Reality Ends Here Design Brief: An Environmental Game for Media Arts Students

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Abstract: Reality Ends Here is an environmental game designed to effect immediate change in the community of learners at the USC School of Cinematic Arts (SCA). Over the course of the project's 120 day run, collectible cards, rumors, secret websites, and a mysterious black flag drew more than 150 students into an intense voluntary underground social game involving collaboration, strategy, and artistic experimentation. By connecting students to one another in unpredictable and serendipitous ways, and by providing a framework for meaningful play and performance, the game transformed a collection of heavily siloed academic divisions into a productively chaotic and interdisciplinary community of practice. This paper introduces *Reality Ends Here*, defines the emerging practice of environmental game design, and discusses the central role of player agency in the design of the experience.

Introduction

Reality Ends Here is an environmental game designed to accelerate serendipity, social discovery, and collaboration among students in the disparate divisions of the USC School of Cinematic Arts. It employs a wide range of technologies and practices, from a game system driven by digitally-connected collectible cards to a web interface integrated with Facebook, Twitter, YouTube, and other social media platforms.

Gameplay in *Reality Ends Here* takes place in every corner of its players' lives, as they collect, share, trade, and combine game cards in order to generate creative prompts which are then used to guide the making of unique media artifacts and the staging of real-world events. By sharing the resulting creative works through the social media platform at the center of the game, players connect with one another across disciplinary and institutional boundaries and unlock customized "trailheads" leading to intimate and offbeat encounters with SCA alumni, artists, and other industry professionals.

The 2011 implementation of *Reality Ends Here* produced a tangible positive impact on the culture of the SCA over its 120 day run, bridging the gaps between traditionally siloed disciplines, generating a rich archive of creative works and fresh assessment data for an entire cohort of freshmen, and creating an atmosphere of intellectual and artistic experimentation. The second iteration of the game is scheduled to launch in August of 2012.

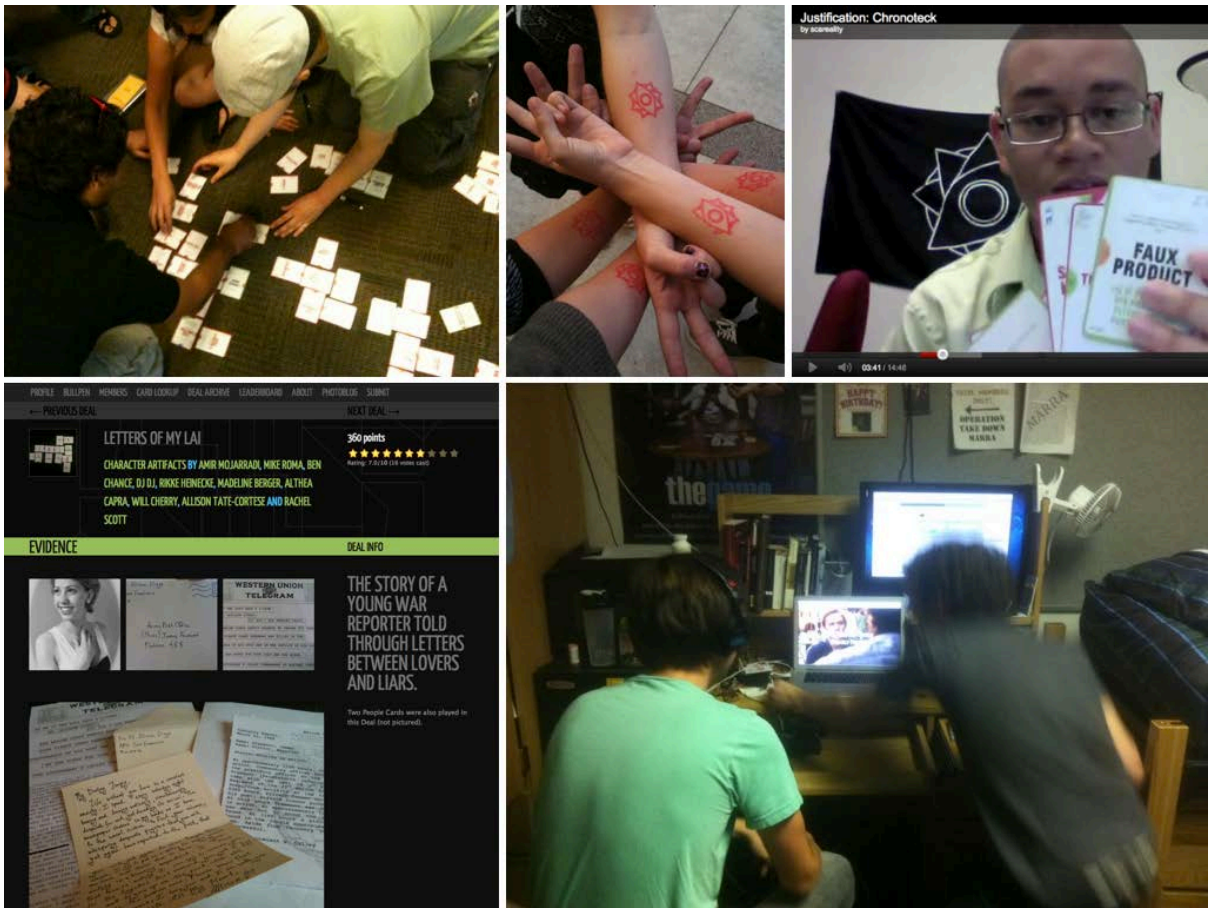

Figure 1: **Reality Ends Here, various play contexts.**

Henry Jenkins describes the impact of the game as follows:

> [This] is the first time I've seen such a large scale experiment in integrating [game] activities across an entire school to orient entering students to a program and to serve a range of instructional goals. The passion the game is motivating in USC students is palpable. And I can tell you that many of the faculty, who have gotten pulled into the game through one play mechanic or another, are feeling a real pride in their school for its willingness to embrace this kind of experimentation and innovation. (Jenkins, 2011)

Environmental Game Design

"Environmental game design" is a new term proposed here to describe the practice of designing games with and around the lived environment of players so as to manifest an impact on the way in which that environment is used. This terminology is drawn from the domains of urban planning and architecture. David Mocarski, Chair of the Environmental Design program at the Art Center College of Design, describes environmental design as "a human-centered discipline that is focused on the design of a user's total experience," involving "spatial, object and emotional communication." (Mocarski, 2012) Designers working in environmental design "plan, design, and implement systems . . . that are added to or overlaid onto and into existing or planned places and spaces" in order to enable "wayfinding," "interpretation," and "placemaking." (Calori, 2007) Environmental game design is the application of game mechanics to these ends.

This terminology is chosen because it describes a very specific use case for games. However, I also choose the term, "environmental game" to describe Reality Ends Here in order to make a break from the conceptual baggage associated with terms like "alternate reality games," "pervasive games," "big games," and "location-based games," among others. These terms entered into the design consciousness during the first half of the first decade of the 21st century. In their initial formulations, they referred to relatively specific domains of design practice. However, as the decade wore on, the

boundaries between these domains became increasingly fuzzy, resulting in terminology with ambiguous and contested meanings.

For example, in its initial usage, the term “alternate reality game” referred to a very distinct kind of temporally-bounded puzzle- and event-driven interactive transmedia scavenger hunt. (See Watson, 2010) However, over the past several years, this term has increasingly been used to describe numerous other kinds of practice. Games such as *SFZero* (2006), *World Without Oil* (2007), and *Socks, Inc.* (2010), among many others (including *Reality Ends Here*), are routinely referred to as ARGs, even though their structure is fundamentally distinct from classically-structured ARGs such as *I Love Bees* (2004), *Year Zero* (2007), and *Flynn Lives* (2009). In spite of their sensitivity to the interests and competencies of active audiences, classically-structured ARGs are effectively “top-down” storytelling vehicles designed around a core activity of collective “search and analysis.” (McGonigal, 2007) In this sense, such ARGs are not actually games. Rather, they are a form of interactive participatory storytelling which generate player experience through the machinations of behind the scenes “puppet masters” rather than through the rules and procedures of game mechanics. Games like *Reality Ends Here* work in a completely different way, largely eschewing top-down storytelling and instead producing diffuse and improvisatory “bottom-up” narratives through media participation structured by genuine game mechanics. While the term “alternate reality game” may have a utility in short-handing the notion that a given game is “played in the real world” or “woven into the fabric of everyday life,” this utility is increasingly outweighed by the confusion it produces.

The simple fact that some ARGs are truly games, while others are not, when considered in light of the growing interest in using real-world play to bring about change in *this* reality rather than an “alternate” one, is more than enough reason to seek out a new and more capacious term of art. A common solution to this challenge is to describe a work as a “pervasive game.” Finnish researcher Markus Montola defines a pervasive game as “a game that has one or more salient features that expand the contractual magic circle of play socially, spatially or temporally.” (Montola, 2005) While this definition is sufficiently broad so as to include the range of interaction designs present in classically-structured ARGs and newer forms alike, the term itself is wanting. The adjective, “pervasive,” carries with it far too much specificity. Taken literally, a pervasive game would be a game that “exists in or spreads through every part of something.” It is impossible to imagine any game meeting the high bar of actually being “pervasive.”

Other terminology is similarly either too specific or too vague. “Location-based games” require “a link between locations in the physical world and game-play” and the use of “location-aware technologies, often mobile phones, as a means of localization and/or communication.” (Ejsing-Duun, 2011) Environmental games need not use any kind of digital technology, and nor are they necessarily linked to purely physical environments. Similarly, terms such as “big games” and “street games” evoke the urban play activities on view at festivals such as *Hide and Seek* or *Come Out and Play*, but fail to account for games that take place in other kinds of lived environments. “Ambient games” comes closer to being a satisfactory definition, but fails to evoke the active nature of play—an ambience is something that happens in the background, whereas a game requires agency. Finally, “environmental interaction design” might have a slightly friendlier ring to those who are put off by the notion of games, but the fact remains that games and interaction and distinct from one another: an iPhone is an interactive device, but it is not a game. We therefore propose the term, “environmental game” to describe the category of design practice to which *Reality Ends Here* belongs. Work produced in this category of practice is designed to address and leverage the conditions present within specific lived environments in order to bring about changes in those environments, and uses game mechanics to achieve this end.

A Procedural Creative Prompting System

Reality Ends Here is an environmental game driven by a card-based “procedural prompting system” (see Figure 2): by sharing, trading, and combining cards, players create challenges within the constraints of a connectivity play mechanic.

As designers, we decided from the start that it was important that the challenges in our game come from the players, not us. We felt that a set of challenges curated “from on high” would take away many crucial aspects of agency and authorship from our players—and since those things are at the heart of the kind of creative and performative impulses that underly engagement with our game, we decided that we needed to protect them.

On the other hand, we understood that a total lack of constraints could be hobbling to creativity, particularly for players who were not already ensconced in strong "maker" or DIY communities and practices. As Orson Welles famously said, "the enemy of art is the lack of limitations." Brainstorming, story workshopping, or any kind of creative spitballing without clear constraints and anchors will often drift into outright confusion.

To address this issue, we devised a simple card game that structures and limits creative brainstorming in a manner similar to a Tarot deck. Through this card interaction, players generate creative prompts of varying complexity.

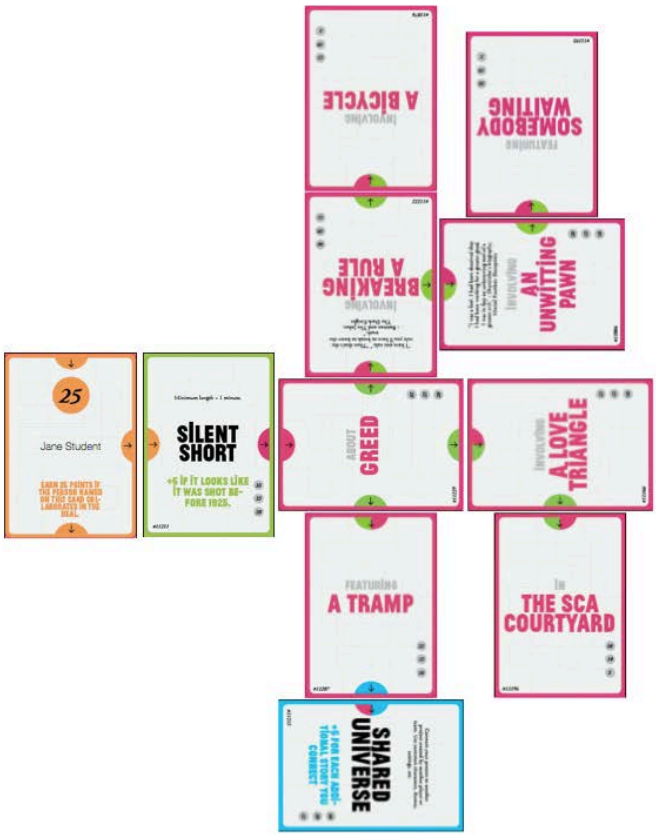

Figure 2: **Sample card combination. By connecting cards in this manner, players generate creative media-making prompts.**

In order to score points in the game system, players must respond to the creative prompts that they have created by producing media projects (or "Deals") across a range of platforms. Depending on the cards used in the prompt, players may end up making films, staging plays, designing games, drawing and inking graphic novels, or making one of 49 other possible media artifacts. Once players complete a project, they submit their work through the game's website, then "justify" it via webcam, explaining how they satisfied the conditions of the creative prompt created through the card game. All this material—including a clickable list of cards used in the Deal, the completed project, the justification video, and the list of those who collaborated on the project (including links to their profiles)—then appears live on the game site, sharable with the world. Readers of this document who wish to see the projects produced by players of *Reality Ends Here* may view the archive of completed Deals at http://reality.usc.edu/deals/.

Players may work with as many other players as they like, and may submit as many media artifacts as they can make. The more media artifacts they submit, the more points they will earn. Additional points can be earned by commenting on the work of other players, posting status updates, and sharing photos. By scoring points, players advance on a multi-category leaderboard and can earn access to special experiences and mentorship encounters related to media making and analysis.

Once underway, the game proceeds in weekly cycles, beginning on Sunday evenings. At the start of each week, the Weekly Leaderboard is reset. The top four players who earn the most points during a given week are declared the "Weekly Winners." Weekly Winners receive special mentorship experiences involving offbeat and personal encounters with alumni working in various facets of the media industries. These encounters typically take place during the following week. This weekly points competition enables new players to join in and compete on a level playing field regardless of how long the game has been running for prior to their induction. In the absence of weekly point resets, early adopters of the game would gain an unfair points advantage over players who join in later phases, resulting in a sharp drop off in player induction in the mid-game and beyond.

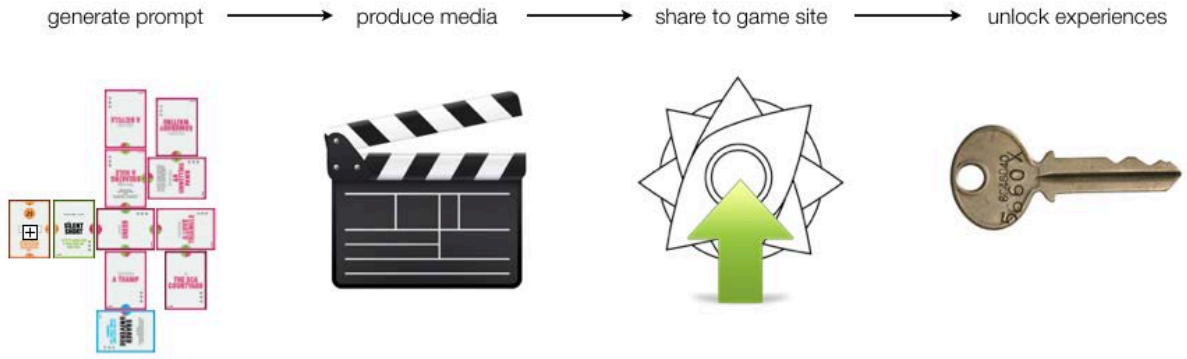

Figure 3: **Schematic of complete play cycle. Players generate prompts, produce media artifacts in response to these prompts, then share them to the game site. Based on the complexity of the projects they submit, players earn variable numbers of points in the game system. Crossing certain points thresholds unlocks special mentorship experiences.**

Offline collaboration, online performance, and built-in assessment

The game's website also serves as a social networking platform for SCA students, faculty and alumni. All players have profiles on the site, which aggregate all their Deal-making activity and status updates, along with displaying any photos they have submitted to the site. Profiles also include an evolving data visualization that is generated based on the kinds of Deals and activities that the player has been involved in. This rich media environment aggregates into a database and constitutes a rich trove of at-a-glance assessment data for both faculty and for students keen on discovering new collaborators. This data is currently being analyzed by the design team and by outside researchers, including Benjamin Stokes of the Annenberg School of Communication at USC.

While most of the site is publicly viewable, including player profiles, some social networking functionality is semi-private, primarily because we wanted to create a kind of exclusive workshopping space—which we've named "The Bullpen" after a historic cinema school workshop space here at USC)—where players can feel free to brainstorm, ramble, and even trash-talk "behind the curtain." Other features not immediately visible to non-players include the Leaderboard, which tracks scores on a weekly and overall basis in a variety of dimensions, the Card Lookup feature, which players can use to view and discuss individual cards in the archive, and the Members Directory, which players can search by name or keyword when looking for collaborators or new connections. Further, many players have set up their own online discussion spaces to strategize their game activity, using platforms such as Facebook, Twitter, and Google.

Informal, Optional, "Secret": Activating Player Agency

The game is not mandatory for SCA students, nor is it openly publicized at the school. In fact, we went to lengths to keep it under the radar. The game is meant to belong to the players, not the other way around. Players discover it on their own, either through word of mouth or by picking up on clues left around the campus—clues hidden in old cameras, left near our mysterious flag which intermittently hangs off the third floor balcony, or hanging from LED throwies we've stuck to the underside of staircases. One by one or in groups, they come to the Game Office, undergo the initiation rites, receive their game cards and website logins, and start playing.

Why did we go to these lengths? After all, we have more or less complete control over our player population. They are students. We could tell them to do something and they would have to do it. That is how they expect their education to work. So why don't we just say to them: go learn about the other divisions of the school, form into interdisciplinary teams, and then make x number of creative projects? We have the power to give assignments and set deadlines. We could enforce our demands with grades. Why did we make all this extra work for ourselves?

Outside of an educational institution, we would not have the ability to "conscript" our player population. In the open market, the best we could hope for would be to capture a decent percentage of our potential players through savvy communications design and the creation of a genuinely engaging product. In this competitive context, the notion that one could simply compel all of a given target demographic to sign up and play is something that almost any design team would find difficult to resist. But in the end, the wise designer wouldn't give in to that hypothetical temptation — and for the very same reason that we didn't simply turn the game into an assignment. And that reason can be found in understanding what it is we mean when we say the word, *play*.

Here is a classic definition of play from Johann Huizinga's *Homo Ludens*:

> Summing up the formal characteristic of play, we might call it a free activity standing quite consciously outside 'ordinary' life as being 'not serious' but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings that tend to surround themselves with secrecy and to stress the difference from the common world by disguise or other means. (Huizinga, 1955, p. 13)

One can take issue with much of Huizinga's definition. For example, the very nature of *Reality Ends Here* is that it is an environmental game, and does not proceed within the "proper boundaries" associated with familiar games such as board games or video games. Further, proponents of art games and impact games would doubtless bristle at Huizinga describing games as being "not serious." But despite these definitional shortcomings, there is one thing in Huizinga's definition that is fundamental to any notion of what play is, and that is that it is a *free activity*.

Think of the enormous amounts of energy people invest into genuine play activities. A ready example is that of the young *Pokémon* player, who will, entirely without supervision or deadlines or course readers, master massive volumes of information about the *Pokémon* universe, the rules of the game, and the kinds of strategy and tactics required to win. They will do this because the game is personal to them. It means something in their world. It has a social value on the playground and in the lunchroom. It is a structured space within which they can explore different kinds of identity, mastery, and leadership. It belongs to them. They have chosen it. They have "opted in."

When players opt in to a play experience, they bring with them the awesome power of their own agency. In the case of a game like *Pokémon*, players will yield up hundreds upon hundreds of hours of precious childhood playtime to master the game. That's the power of agency, and that's what engaging people in true play experiences can do.

Interaction designers know that they need to protect player agency at all costs. Within a given game system, this means thoughtfully designing play mechanics such that player action visibly and meaningfully shapes the evolving state of the game. If the game becomes random or deterministic, if it ends up feeling like everything is "on rails," or if the relationship between the players' choices in the game and the effects those choices have on the system is not apparent, players will cease to feel in command of the experience and will invest less of themselves into the game. And once a certain threshold is crossed, players will opt out entirely.

Crucially, player agency must also be protected in the context of the invitation to play the game in the first place. In most game design situations, this is something designers don't have to worry about, since games are typically conceived of from the start as something that players will only play if they feel like doing so. But in the realm of impact games, this isn't always the case. In education, for example, students are often "told" to play games in lieu of traditional assignments. Telling players to play in this manner is a sure-fire way to compromise their personal investment and sense of agency.

Action, Not Simulation

Of course, personal investment and sense of agency are not always of prime importance in applied game design. The point here is not that educational games or other kinds of impact-oriented games should always be agency-rich opt-in experiences. Every design brief is different. In many instances, games can be effectively used purely as simulation tools, or as methods for constructing complex arguments or presentations that would be difficult or impossible to execute using other media forms. Students can be asked to interact with a simulation, and can genuinely learn something about the system that the simulation models, even if it's not something they would normally interact with of their own accord.

But our mandates are about action, not simulation. They are about what the players are *doing*, not what we are *showing* them. The objective of *Reality Ends Here* is to transform the environment at the SCA, not merely deliver information. We needed to create a play experience that would bring about the kinds of social and creative situations that the school had identified as being missing or under-represented. These situations couldn't just be one-offs. This was about effecting lasting change. It was about enlivening—and, in some senses, creating—a community. To make that happen, we would have to inspire sustained and deeply personal involvement in the game. That kind of passion isn't something you can tell people to have. They have to find it on their own. Students discover *Reality Ends Here* the same way they discover things like the college radio station. They hear about it, and if they like the sounds of it, they show up and pour their hearts into it.

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