagged--for instance, the UK is just now getting episode 7 in the already completed season 2--meaning that any plot revelations in the ARG must be sure not to spoil mysteries within the television series. Thus "Experience" must offer only supplementary inessential narrative information to Lost, allowing the television series to retain centrality within the storyworld (ibid.).

Mittell also notes the difficulty in sustaining an ARG, an alternate reality, when the TV show of LOST is already presented as a fiction. He cites the conflicts that have occurred around the Gary Troup book Bad Twin: the fictional corporation Hanso, for instance, has claimed that Troup did die in the real plane crash which has been fictionalised in the LOST TV series. The integration of advertising into the ARG, he observes, has also 'irritated' many players. It is not so much the embedded advertising, Mittell posits, but the 'tacky and superfluous' inclusion without 'significant payoff'. As an example, Mittell describes the in-game character, DJ Dan, who is anti-corporation but has real life corporate banners on his website. Mittell is optimistic however, and will be following up this post with an extensive analysis of the whole ARG.

> This critique of "The Lost Experience" is meant not to condemn an ambitious attempt to take a cult game form into the mainstream or innovate cross-media storytelling techniques. […] But every medium and storytelling format has its own norms and biases, limitations and possibilities--thus far, the conflicts between these two narrative modes seem to have hurt the game's viability (ibid.).

In his follow up post at the Convergence Culture Consortium blog, 'The Lost Experience: Act II', Mittell reframes ARG into having a three-act structure (Mittell, 2006c). The first act, he explains, was more for ARG players, providing lots of clue gathering activity but little narrative. The second

act appeals more to the serialised television viewing audiences because it is more story-driven and episodic. In this act, hacking activity turned to reading blog posts and watching video-clips. With this shift, Mittell notes, many players left the game, prompting him to elaborate on the difficulty of appealing to different audiences further:

> For most TV viewers, an ARG is far too much of a time-consuming headache to dedicate themselves to. But for ARGonauts, the video diaries of Rachel Blake are too much like viral video to offer the paranoid pleasures of previous ARGs. How will these desires reconcile? (ibid.)

In the academic presentation 'Serial Narratives and Tie-In Games', Mittell has also referred to the Alias ARG and its relationship to the TV show (Mittell, 2006a):

> These examples of emergent fan-driven alternatives to licensed games suggest that fans do want to explore the narrative worlds of a television series via games, but that most options presented thus far fall short in capturing what makes a series like Alias so beloved by viewers. Contemporary television narratives like Alias and Lost seem inspired by the complexity and engagement of videogames, and thus are ripe for cross-media storytelling as long as creators can better realize and maximize the particular possibilities offered by each medium. Once they do, the derisive attitude toward licensed games may give way to a dedication to new paradigms of convergent narratives (ibid.).

Mittell will be covering TV-based ARGs in a book that is in-formation.

Henrik Örnebring

Henrik Örnebring has a PhD in Journalism and Mass Communication from Göteborg University, Sweden, and is currently Senior Lecturer in Television Studies at Roehampton University, London, UK. His research interests include media history, particularly the history of television and the history of journalism (both areas on which he has published previous work). He is also interested in using historical perspectives and historical studies to analyse and understand contemporary developments in media; such as processes of increasing media convergence, the ongoing fragmentation of media audiences, and the ways in which new digital media and digital technologies affect 'traditional' media.

ARGs & Örnebring

Örnebring discovered ARGs about two years ago through an article in a gaming magazine. He was interested in them, he explains, as a cross-media phenomenon and as an area where both commercial and non-commercial actors are involved. His first paper on ARGs, 'Extending the Narrative of Alias: the emerging cultural economy of Alternate Reality Gaming', Örnebring contributes to the academic discussions about fandom and so-called 'American Quality Television' (Örnebring, 2006). Örnebring argues that

> ARGs are an important area of study because they serve as a focal point for several different but interconnected theoretical and empirical issues in media and cultural studies in general and television in particular.

Örnebring explores ARGs through the lens of fandom but is careful to highlight how some theories of fandom are not appropriate:

Not all ARGs are connected to an existing media property. Many fan- or grassroots-produced ARGs are set in their own fictional universes, and grassroots-produced ARGs are currently at least as common as commercially-produced ARGs. This means that many of the members of the ARG community are perhaps more correctly described as fans of ARGs, rather than a particular media text or set of media texts.

ARGs, Örnebring argues, are 'closely related to the rise of so-called quality television or American quality television' (AQT). Drawing on Thompson's description of AQT, he situates ARGs, and in particular the Alias ARGs, as part of the commercially-motivated trend towards creating properties which are 'multi-layered, literary narratives, ensemble acting, complex backstory and serial "memory"'.

Örnebring outlines four 'unique elements that sets it [ARGs] apart from other media genres' (Örnebring, 2006). Firstly, ARGs are always based on a fictional universe that is either created from scratch or builds on an existing fictional world. Second, a central characteristic of ARGs is interactivity, which, for Örnebring, is 'the opportunity for participants to communicate with the fictional universe'. The third characteristic of ARGs is that the 'fictional universes are presented in a narrative format'. In this category, Örnebring delineates between clues and puzzles that are just solved for the purpose of getting to another one, and clues and puzzles that 'form part of a coherent narrative set in the fictional universe'. The final characteristic is that 'ARGs can be divided into two types based on the motivations of the producers […]: commercial and non-commercial'. Commercial ARGs, he explains, 'are those ARGs that are part of the marketing campaign of a product […] or other media text'. They are a sub-type of viral or buzz marketing, are usually free to participate in, the integrity of the fictional universe is usually viewed as important and the products are not often revealed until the end. Non-commercial ARGs are produced by fans, do not market a product and are usually non-profit. ARG players however, he notes, do not distinguish between commercial and non-commercial ARGs, because the emphasis is on the game experience.

Örnebring undertakes the first comparison of commercial and non-commercial ARGs, which are also within the same 'fictional universe': Alias. He analyses the producer-created (ABC) ARGs for the first (Oct 01- March 02) and second seasons (Aug 02 – Nov 02, March 03) and the fan-created ARG: Omnifarm (2005) according to the characteristics he proposes. Here his summary chart from the paper, republished here with kind permission from Örnebring:

Point of comparison	*Alias* ARGs Season 1-2	*Omnifam* ARG
Fictional universe	Based directly on the TV show.	Based on the backstory of the TV show; fills in syntagmatic gaps.
Narrative extension	No or little overall narrative in ARG. Narrative extension explicitly tied to specific episodes, events and characters on the TV show.	Strong overall narrative in ARG. Narrative extensions based on the backstory; specific episodes, events and characters rarely (if ever) mentioned.
Interactivity	Online only. No opportunity for participants to affect the narrative.	Online and offline. Opportunity for participants to influence the narrative (ending in particular).

Table 1: Comparison between Alias ARGs Season 1-2 and the *Omnifam* ARG (Örnebring, 2006)

He then argues what his comparison shows is that:

> ARGs could be viewed as part of an ongoing contestation of narrative, where (fan) audiences increasingly feel that they have (or ought to have) some measure of ownership of a text, and where media organisations, faced with a world of easy-access downloading and file sharing, increasingly want to retain control over their intellectual property.

His ongoing research into ARGs includes a major project examining the emerging cultural economy of ARGs and the ARG subculture.

Marc Ruppel

Marc Ruppel is a PhD candidate at the University of Maryland College Park. He has presented papers on several subjects from Native American literature and science to new media and narrative theory, with a particular focus on stories told across media. Marc has also taught courses focusing on topics ranging from new media literacies to film, and his dissertation, tentatively titled "Triggers and Traces: Convergence, Divergence and the Cross-Sited Narrative", is currently in progress.

Website: http://www.things.wordherders.net

ARGs & Ruppel

Ruppel's first interaction with an ARG was with *The Beast*. He was, Ruppel explains, fascinated by the fluctuations between something like a late night in-game phone call and the online reactions of those who received it, the give and take between automated (i.e. top-down) narrative and emergent speculation and information aggregation. Since then he has followed and participated in several ARGs, ranging from the National Treasure ARG to *I Love Bees*.

Ruppel's research into ARGs is directly related to his PhD dissertation on cross-sited narratives, stories told across a diverse media set. He feels ARGs are becoming the pervasive model of narrative distribution and will be dedicating a chapter in his PhD to the subject. Ruppel explains that ARGs traffic in narrative information, and so are primarily narrativistic. He is investigating ARGs via historical, cultural, quantitative and close-playing modes of analysis.

In his seminar paper, 'Hybrid Channels', Ruppel investigates the cognitive and cultural phenomenon of cross-sited narratives, and argues that works such as *I Love Bees* and The Matrix represent a new mode of storytelling that presents significant challenges to both cognitive theory and narratology (Ruppel, 2004). In his paper presented at the Society Literature and Science Conference, 'Triggers and Traces', Ruppel introduces his terminology and methodology for the study of cross-sited narratives and includes a significant section on ARGs (Ruppel, 2005a). As he explains in his paper 'Learning to Speak Braille', ARGs fall within 'horizontally cross-sited narratives', for they function in the 'expansion of a narrative across media' (Ruppel, 2005b). Ruppel illustrates in his PhD qualifying exam, the 'migratory cues' of *I Love Bees* such as the flash of the URL on the TV commercial (ibid.), cues defined as

> a signal towards another medium—the means through which various narrative paths are marked by an author and located by a user through activation patterns (ibid.).

At his talk at the Digital Humanities Conference in Paris, 'Many Houses, Many Leaves', Ruppel

outlines how the current archiving practices are informed by 'single-medium logic' and so are therefore an insufficient approach for works such as ILB (Ruppel, 2006). Ruppel also discusses *The LOST Experience* at his blog, reframing it to include the TV show:

> I think it's possible to view the entirety of the LOST storyworld, TV show included, as perhaps the most pervasive ARG ever created, with millions upon millions playing it every week, every day, without even realizing it (Ruppel, 2006b).

Ruppel is continuing with his research into LOST and other ARGs, looking into the demographics of who does what with its different incarnations. They will be discussed extensively in his PhD.

Future Directions

The research briefly discussed here provides helpful guidance for producers of ARGs and of cross-media/transmedia/multi-platform entertainment in general. It is clear from some failed attempts that the ARG form is not easily cloned and so needs to be employed with careful consideration of its mechanics and the community. At present, ARG creators are extremely reticent to share their design secrets and so the insights that academics offer will assist in the development and expansion of the craft. This is perhaps the gift that academic study can offer ARGs: a non-commercial investment into its future.

However, there are obstacles to the study of ARGs that researchers have recognised:

- Preservation of ARGs [Alexander]
- Researchers need to collaborate to study these works. Just as it is impossible for a single person to negotiate all the texts in an ARG, it is impossible for a single researcher to experience and document everything in an ARG. Researchers need to pool their collective intelligence when an ARG is in play just like the players. [Dena]
- 'I do think that, if we are to truly make ARGs a viable subject of our research, we have to address the potential dilemma of archiving these works. So much of an ARG is temporally bound. How many payphone conversations, for example, were lost during I Love Bees? How many websites, TV ads, video games, will potentially be lost as the years pass by? In order to prevent these narratives from being relegated to an Agrippa-like Gibsonian bookmark of expiration, there has to be a way to archive these narratives. Beginning with the message boards themselves is a good start.' [Ruppel]

What are the future areas of research the academics feel are pertinent?

- There needs to be "audience" analysis - gender, race, location, etc. [Alexander]
- More researchers need to look at the design of non-mainstream ARG forms [Dena]
- Research more the intersection of formal and social or cultural meanings—where gameplay or storytelling meets commodification, viral marketing, etc. [Jones]
- Future research should address 'ARGs as a kind of marketing (both from the producers' and the audiences' perspectives).' [Örnebring]
- 'A comprehensive empirical study of the ARG community/subculture, getting basic data about the cultural practices as well as demographics of this group of media consumers.' [Örnebring]
- 'We really need more solid documentation and case studies about the learning experiences that go on in ARGS. So one could go to a policy maker or textbook publisher and say "Look, here is a case study of Pedro Smith. In the course of playing this ARG he learned how to set up a blog, coordinate 50 people to do x, etc. He then used the skills to set up a blog about

environmental hazards in his area and rally a group of concerned citizens." This is why this needs to be in our school system.' [Purushotma]

- 'Comparative studies of ARGs & other narrative forms/game modes.' [Mittell]

And so ends the section on ARGs and Academia. This may be the first inclusion of an academic section in a major games whitepaper and hopefully it will not be the last. We believe that scholarly research can provide industry with as much inspiration and understanding as ARGs gives academics.

Appendix 1: Academic Citations

These are the publications mentioned in the overviews of the academics. They are listed here in alphabetical order (by surname).

Bryan Alexander

Academic

- Alexander, B. (2005a) 'Alternate Reality Games (ARG)' presented at New Media Consortium Online Conference on Educational Gaming, Online, 8 Dec.
- Alexander, B. (2006a) 'A New Approach to Gaming and Education: Alternate Reality Games' presented at ELI Annual Meeting: Advancing Learning: Insights and Innovations, San Diego, CA, 30 Jan. Some detail at available at: http://infocult.typepad.com/presentations/2006/01/test.html
- Alexander, B. (2006b) 'Alternate Reality Game Practice: Puzzles and Design Workshop' presented at ELI Annual Meeting: Advancing Learning: Insights and Innovations, San Diego, CA, 30 Jan.

Substantial Blog Posts

- Alexander, B. (2005b) 'Antecedents to alternate reality games', Infocult, 5 Oct [Online] Available at: http://infocult.typepad.com/infocult/2005/10/antecedents_to_.html
- Alexander, B. (2006c) 'ARG vs Wikipedia vs blogosphere', Infocult, 16 Aug [Online] Available at: http://infocult.typepad.com/infocult/2005/08/arg_vs_wikipedi.html
- Alexander, B. (2006d) 'Gene Wolfe's pre-ARG story', Infocult, 25 Jan [Online] Available at: http://infocult.typepad.com/infocult/2006/01/gene_wolfes_pre.html
- Alexander, B. (2006e) 'Tackling the Lost ARG: first go ', Infocult, 5 May [Online] Available at: http://infocult.typepad.com/infocult/2006/05/tackling_the_lo.html
- Alexander, B. (2006f) 'Tackling the Lost ARG: part 2', Infocult, 7 May [Online] Available at: http://infocult.typepad.com/infocult/2006/05/tackling_the_lo_1.html
- Alexander, B. (2006g) 'Tackling the Lost ARG: part 3', Infocult, 9 May [Online] Available at: http://infocult.typepad.com/infocult/2006/05/tackling_the_lo_2.html
- Alexander, B. (2006h) 'Tackling the Lost ARG: part 4', Infocult, 10 May [Online] Available at: http://infocult.typepad.com/infocult/2006/05/tackling_the_lo_3.html
- Alexander, B. (2006i) 'Tackling the Lost ARG: part 5', Infocult, 8 June [Online] Available at: http://infocult.typepad.com/infocult/2006/06/tackling_the_lo.html

Christy Dena

Academic

- Dena, C. (2004a) 'Towards a Poetics of Multi-channel storytelling' presented at Critical Animals, This Is Not Art Festival, Newcastle, 1 Oct.
- Dena, C. (2005a) 'Elements of "Interactive Drama": Behind the Virtual Curtain of Jupiter Green" published in Performance Paradigm 1(1).
- Dena, C. (2005b) 'Texts, Worlds, Realms and Channels: Towards a Taxonomy of Polymorphic Works' presented at SCAtharsis Monthly Seminar Series, University of Melbourne, 17 Aug.
- Dena, C. (2006a) 'Clustering Conscious: Towards Polymorphism' presented at SEAFAM Research Day, University of Sydney, 16 June.
- Dena, C. (2006b) 'How the Internet is Holding Together the Conjured Universes' presented at Internet Research 7.0: Internet Convergences, Association of Internet Researchers, Brisbane, Queensland, 27-30 Sept, 2006.
- Forthcoming PhD.

Industry Reports

- Dena, C. (2004b) 'Current State of Cross Media Storytelling: Preliminary observations for future design' presented by proxy (Monique de Haas) at 'Crossmedia communication in the dynamic knowledge society networking session' at the European Information Society Technologies (IST) Event 2004: Participate in your future, The Netherlands, 15 Nov.

Substantial Blog posts

- Dena, C. (2005c) ' Bots Just Wanna Chat ', Writer Response Theory, 28th May [Online] Available at: http://writerresponsetheory.org/wordpress/2005/05/28/bots-just-wanna-chat/
- Dena, C. (2006c) 'Top ARGs, with Stats', Cross-Media Entertainment, 4 March [Online] Available at: http://www.cross-mediaentertainment.com/index.php/2006/03/04/top-args-with-stats/ Last modified: 4 June, 2006.
- Dena, C. (2006d) 'It's Alive!: Lost ARG has begun', Cross-Media Entertainment, 4 May [Online] Available at: http://www.cross-mediaentertainment.com/index.php/2006/05/04/its-alive-lost-arg-has-begun/

Henry Jenkins

- Jenkins, H. (2004) 'Chasing Bees, Without the Hive Mind', Technology Review, 3 Dec [Online] Available at: http://www.technologyreview.com/read_article.aspx?id=13561&ch=infotech
- Wallis, A. and H. Jenkins (2006) 'GameSetInterview: Henry Jenkins On The Responsibility Of Games', GameSetWatch, 5 June [Online] Available at: http://www.gamesetwatch.com/2006/06/gamesetinterview_henry_jenkins.php
- Jenkins, H. (forthcoming) Convergence Culture: Where Old and New Media Collide, New York University Press, New York
- Jenkins, H., R. Purushotma, et al. (forthcoming) 'Confronting the Challenges of Participatory Culture: Media Education for the 21st Century', Project New Media Literacies. http://www.projectnml.org.

Steven E. Jones

- Jones, S. E. (2005) 'This Medium will Metastasize: Videogames and Textual Studies' presented at MLA, Washington, DC, 29 Dec.
- Book in progress: Textual Studies and Video Games.

Andrew Losowsky

Academic

- Losowsky, A. (2005a) 'Alternate Reality Games and a future of narrative' presented at Science

Fiction(s): A Study Day on Science Fiction Film, Television, Literature and New Media, University of Nottingham, 19th August [Online] Available at: post Prandial http://www.losowsky.com/weblog/archives/009727.html.

Media Articles

- Losowsky, A. (2003) 'Puppet Masters', The Guardian, 11 Dec [Online] Available at: http://www.guardian.co.uk/print/0,3858,4815979-110837,00.html
- Losowsky, A. (2005b) 'BBC's Teen Dream a Risky Business', The Guardian, 23 June [Online] Available at: http://technology.guardian.co.uk/online/story/0,,1511977,00.html

Substantial Blog Posts

- Losowsky, A. (2006) 'Separating Truth from Reality', post Prandial, 8 May [Online] Available at: http://www.losowsky.com/weblog/archives/2006/05/08/separating_trut.html

Jane McGonigal

Chapters & Journal Articles

- McGonigal, J. (2003a) ''This Is Not a Game': Immersive Aesthetics and Collective Play' presented at MelbourneDAC: the 5th International Digital Arts and Culture Conference, RMIT, Melbourne, Australia, May 19 - 23, published at School of Applied Communication, RMIT [Online] Available at: http://hypertext.rmit.edu.au/dac/papers/McGonigal.pdf . PowerPoint available at: www.avantgame.com.
- McGonigal, J. (2003b) 'A Real Little Game: The Performance of Belief in Pervasive Play' presented at Digital Games Research Association (DiGRA) "Level Up" Conference, November, published at www.avantgame.com.
- McGonigal, J. (2005a) 'Supergaming! Ubiquitous Play and Performance for Massively Scaled Community', W.B. Worthen (ed.) Modern Drama: Special Issue on Technology, 48(3): 471-491. Also published at www.avantgame.com.
- McGonigal, J. (2006a) 'The Puppet Master Problem: Design for Real-World, Mission-Based Gaming' in Pat Harrigan and Noah Wardrip-Fruin (Eds) Second Person: Role-Playing and Story in Games and Playable Media, MIT Press. Also published at www.avantgame.com.

Presentations

- McGonigal, J. (2004a) 'Alternate Reality Gaming: 'Life Imitates ARG'' presented for the MacArthur Foundation Board of Directors, Nov. PowerPoint from available at www.avantgame.com
- McGonigal, J. (2004b) 'The Runaway Game: Spectacle and Performance in Public Play' presented at StoryEngines Conference, Stanford University, February, published at www.avantgame.com
- McGonigal, J. (2005b) 'Experimental Gameplay: I Love Bees' presented at Game Developers Conference, March. PowerPoint available at www.avantgame.com
- McGonigal, J. (2005c) 'I Love Bees: A Buzz Story' presented at Word of Mouth Marketing panel at AD:TECH, San Francisco, 25-27 April. Powerpoint available at www.avantgame.com
- McGonigal, J. (2005d) 'Alternate Reality Learning' presented at Creative Design panel at the E3 Education Arcade, Los Angeles, 15-17 May, published at www.avantgame.com
- McGonigal, J. (2005e) 'Puppetmasters and Performance' presented at HUMlab, May, Umea, Sweden. PowerPoint from available at www.avantgame.com
- McGonigal, J. (2005f) 'Down the rabbit hole' presented at 050505: Center for New Media Groundbreaking, May. PowerPoint from available at www.avantgame.com

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  Blog post

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