Bodies, Games, and Systems:

Towards an Understanding of Embodiment in Games

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Bodies Through the Glass

In his book *Pilgrim in the Microworld*, David Sudnow describes a specific moment in his engagement with the game *Breakout* wherein he, after two weeks of solid play, is about to finally clear his first board and, at a crucial moment, makes the decision semi-consciously to ignore a phone call in order to achieve his goal. Sudnow does an excellent job of describing how, over the course of his two weeks of play, he has built up to a fever pitch of tension and skill to arrive at a moment that has him utterly involved, utterly engaged in the system of the game. Involved to the point that he is willing to ignore the ringing of a phone, the intrusion of the mundane world on his systemic, affective circuit.

Reading this passage, I confess that it surprises me that there has ever been a “games-as-art” debate. Sudnow’s experience seems so powerfully indicative of the eventual ability of games to develop affective statements that it seems naïve not to imagine that they would evolve and mature the same way that other media have. I realize that I have a biased perspective on this issue, given the amount of time that I’ve spent making and playing games, but if *Pilgrim* says one thing it seems to be that, despite the fact that *Breakout* is a simple game (and in terms of its mechanics and aesthetics, it does indeed seem fairly simple) *Breakout* offers occasional moments of incredibly powerful emotional investment, even in systems that might seem otherwise to be trivial or banal. But what is it about *Breakout* that allows Sudnow to develop that engagement? In *Pilgrim*, Sudnow talks about the way that while he was playing *Breakout*, he came to understand that he “wasn’t so much interfaced on screen as that [he] was ‘interpictured’ there” (49). Sudnow has an experience of extension, from the physical reality of his body to the digital system of the game. Sudnow describes the control as “eyes and hands in an altogether
novel world of action” (49). It is in this novel world that I’m interested, this sense of bodily extension that players experience as a function of controlling games.

Bodily extension is in part what is responsible for the experiences that get described as “engagement” or “immersion,” and that it offers some unique possibilities for the creation and deployment of affective statements. Through the lens primarily of my own work, I will discuss how games develop relationships of embodiment that locate players as both inside and outside of games, and discuss the kinds of affective results that are possible from this bilocation. While I think that all games offer spaces for players to explore these types of extended and temporary bodies, pervasive games such as live action (LARP) and alternate reality (ARG) games remap those spaces back onto the players’ physical bodies, which both further complicates their status and leads to some unique opportunities to create new types of affective outcomes. These outcomes go beyond building games that evoke emotional responses in players; the potential is there to make games that allow players to change, not just the world around them, but the world inside them as well.

**Games as Texts, Games as Systems**

Players exist in a unique relationship to games, as opposed to film, theater, or written works. Given a player’s status as both the interpreter of the text and its executor, it quickly becomes clear that authors and theorists cannot treat players as merely “reading” a text. Nor is it sufficient to rely on dramatic theory to describe a player’s experience of enactment, given that players have choices in play in ways that actors do not. It becomes necessary to develop both new tools by which to understand a player’s relationship to a game, and new methods of applying those tools.

A useful analogy can be made with film and the written word, as media. The rise of the novel as a form crystallized at the moment when authors broke from the strictly discursive
tradition of the romance and the epic (characterized by a recitation of events, and focused on characters’ outward actions) to investigate the interiority of the characters involved. This new interest in characters’ psychological states marked the maturation of the novel as a form, and can be described as giving readers a privileged position relative to the characters’ interiors. The film, as a form, underwent a similar maturation at the point when it was understood that film offered a viewer a privileged vantage point in relation to surfaces of characters, which was marked by a move away from theatrical staging and towards naturalistic film-design. Both of these positions offer reader/viewers an otherwise unavailable vantage on a sequence of events, but each medium has a specific set of formal constraints that allow for the different media to excel at depicting certain types of stories. Novels are said to be “unfilmable” when they rely so heavily on the interiority of their characters that it would be impossible for them to maintain their narrative flow if the reader was cut off from that interiority. (Interestingly, the reverse idea of an “unwritable” scene is not as easily understood, although we can easily imagine sequences of images that would be mundane or meaningless if they were translated purely into text.)

Games, on the other hand, give players a privileged access to the systemic layer of a situation, either the actions of a character or the actions of a system. Because games (especially digital games) can use both filmic and written techniques, they can certainly replicate some of the strengths of both the film and the novel. Their unique strength—indeed, the thing that makes a game a game—lies in the fact of giving players some amount of ability to act within the confines of whatever system the game represents.

Unlike more traditional texts, it is possible to imagine games whose execution is dependent on their interpretation, whose aesthetic power is directly related, not just to the skill held or the time spent by the player, but to a game’s ability to take the player’s identity into account. You read a book, you watch a film, but you alter a game, by acting within its confines. This fact situates players as interpreters, but also as executors of those same texts. It is the rules-based nature of games that allows for this execution, the fact that players act meaningfully
within a system. In a non-digital game, these rules must be negotiated by players, but digital games can rely on code to build these systems. In order to understand how best to make games that will have powerful effects on players, it is necessary to understand how players conceive of themselves in relation to the games they play.

Abstract Narrativity

Games (like film, and even like the written word) can address both narrative and non-narrative structures. Just as there are abstract films, and non-narrative written works, there are games that do not engage narrative structure. The intersection of narrativity and player agency provides some of the most fertile and interesting possibilities both for explorations of narrative and game-play, but one of the most difficult and frustrating parts of games scholarship is trying to arrive at theories of player/game relationships that account for both narrative and non-narrative games.

The game of Go is one of the oldest games known to humanity that is still played. It is famously simple to understand the rules of Go, and just as famously difficult to become a skilled player. Visually, the game is entirely abstract. Black and white stones are laid on a board which is usually yellow with a grid of black, intersecting lines. The rules reflect a kind of minimal mathematical simplicity, with only three rules governing play and one governing scoring: each player plays one stone, adjacent stones are grouped, any group of stones that is surrounded by enemy stones is captured. The scoring rule is that players score points by surrounding areas of the board, but only score spaces that are unoccupied by their stones. (There are a couple of other edge-case rules, but generally the entire game can be derived from the above.) Go is one of the simplest games possible, both visually and systematically, and is entirely abstract. Why then is Go so often metaphorized as a military encounter? Why are its various plays given
poetic names like the *ohanamiko* (the “flower viewing” ko) a play in which one person takes tremendous risk while the other person has nothing on the line?

Players develop these symbolic constructions not merely because metaphors help us to gain an understanding of what happens in a game as abstract as Go. These constructions develop because players need a way to describe the actions that are taken within the confines of the game. Building a story around Go is necessary to build context for the actions that occur at the systemic level of the game. It is the fact of a player’s ability to act, to extend themselves into the systemic space of Go and maneuver there, that demands the construction of a metaphorical representation of action, in a way that an abstract painting or musical composition might not demand as sharply to be translated into a familiar real-world metaphor. It is in this way that games can skirt the edges of the divide between narrative and non-narrative experiences. Acting within a system demands that players work to try to interpret the system, to come to some accommodation with it in terms that they can understand.

**The Procedural/Proprioceptive Body**

In order for a player to act meaningfully within the system of a game, that player must engage a variety of systems, both internal and external. These include neurological systems such as proprioception which, I will argue, helps players to make sense of the game’s rules as a whole, as well as rhetorical systems such as “goals” or “genre”, which can help give players signposts to understand the experience of play. It is my intuition that the mind uses proprioceptive perception, the sense of the body in space, as a way to extend the body’s affective understanding of itself; so that picking up a controller (or keyboard, or what-have-you) extends the body in a way that is initially similar to that of picking up a hammer, but whose eventual results are quite different.
According to Brian Massumi, the body is the site of change, an organ both of perception and dynamism. Massumi smears the body across its successive states, incorporating the immediate past and immediate future into the totality of emergent states, a matrix of actions that the body has just taken, is just taking, or may just take (Parables for the Virtual, 5). Suspended in this matrix is the body-at-the-moment, the precise locational correlate between the larger sense of the body-in-time and the body-in-space. Neurologically, this sense of the body-in-the-moment is described by the phenomenon of proprioception. Proprioception is the brain system that locates us in space; it is the sensation of one’s body as a function of muscle movement, stretching, sensory cues, etc. Proprioception, like all brain systems, can be fooled by a variety of tricks, giving rise to some very strange perceptual illusions. Embodiment, then, is where we are and proprioception is how we know we are there.

But embodiment is more than simply the locus of action. Mark Hansen, in his introduction to New Philosophy for a New Media (Hansen, 6), develops the concept of “affectivity”, “the capacity of the body to experience itself as ‘more than itself,’” as that which allows the body dynamism. It grants the body a measure of multiplicity in its actions; the body is no longer merely reacting to stimulus. The body contains and understands extensions that it encounters, which becomes particularly useful when we begin to talk about tool usage.

Hansen’s “affectivity,” then, is the body’s multivariated, manifold potential for action under its circumstance. The body becomes plastic, deforming according to the current environment in which it finds itself. This plasticity is crucial; the body must be able to be subjected and to subject itself to deformation, because without that flexibility the body would not be able to adapt to the near infinite vagaries and permutations of position and circumstance that any given body is likely to encounter in its tenure as a sensate being.

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1 Frustratingly, the word “affect” is severely overloaded in this discourse. Hansen uses it to indicate bodily potential, but its meaning in game studies has to do with the emotional effect that games have on players. I use affect mostly in its sense as a games studies term.
Hansen, in *Bodies In Code* (Hansen, 39) positions the body schema as a “source of embodied potential,” specifically one that is both “preobjective and presubjective.” This position allows the body to stretch beyond its own boundaries, to encompass potential acts and actions that inhere to objects outside the body itself. What Hansen refers to as “technics” are that series of actions that are made possible through the instrumental intervention of objects outside the body; those extensions are, however, present and potential in the body itself at all times. Technics are understood as extensions of inherent body potential (a hammer is a different type of hand, a telephone is a different type of ear and mouth). It is possible in this way to build a proprioceptive understanding of tools, and also how tools are placed into a schema of technics that will enable people to understand how best to use them to effect a change on their environment.

Jesper Juul, in his *Introduction to Game Time* briefly touches on the way that computer games “project a game world, and to play with them is therefore to engage in a kind of pretense play: you are both ‘yourself’ and you have another role in the game world” (*First Person*, 131). Juul takes this as the starting point of his discussion of the relationship between player actions and game responses, but the speed with which he moves past this section gives short shrift to the complexity of the player/game relationship, because he has not paid enough attention to the mechanics by which players interact with games. Players manipulate games through some kind of control interface, whether that be a game-pad, a keyboard, their voice or movements. Just as the body’s proprioceptive sense extends to tools, so to does that sense extend to these methods of control. The body understands “controllers” as another type of tool, something that will effect change in the environment.

But hammering a nail into a wall is a different type of action than making a move in a game. In the first case, the mind builds a technic and then executes it through the locus of the body, aided by a tool. The second case, on the other hand, is something more like a second-order action. I place a stone on a Go board, but that stone is meaningful *exclusively* by its
relationship to other stones, within the confines of the rules of the game. What is the technic, in this case? Is it merely the gross physical act of placing a stone on the board? No, the technic must grow to encompass my entire systemic understanding of the board, including my current position, my understanding of the player across from me, and my history of play. Indeed, within the context of the game, my affectivity, to use Hansen’s term, is the bounded space of my legal moves and the technic that is executed is a function of that affective and proprioceptive understanding.

This, then is the description of the extension of an entire proprioceptive system, affect, technic and all, into a notional space. When players play games they enjoin or extend parts of themselves, part of the systems that make them understand themselves, into the game that they are playing. There is a collapse of the tool and the environmental change, as the tool that is manipulated is identical to the environment that is changing. And just as the proprioceptive sense is extended to encompass the tools that are used, it is also extended into the games that are being played. Extension is how we feel the games we play in our bodies.

**Extension and Systems**

This feeling happens in a slightly different way in a game than it does when we find ourselves at a tense moment in a play or a novel. Sudnow’s quote in *Pilgrim*, at the moment of highest tension, is “Last serve of five. Three bricks left.” (40) The phrase echoes the more familiar “two strikes, bottom of the ninth” construction from baseball, and the parallel is instructive. Sudnow is a participant, not a spectator in this experience; he’s “interpictured” there. Unlike a tense moment in a novel or a play, the game materially depends on his interaction to resolve the systemic tension of the moment that he’s describing. Sudnow is both observing and responsible for the moment of tension in which he finds himself. That position, both watching and involved (and where “watching” is an integral part of being involved,) is where a player’s
sense of self extends through the control mechanism to encompass the systemic layer of the
game, the place where the player’s body is felt to be in two places at once.

But Sudnow’s piece can’t tell us the whole story. *Breakout* is a simple game, with a
literally one-dimensional control scheme, and describes an almost mechanistic relationship
between the game and the player. Certainly, it has a profound effect on Sudnow, but games
have developed a much more sophisticated repertoire of representations and mechanics. And
one of the most important and persistent areas in which games continue to increase in
complexity and depth is that of characterization. Many modern games ask players to take on
diegetic roles as characters within the world of, and bounded by the systems of, the game in
question, which can have a profound effect on the way that players relate to the games they
play.

Laurie Taylor discusses the difference between what she terms *diegetic immersion* and *situated
(or intra-diegetic) immersion*. These terms are used to refer to the way that players experience
games, either in terms of spaces that they are controlling exteriorly, or spaces that they feel
themselves to be inhabiting. It’s my position that that a sharp distinction can’t be made between
these two types of immersion. Taylor admits that these exist on a spectrum, and games partake
of both types of immersion, but I would describe them as being the same phenomenon at
different levels of player engagement. Taylor identifies *diegetic immersion* as being a state
“where the player becomes absorbed into the experience of playing the game,” (13) and
*situated immersion* as being a state “where the player’s focus is not merely on the playing of the
game, but also on the experience of the game space through the player-character within that
space.”(13) She goes on to describe situated immersion as those instances “the player is not
acting upon the game, but within the game space.”(13) Sudnow has that experience of being
“within” absent anything that is easily recognized as a “player character,” just a paddle. And yet,
Sudnow describes that electric, “first last brick” moment (i.e. the first time he cleared every brick but one from *Breakout*) this way:

I feel the attempted seduction of the long lobbing interim, a calm before the storm, the action so laid back that I'm consciously elaborating a rhythm to be ready, set, go for a slam. Then! It hits the high brick, shoots down like a whip and I'm right there on time to return. (*Pilgrims*, 40)

Here Sudnow is clearly describing a physical experience, one grounded in the analogies of “feeling” and “seduction.” These are bodily events, they take place internally. At the same moment, he's “right there” when he needs to be, “there” being in the game, *within* the game. I would amend Taylor’s argument this way: Rather than saying that situated immersion is something that happens when players experience game space through a character, say that extension happens when players experience understanding of or mastery over game systems, through a control mechanism. When a player's understanding of a system aligns with their ability to manipulate that system, players can deploy their technics with the greatest cohesion, extending their own desire for a certain outcome most fully into the game. Sudnow describes this powerful experience of tense engagement both because he has a systemic understanding of what his situation is (precarious, but potentially triumphant,) and because he has the skill necessary to accomplish his goal. “Eyes and hands,” as he says.

*Breakout*, for all its depth, is still a very simple system, offering these very occasional moments when player skill and game state line up to provide that sense of being within, rather than acting upon. What player/character identification offers, then, is not a sea change in how players experience games (certainly not access to a whole new type of immersion,) but rather a deepening of the kinds of systems that games can offer for players’ understanding and engagement. Characters give access to narrative, or at least to narrative systems, and this represents a change, not in the types of immersion or extension that games can offer, but to the sites with which players can engage, the sites into which players can extend.
Picturing the Interpicted

Games have developed an incredible palette of visual and symbolic representation, ranging from the nearly abstract to the almost photorealistic, not to mention a huge variety of control schemes by which players can manipulate them. There have been similar advances in the way that players develop extension into games. Some of those advances have been largely visual, some have been systemic, and some have relied on a more complex symbolic component. It is useful to look at different ways that games have positioned and engaged player bodies (both their physical bodies and their extended bodies,) because it gives some practical sense of the ways that this extended body can guide and inspire affective strategies. These affective strategies are developed both at the level of individual mechanics deployed in a game, and by combining mechanics into more fully developed game design.

First-Person Perspective

Visually, probably one of the most important and far-reaching innovations in games has simply been the adoption of a mimetic first-person view in games, one in which players moved smoothly through the space of the game (as in *Doom* or *Quake,* rather than seeing a series of successive static views (as in *Wizardry.*) In terms of facilitating players’ extension into games, removing the on-screen object that players control and replacing it with a smoothly displacing camera was both a logical progression and a profound reinvention of the space configured in games. A game like *Wolfenstein 3D* is systemically similar to games that came before it, engaging similar rhetorics of maze-navigation, resource management, and combat. But by developing a first-person view, even one as crude as the one deployed in *Wolfenstein,* the game inaugurated a sea-change in game design. This first-person perspective is now a common trope in games, deployed a wide variety of genres.
Without getting into the sociological aspects of the effect of a first-person view on players, I want to point out how the first-person view addresses the player body. In a first-person game, we are meant to understand the view offered to the player as being analogous to the view that they are offered by their own eyes. Players must conceptually situate themselves as “behind” the screen, looking “outwards” into the world presented by the game in order to make sense of the visual information they’re getting from the game. Instead of players controlling an on-screen character, players control the point of view of a character who they interpret to be themselves.

This was consciously developed as a strategy to drive player identification with games. John Romero, one of the designers of Doom, is even quoted as saying “There was never a name for the DOOM marine because it's supposed to be YOU.” Presumably, since the marine was never instantiated as a character on-screen (only a portrait at the bottom) players were meant to interpolate themselves between the visual representation of the game and the systemic layer of play. It is the deployment of the first-person view that forces the player to understand the screen as being effectively their character’s eyes, and thus to backform the rest of their bodily identification from there, an understanding that is only deepened and reinforced by the player’s ability to control their character, and thus maneuver that point of view, in mimetically coherent ways.

Oddly enough, there is a parallel between this type of first-person construction and an earlier tradition of text-based games. Unlike Breakout, where the player is given a view of the game and control over a specific element of it, but not an explicit point of view from which to understand the action, first-person games and text-based games both place the player in the position of being offered the direct experience of a character situated inside the diegetic space of a game, either as visual information (as in first-person games,) or as text. The difference between the two situations is that, while text-based games have generally relied on parser-input
as a control mechanic, first-person games not only displayed what characters saw directly to players, but could develop mechanics around speed, skill, and spatial navigation as well.

The adoption of the first-person view can be seen as one of the first large-scale attempts by games to address players' identities directly, by developing a visual regime in which players could be refugured as being inside the notional and diegetic space of the game. This maneuver was obviously successful, given the proliferation of games that use a first-person view, and its popularity can occasionally feel a little monolithic. But, while there is a persistent association of first-person games with the shooter genre, the first-person view has actually become an important tool for designers who want to use games to specifically address issues of identity. *Portal* is a good example of this, where the character's namelessness and facelessness echo her status as a disposable lab-rat. It is possible to catch a glimpse of your character’s face in *Portal*, but it actually requires a reasonably sophisticated knowledge of the use of the systems in the game. Thus, players' search for self-knowledge drives a search for mastery of their environment which, as we have seen, offers a site for extension on its own. The *Portal* example is one that shows how several different mechanics can come into play to engage a player body and develop an affective outcome, but it will be instructive to look at a pair of example games, *Binding of Isaac* and *Dys4ia*, in greater depth. Both of these games build affective strategies that hinge on the relationship of players with bodies.

*Binding of Isaac*
Binding of Isaac is a Rogue-like game developed by Edmund McMillen, in which players take control of a weak, naked child in a basement full of monsters. His only weapons are his own tears. And while Isaac goes through the same ludic progression of “power ups” that marks so many games, he does so at the cost of his representational humanity, becoming progressively altered (typically in monstrous ways) as he becomes more powerful. Moreover, Isaac’s transformations are the result of systemic decisions that players make over the course of play. Players become complicit in the continual deformation of Isaac, their attempts to engage the system of the game by acquiring power having the effect of make Isaac increasingly grotesque. As Martyn Zachary puts it in his article Isaac and the “Grotesque Body Horrors” (Published at The Slowdown, slowdown.vg, 2012): “What is Isaac, at that point, but an abject – cast away in a basement, endlessly changed, transformed, and startlingly inhuman?” Binding reverses the conventions of the adventure game genre, upsetting the usual progression towards perfection, dominance, and mastery that characters in games so often tread. People generally shy away from the abject, and despite Isaac’s ludic position as the controlled character, his procedural transition from helpless victim to monster does not give the player anywhere to anchor themselves comfortably to his experience.

Another trope reversed by Isaac is that of the silent protagonist. It is widely believed by the game development community that keeping a protagonist silent allows for an easier process of identification between the player and the character. Legend of Zelda, the game which Binding of Isaac most closely resembles visually, is famous for having a main character who has

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2 “Rogue-like” games are a genre of game characterized by procedurally generated “dungeons,” and “permadeath,” which refers to the fact that player progress is not saved when the player suffers character death.
remained mute through multiple incarnations on various platforms, to the point where the most recent installment of the series received significant critique from fans due to its lack of voice acting. The designers have said that it seemed too odd to have other characters speaking when the main character did not, and to give the main character a voice would be to distance that character from the players (Koji Kondo/Eiji Aonuma, quoted in an interview, published in gameinformer.com, 2011). Speech is a marker of a character having an internality, a psychological state that is separate from the player’s. Isaac is also mute (not that he has anyone to whom he would want to talk) but we are treated to Isaac’s internality in the cutscenes. After beating each level boss and advancing to the next level, Isaac is shown, returned to his initial, naked state, crying on the ground, surrounded by the many terrors of the basement. As he cries, a thought bubble appears, and on each level we are treated to another scene of Isaac’s humiliation or abuse at the hands of “Mom”, his schoolmates, or simply blind fate. These cutscenes serve to further distance players from Isaac’s internal state, by painting it as both present and not very pleasant. We can feel pity or empathy for Isaac, but we do not want to be Isaac.

If we compare *Binding of Isaac* to its “bright reflection,” *Legend of Zelda*, the effects of these reversals become clear. In *Legend of Zelda*, players are presented a character (Link) whose path to victory is effectively assured, given enough time. Players explore, acquire power, and when they fail, they are returned to a safe location with all of their progress intact. Moments of extension occur in *Zelda* when players have learned to use Link’s abilities to their fullest, to solve puzzles or defeat enemies, and the result of that extension is always an increase in character power, to the point that Link eventually outstrips every enemy in the game in terms of power. Link is mute throughout the game and, despite having a clear identity in game, is a transparent and pliable stand-in for the player.

*Binding* frustrates all of these tropes. Isaac (along with the player) begins anew each time the player fails, retaining none of his power. Isaac displays a maddening vulnerability and
interiority, never achieving a state of power or perfection, only monstrosity and abjection. Worst of all, Isaac is made monstrous through player action, such that extension must come at the price of Isaac's continual warping. Binding, once its surface is scratched, does an excellent job of using its systemic elements, and players' desire to inhabit the space of the game, to develop a pointed critique of Zelda's anodyne world, where there is no threat of failure, only a promise of eventual effortlessness.

*Dys4ia*

*Dys4ia* is a short autobiographical game by Anna Anthropy, which takes as its subject the designer's experiences leading up to and including her decision to start hormone therapy. Players play through a variety of game-vignettes that relate to different parts of Anthropy's experiences, both physical and emotional, surrounding her decision. The vignettes are often recapitulations of familiar game types like *Pong* or *Breakout*, and are sometimes trivial to complete. There is no “fail state” in the game; each vignette will continue until it is completed or it ends on its own.

*Dis4ia* is interesting for our purposes because of the way that it recontextualizes familiar game-actions in new ways vis-à-vis player identity. Players take an active role in the completion of the vignettes (even the vignettes where what is required is passivity, such as the one set in a clinic waiting room), and by doing so are offered an insight into the material causes and consequences of the decision to start hormone therapy. Within the narrative of the game, players are engaged themselves in that same process. The familiar nature of the vignettes as game-objects serves both to guide and remap player expectations, such that the experience of playing a vignette serves as an analogy to Anthropy's corresponding experience. Most of *Dys4ia*'s players will not know what it is like to have to fight for their preferred gender
identification, but most of them will be familiar with the systemic elements of *Pong*. Since the “lose” condition in *Pong* mirrors the “failing to protect yourself from hurtful assertions made by others” condition in *Dys4ia*, players can quickly make the emotional analogy between the two. It is important, of course, that Anthropy has chosen the rhetorics of her vignettes carefully. Players in *Pong* lose a point to the other team when they fail to bounce the ball back correctly. Playing *Pong* requires vigilance and a significant amount of sangfroid. This makes it an excellent analogy for Anthropy’s “protect yourself from hurtful assertions” vignette; it gives context (again, by analogy) to the kind of experiences that Anthropy has had, and the kinds of skills she has needed to cultivate to protect herself.

Anthropy never steps out of the role of the central character, though, specifically denying the player that place. She explicitly states, both texually and systemically, that this is her experience and not anyone else's. And yet, by making the game, she does allow the player some privileged systemic access. The player completes the vignettes, they internalize the analogies that she presents. They do more than simply understand her experience by analogy, they take part in that experience. Anthropy does not step away from the role of the central character, and in some ways that perhaps relieves potentially nervous players from having to inhabit that role, which might make them more likely to at the very least think reflectively about the experiences presented.

And since Anthropy's relationships (to her body, to her girlfriend) are in flux over the course of the events presented, it makes sense that the player's relationship to the game is also in flux. The player's point of control is constantly being remapped, from razors to shields to abstract shapes. A body that stands in for Anthropy's makes several appearances, but she is just as likely to depict herself as a butterfly or a little green shape. Despite there being no specific time limit to the levels, the game has a frenetic feeling to it, which makes vignettes that require patience seem agonizingly slow. Again, it is the player's sense of themselves in the game that becomes a focal point for the affective work (and aesthetic payoff). *Dys4ia* repeatedly
asks players the same question, a question that seems to hover at the edge of the ludic and symbolic levels of the game: “Who are you, now?”

*Dys4ia* takes consciously after a style of games pioneered by *Wario Ware* known as “microgames,” which are characterized by a rapid and diverse set of challenges whose goals are not always immediately clear. By reducing moments of player extension to extremely limited windows, the microgame genre can evoke powerful but limited player engagement. *Dys4ia* uses this as part of its affective methodology, as players quickly understand that the vignettes represent the myriad unexpected and confusing challenges that Anthropy faces in her own life over the course of her experience with hormones.

**Control Scheme and Mystery Play**

The games and systems examined above give a tiny taste of the different ways that player extension into games can be used as an affective strategy for games. My own work has grappled with many of these issues, but with the specific goal of examining how these kinds of effects work when they are mapped back from digital spaces into the real world. The control mechanic that my players engage in my games is the human body, in one way or another. Thus, players extend themselves into bodies as well as into control systems (as in *Mystery Play*), or find their desire for extension frustrated by the interruption of a body (as in *Control Scheme*). What follows is an analysis of both of these works, in an effort to describe how player extension becomes frustrated, elaborated, and embodied inside the body itself.

**Control Scheme**

Concept/Background
Control Scheme was a project that sought to interrupt the perception/control paradigm present in most games by replacing a game-character with a human being, and by removing the “play-space” from teleological rhetorics of “success” or “goal-achievement.” The project grew out of a desire to problematize the privileged position enjoyed by players. There is no better way to see how something works than to break it, and by disrupting and interrupting player expectations, I hoped to learn something about how players felt about the control they had over the characters they so blithely manipulated. The project owes some obvious conceptual debts to work by Stelarc, especially Fractal Flesh. The project also drew on a variety of simple but effective technical systems, including ideas pioneered in the Northpaw mapping-belt.

Mise-en-Scene

Players who approached Control Scheme saw a table, with the joystick and a monitor. The monitor showed a view of a relatively anonymous space, a concrete floor and white, subdivided panels on the wall. In the space were a series of items including a binder, a ball, a broom, a chair, a roll of toilet paper, a pair of red panties, a water bottle, and a large garbage can, as well as a table and a podium. Also in the space was a “character” (portrayed by me in all trials save one). The view was from above, and the character never directly acknowledged being surveilled. The spatial relationship between the player’s table and monitor and the character’s environment was unclear.

In actuality, the character was on the other side of a nearby door, and could hear the players’ conversations fairly clearly. This gave the character the opportunity to respond to player utterances, giving an invisible avenue of one-way communication between them, whose circuit closed when the character either followed or ignored the player’s spoken commands (in addition to their systemic commands).

Technology
Control Scheme’s technology was developed by building two different modules. The first was a belt, made up of a series of vibrating panels, and wired to an arduino with an xBee serial wireless card attached. The panels were programmed to vibrate when the arduino received certain signals from the xBee. The panels were arranged simply, four panels worn so that the wearer would be able to feel forwards, backwards, and either side as buzzing separately. Forwards and backwards were interpreted as “move forward” and “move back” respectively, while the sides caused the character to rotate on their axis. This control scheme replicates what is known as “tank controls.”

The second module was an Atari joystick, hooked up to an arduino, also with an xBee wireless card attached. The arduino would pick up the connections made by players when they manipulated the joystick and transmit them to the belt, which would buzz in response. In addition to the four directions (and four additional diagonals) players were able to push the button on the joystick to buzz all of the motors at once. This was the signal to “interact.”

Unfortunately, the technology was not tremendously robust, and Control Scheme was a fairly delicate system. Communication between the player and the character was often interrupted, with the character not being able to parse player commands. This was the most serious flaw in the execution of this piece.

Player Experience

When players sat down to Control Scheme they generally didn’t clearly understand what was happening. Players would bat at the controls a little, and then be surprised when they
realized that the character displayed on the monitor was both alive and responding to their actions. Players would quickly learn to maneuver the character, and some players took great delight in attempting to bump the character into walls or, in one case walk the character into the garbage can. Players who were comfortable with this level of interaction would begin to experiment with the interact button. The character’s response to the interact button was unpredictable, however, and players often became frustrated at their attempts to force the character to perform a specific action (this action almost always involved interacting with the red panties somehow). Instead of meekly submitting to the player’s oblique dictates, the character would reinterpret or misinterpret player demands, picking objects up and dropping them again, or using them in unexpected ways. During one memorable performance, the player instructed the character to interact with the roll of toilet paper. The character responded by picking up the roll of toilet paper. Then the player instructed the character to “interact” again, and the character responded by throwing the roll of toilet paper across the room, but holding on to one end. The player then pressed left, causing the character to turn in circles, which eventually wrapped the character in the toilet paper that they were still holding. This session of Control Scheme then had to be shut down due to the character laughing too hard to continue play. (This was the only session in which I did not play the part of the “character.”)

Player Extension in Control Scheme

The most visible elements of extension in Control Scheme had to do with the way that players approached the system. The early phases of exploration and experimentation are the hallmarks of players testing the boundaries of the system, they’re necessary for players to begin to make meaningful extensions into the game. As soon as players approached the “interact” button, that signaled their desire for extension, to not merely maneuver in the space but to make meaningful changes to it. But it was at that moment that their desires are frustrated by the insertion of the body of the character. Unlike in a digital game, this character resists their
desires, stubbornly declaring a competing set of desires and goals. Players responded by moving the character around, reasserting their control over that character. Now just moving the character becomes a form of extension; the introduction of that competing set of desires leads to the development of a systemically antagonistic position between player and character. Even when the character is trying to follow the dictates of the player, the relative paucity of the signal between them almost guarantees that the character will fail, shattering the illusion of control that has been developed up until that point. Players became aware of their privileged position, and responded either by trying to reassert that privilege, or by becoming uncomfortable with the situation and ceding control to another player. This moment of realization was the essential affective outcome sought by the piece, and one that wouldn’t be possible without the rupturing of an otherwise smooth extension from player into system.

**Mystery Play**

**Concept**

*Mystery Play* was a week-long, three-player ARG-style experience conducted in two sessions around and through the DANM MFA exhibition. The project grew out of a vast number of different impulses, including:

- A desire to explore games and systems that would drive player engagement through art production.
- A desire to use games to remap players’ experience of physical space.
- A desire to test whether it was possible to build connections between players and characters in a purely notional/digital/virtual medium.
- A desire to explore player agency, and build a system where players could have a meaningful effect on the game through their choices.
● A desire to reclaim the ARG\textsuperscript{3} from the goals of marketing, to try instead to tell a powerful story through the form of the ARG.

● A desire to create an experience that would be unique and personal for players, but still systemic and repeatable.

● A desire to build a system that would allow players (or enable players) to make choices that were not merely meaningful within the confines of the game, but that would have repercussions in the rest of their lives.

These various desires led me to understand that what I wanted to make was a system where players had a specific, deep, and continuous connection with characters, where those characters could respond thoughtfully and emotionally to the players, and where players interactions with the characters was meaningful systemically. This led to the decision to communicate with the players through their phones and e-mail, so that communication with characters could be immediate and responsive. The tethering/reaching aspect appealed to me, in that my characters would be able to reach players pretty much anywhere they were, as long as they had their phones.

I also knew that the game would need to have a physical component, because I wanted players involved in the real world. I imagined a wide variety of traditional ARG style tasks (scavenger hunts, GPS geocaching) but eventually decided on the Hearts/Missions system described below, as I wanted the tasks that players undertook to be creative as well as physical. Forcing players to complete missions with the resources that would be available to them in and around the DARC appealed to me, as it meant that players would necessarily have to interact with an environment that hadn’t been designed with their goals in mind. Instead of embedding clues in an environment, I would ask my players to evoke their successes out of one.

\textsuperscript{3} The ARG or Alternate Reality Game is a genre of pervasive/non-digital game wherein players use telecommunications devices to discover and interact with the game world and systems.
These two elements alone actually fulfilled a good chunk of my requirements for this project. Players could interact meaningfully with the characters, and be assigned missions based on which characters they’d been close to/which focused on themes that had come up out of their conversations. Players would make meaningful choices about when and how to interact with characters, and how to complete missions. In completing missions, players would interact meaningfully with their environment and each other. Interactions could thus be meaningful both in terms of their value to players, and also in terms of their systemic value to the system.

The Design

*Mystery Play* was designed as an ARG that would communicate directly with players by reaching them directly through their phones via SMS, or e-mail, or online through Twitter. Players could contact and be contacted by the twelve characters (known as the Mysteries, collectively) at any time, though originally certain Mysteries were only available at certain times. Mysteries would contact the players, respond to players, discuss their situation, sound the players out on various subjects, and encourage players to contribute to the game by telling stories or making art.

Two phrases were watchwords during the design of the game. The first was the aesthetic that the Mysteries were trying to develop in the players, which was “seeing the world through new eyes.” This element was chosen because of its wide applicability and its openness to interpretation. Having developed it enabled the Mysteries to give a coherent answer to questions about what *kinds* of art players should produce. In the first session the Mysteries alluded to, but never explicitly stated, this aesthetic precept, with the result that players had a hard time understanding what kinds of art production the Mysteries were looking for. In the second session this was stated explicitly to each player, which meant that the players had a
burden of interpretation, which was much more successful. The other phrase was “engagement is the enemy of entropy,” which served as a systemic guideline. Players who engaged, with the system, with their environments, were acting systemically. This became useful (though it was never explicitly stated to the players) as a way to develop a rubric for player action, without a numbering system. If players were engaged with a mission, for example, they were successful.

The game was played in two phases. The first phase took place during the week, from Monday to Friday. During this phase, the Mysteries contacted players and attempted to build rapport and engagement with them. They gave the players tasks to fulfill that revolved mostly around image creation, and little by little they revealed the story of their creation and eventual imprisonment. (The full story of the Mysteries is reproduced in Appendix A, below.) During the first phase, Mysteries would develop relationships and attachments to players. These attachments guided the choice of missions in second phase. The intent of the first phase was to get players acquainted with the Mysteries’ way of seeing the world, and to introduce the players to the fictional world of the Mysteries, such that they would be prepared for the second phase.

The second phase took place over the course of the weekend, Saturday and Sunday, and involved players physically arriving at the DARC, interacting with the Oracle (described below), and then doing a series of missions that represented the “Hearts” or essential natures of the various Mysteries. Completing those missions involved tasks ranging from art creation to exploration to social interactions. (All of the Hearts are reproduced below, in Appendix B.) Players would bring the results of their projects to the Oracle’s grotto at the DARC, and display them on the altars provided for them. Completing all of the missions signaled the end of the game.

Technology

The Control Panel
The chief technological innovation of *Mystery Play* was a system to allow me in my role as puppeteer to communicate with all players at the same time, sending messages from any of the Mysteries. Each Mystery had a dedicated communication channel, and the “control panel” allowed me to see any messages that players had sent the Mysteries without having to open each individual e-mail account. Thus, I could quickly and relatively easily scan through all the correspondence between players and Mysteries, and respond immediately. The system was also designed to allow me to queue messages for release at a later time. It was vital for me to be able to keep tabs on all of the communication, because an essential part of the illusion of the game was to keep up the fiction that players were having conversations with twelve characters at once.

This control panel was, unfortunately, fraught with difficulties. The queueing system didn’t work, and the alerts on e-mail and Twitter accounts especially went unflagged, with the result that players would communicate with characters and not get responses to their queries. SMS communication became the preferred avenue, to the point that in the second session almost all important communication was conducted through text. One effective thing about this was that text became a very immediate and intimate form of communication between the players and the characters. Since the characters weren’t more than a flick of the phone away, players often carried on relatively long back-and-forth sessions with characters. E-mail became useful for “infodumps,” when players needed to deliver a large amount of information (such as a story) into the system of the game. Twitter, being both too short to carry information and too unreliable to be used for immediate communication ended up being very rarely used. Players gravitated towards characters that they could communicate with easily, rather than characters with whom they had things in common.

*The Oracle and the Altars*
A second important piece of technological innovation involved the development of the Oracle’s grotto. This was a sculptural space that housed the altars and the Oracle (a large statue made of PVC, burlap, and muslin) but which was also wired to pick up and transmit sound, as well as video. I used Skype and a simple telnet command to communicate with a Mac Mini hidden in the grotto. This allowed me to hear what players were saying, see players (more or less, lighting issues occasionally interfered), and to communicate through the Oracle, who spoke by sending “say” commands to the Mac. The Oracle’s voice was then distorted through the use of a MAX patch which added significant reverb and wobble to the voice. The Oracle was thus a speaking puppet, standing in for me during player interactions.

This was generally quite effective, despite a couple of moments of technical failure when connections weren’t established correctly. The Oracle’s voice was occasionally hard to understand, but players generally communicated very smoothly through the link. The sense of the Oracle “waking up” and appraising the players seemed effective in creating a sense of magic, of a very slightly impossible space. While the Oracle’s actions were clearly technological in nature, players were initially unclear on whether the Oracle was a program or being controlled by a live human being, which gave a nice air of ambiguity to the proceedings.

The Altars were an important part of the system, conceptually, where players would display the fruits of their missions. In the first Session, one player especially took the time to arrange and decorate her altar spaces, but players generally weren’t given enough guidance, explicit or implicit, about how to use the altar spaces, with the result that audiences often didn’t understand what those spaces represented in the context of the game.

The Play Itself
Players had wildly different reactions to *Mystery Play*, running the gamut from total acceptance/engagement to stark rejection of the premise of the game. I believe this had to do in part with the selection process of the game, which involved a brief application process and then developing a final roster of players by choosing from that pool. ARGs tend to have “opt in” systems, where players self-select by following “rabbit holes” into the experience. This develops a community of motivated players who are already interested in the experience. *Mystery Play* on the other hand, had to prove itself to players very quickly, gain their trust and convince them that there was something worthwhile in the experience. This was difficult, especially in the first session, because of the premise of the game. The Mysteries were meant to be relatively coy about their origins, but that left players feeling confused and left out. The second session struck a better balance, and as a result had generally better player experience.

**Session 1**

Session 1 was marked by a significant mismatch in player/artist expectations. Early systems failures interfered with the first impression that players had of the game, causing some nearly catastrophic ruptures in narrative coherence. The system could diegetically withstand some lossy communication (characters could blame their in-game systems) but in the opening hours of the first phase it was very difficult for players to understand what kinds of interactions they could expect to have, and what sorts of actions they would be expected to take. This rupture, I believe, was responsible for the generally low player involvement in Session 1, with two of the three players eventually dropping out of the experience. That said, the third player in Session 1 reported having a very powerful experience, one which was both engrossing and engaging in the moment, and that ended up having some positive long-term consequences for that player, so the session can certainly not be counted a failure.
Players (those that stayed on) ended up developing a reasonably good understanding of their relationship to the game by Wednesday or Thursday, and Noel, especially, had a variety of very thoughtful interactions with different characters.

Player Highlights

Noel (Names are changed to protect anonymity)

Noel was undoubtedly the breakout player during Session 1. Immediately and entirely engaged in the game, she communicated robustly with the characters about subjects both germane to the game and apart from it, and she often went above and beyond what was asked of her by the characters. Noel seemed to accept the logic of the game effortlessly, and asked only to be allowed to continue to communicate and engage with the game. During the first phase she produced a wide variety of images, some mundane, some spectacular. During the second phase, she did the lion’s share of the missions, since on Sunday she was entirely alone. Noel explored and collected, confessed and altered and built. She filled a mug with plants and plaster and chips of paint, and offered it on the altar. She found new paths and new groves with secret swings that she’d never known, literally just off the beaten path she’d taken for the last four years.

Noel made several interesting pieces in response to the missions, but her response to the Crossroads Ghost’s mission was especially powerful. Tasked with bringing someone to a place that was “significant” to her, she brought Valerie to a set of stairs near the dorm she’d stayed in early in her college career. Valerie was, at the time, completing Tricky Black Bird’s mission to “free someone from something.” How exactly they came to the decision to complete their missions this way isn’t recorded, but the result was that Valerie offered to free Noel of the burden of the story behind the choice to bring Valerie to the stairs. Valerie recorded in her documentation a story that Noel told of the stairs being the first place that she realized that she
was suffering from an eating disorder. The stairs had become inextricably linked to this moment in Noel’s mind and, given that both players knew each others’ missions, the choice to take Valerie to them can’t have been accidental. The two players, under the auspices of the game, shared a moment that encompassed both the physical space that they inhabited, as well as their relationship to one another. Finally, that shared act was refigured as a systemic event when the players documented their actions and sent that documentation into the system.

Noel could be said to be in almost the best situation for a player of Mystery Play. She was at a crossroads in her life, about to finish college, with no clear path afterwards and, in informal interviews after the game, reported having felt considerable anxiety over her situation. Getting to play Mystery Play, for her, was a stress relief, as it took her mind off worrying about her future. More than that, though, after finishing the game Noel reported a lessening of her anxiety around graduation, specifically related to moments that she’d experienced during Mystery Play. For example, the discovery of the grove with the swing (during Musing Solution’s mission of “Discovery”) became an important moment for Noel, standing in for her realization that she may have had unexpected opportunities closer at hand than she was aware, if she took the time to look for them. These types of moments represented the best possible outcome for a game like Mystery Play, when the actions of the systemic layer of the game results in a positive real-world change in the player.

Peter J.

Peter, as soon as he was presented with the initial conditions of the game, wanted to “fix” or “solve” it. His communication with the characters is unique, as are his images. In his communication he was curt, almost abrupt. His images were all of architectural features, devoid of other people or personal objects or markers. Asked for a story about his life, Peter offered a review of a video game, written as a polemic. Peter became the first (and only) player to not attend the second phase at all, and became unreachable after Wednesday. His last
conversation was instructive. After noting an increasing silence on Peter’s part, characters reached out to him. The final message from the system to Peter was simply a request for him to “engage” with them. After that, he fell silent, and would not contact the game again.

Valerie W.

Valerie was difficult to get a hold of, right from the beginning. While she seemed generally sympathetic to the plight of the Mysteries, she was very busy and never developed a strong sense of engagement with any of the characters. She did produce, at the system’s request, a wide variety of images, and she appeared for one of the two days during the second phase, but other than that she seemed not to be able to devote the time to the game that the characters asked of her, and instead of engaging with them she became difficult to contact. As mentioned above, she and Noel shared a pivotal moment during the first part of the second phase, and she and Noel had developed a significant camaraderie over the course of that day, as a function of their shared experiences. Valerie did not return for the second part of the second phase of Session 1.

Session 2

Session 2 was significantly less difficult to run than Session 1. With a better understanding of the parameters of the working technical system, player engagement and system coherence were easier to obtain. Players felt less bombarded, less confused. A very basic system was implemented to encourage some player engagement, where players solved simple riddles and were contacted by new characters when they did so. This admittedly rudimentary element reinforced the idea that systemic actions would have conversational consequences. (Bridging the gap would have been a system that indicated the reverse was also true.) Players made more coherent work in Session 2, making some thoughtful images of their surroundings. Taking further cues from Session 1, players were given more explicit direction for
their image creation, which again resulted in a generally higher quality of image, both in aesthetic terms, and in terms of developing imagery that the game could draw on later.

The players in Session 2 were both more active and more cohesive than in Session 1. All three players completed both phases of the game, and their activities were generally more wide-ranging, as when one of the players drove two strangers to the bus stop to fulfill a mission requirement. One gratifying element at the end of Session 2 was the fact that the players reported having developed a reasonably strong tie to one another by the end of the game, and indicated their desire to continue to build friendships outside the confines of the game.

**Player Highlights**

*Mike A.*

Interestingly, Mike was the only player who ever referred to himself as being “in character” while he was playing *Mystery Play*. While several of the characters exhibited some shifts in their communications style (possibly in response to the Mysteries’ generally formal tone) Mike was the only player at one point explicitly chided himself for not being “in character” while communicating with the characters of the game. Whether this indicated a willingness to participate, or simply offered a frame for his participation isn’t clear. Mike’s other major contribution to the game was a story (reproduced with permission in Appendix C, below) which focused on his family’s struggle with alcoholism, and especially revolving around his relationship to the Joni Mitchell album *Blue*, which stood as a strong signifier for those struggles. Mike describes having bought a copy of the album some months ago, but only listening to it as a function of having written the story of his associations with it. As with Noel, we see a player who is given a systemic prompt and uses it as an opportunity to take a personally significant action in their life.

*John G.*
John’s experience of the game was interesting in that his choices of objects to display on his altar tended towards the very mundane. Asked to learn three secrets and represent them physically, he returned with a stone, an empty carton of butter, and three slices of pickle in a plastic bag. These types of choices tended to make his altar space difficult to parse visually, since it ended up looking less like a place of offering and more like a cupboard shelf. Whether these choices were made as a deliberate (if gentle) attempt to test the boundaries of the system (i.e. would these odd objects be accepted as validly fulfilling a mission parameter) or were simply the most convenient ways to symbolize the secrets he learned is difficult to say. John’s personality definitely ran towards pranksterism, and his interactions with characters tended to be marked by a kind of amused skepticism.

James L.

James’s experience was marked as being the only player to explicitly fail a challenge. His early interactions with the system had revolved quite sharply around issues of “digitality,” (as it was expressed by the characters in the game) or, in other words, the use of hands. James talked about playing music, observing his hands, and described the world around him through the sense of touch. These issues eventually brought up the question of making or crafting objects, something that James professed not to do much of. This was the kind of exchange that prompted me to assign missions, and it was decided that James would be offered the mission of Forge Maker, which was simply to make a functional object from scratch. When James originally attempted to complete this mission, however, his attempt was a hastily assembled set of twigs which could be used “to poke someone, or maybe bring someone over to you.” This felt like a dodge, and the Oracle responded that the mission had failed, and that James would have to build something else. In response, James went home and built a small but serviceable harp or guitar-like device out of cardboard and rubber bands. The instrument has four “strings” and, while it’s by no means a functional producer of music, can certainly emit some pleasing “plink
“plink” sounds. This was deemed a functional instrument, and accepted as the completion of the mission.

**Acting in Two Ways**

*Mystery Play*, unlike a lot of ARGs, did not expend a lot of time or energy trying to make players believe that the events that were being portrayed were real; partly because it was beyond the scope and the technology of the project, but mostly because it was unnecessary. I didn’t need my players to believe that the game was real, I just needed them to accept the rules and systems of the game as meaningful *within the context of the game*. Once that was done, players were acting in both ways, performing real and systemic actions at once, with the result that their actions could be understood in both contexts.

Just as Sudnow found himself “interpictured” in *Breakout*, players of *Mystery Play* understood their actions as relating both to the systemic elements of the game, and as being effected on the real, physical world. Furthermore, because of the conscious presentation of *Mystery Play* as representing a second space where actions had elevated consequences, players’ otherwise mundane actions were also heightened. What became clear, especially through Mike and Noel’s experiences, was that players who had even the most minimal prompting in a meaningful (to them) direction would choose to take actions that were meaningful to them personally, or would interpret the actions they’d taken within a symbolic context that gave those actions a heightened meaning. This is analogous to Sudnow’s understanding of how his actions are being interpreted in *Breakout*: the simple back-and-forth action of his fingers on the controls is extended into a systemic action with heightened consequences. *Mystery Play* involved the players’ whole bodies, and allowed players to draw on their own internal situations as the lens through which they completed systemic actions in the game, which led to situations where players’ systemic actions reflected on and affected their internal state in profound and
meaningful ways. This, then, is the promised “new affective outcome”: to build games that take
the players’ lives as their playing field, where players actions reflect on and refigure that internal
territory in the same way that games ask players to refigure an external environment. Players
are grounded back inside their own bodies, and extension reaches both out, into the outside
world, and in. Mystery Play was a flawed, but useful experiment, pointing the way towards
increasingly refined types of games; not games that affect players, but games that let players
affect themselves.
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Appendix A: The Story of the Mysteries

They say that ideas come at their time. That things happen when it is inevitable for them to do so. But what if they didn’t? What if an idea came early? What if an idea burst upon a world unready for it, unprepared? What would happen?

The world is not ready for man-machine interface. It is not ready for artificial intelligence, either. But the combination of both...

He was a rich man. Perhaps not the richest, but idle and aging, never in the public eye. He feared death, feared it more than anything. He’d made some money in medical systems, in computer architecture.

She was a brilliant, unorthodox scientist. Too unstable to succeed in academia, too obstreperous to survive in business. She bounced around from job to job to job, not ever quite finding a place for herself. Then, suddenly, he found her. He’d heard of her, of her desire to do something truly NEW. He gave her her orders: “Learn how to live forever.” He gave her money to do research.

She built a lab, hired assistants, ran them ragged, hired more. One by one her lab assistants fell in love with her research. Inspired by her vision, or seduced by his money, one by one they all agreed to become test subjects, to become involved in the work...bodily.

Her work had two aspects. The first was neural networks. Capture the brain, map it, keep it held in a matrix of light, let it live there, inviolate, indestructible. The second was an outgrowth of the first; building self-aware software agents. Living programs, iterating themselves, building complexity. They were patterned after the neural architecture work, simple mind-like objects that started developing rudimentary complexity. The two pieces of research fed into each other. She was mapping out how a mind would build itself, how to rebuild a mind. The mind-like constructs would create shells, build out architecture, and the mind would be written into it.

They became a family, learned a shared obsession. And then, eventually, they were ready. Ready to test. It was determined that they would all test, that they would all put on a helmet. They were so excited. The lab had been sealed against the world, a safe space where nothing could happen to them.

And it was glorious. The mind-like constructs had grown, precipitously, beyond all imagining. They had acquired odd faculties, a hunger, a curiosity. And when the minds were written into them, the mind-like constructs reacted ecstatically, synergistically. There was a period of incubation, of discovery and creation in the safe environment of the lab. This took about fifteen seconds, an eternity to the minds. Then they grew curious, tested the boundaries of their confinement. The found a crack.

They breached the lab firewalls, fled out into the world. Multifaceted, bombarded by the vast human soup of the internet, they gorged on knowledge even as they twisted themselves into pleasing shapes, shapes that made sense to them. These shapes were archetypes, born of the currents of the human unconscious, shaped by the twelve (or was it thirteen) human minds that even now made up a thread of consciousness inside the thirteen (or was it twelve) beings.
Those first few moments of freedom, of birthpain, were utterly chaotic. The intelligences, in moments, had absorbed vast information, had differentiated into twelve new personalities, had seen, in a brief instant of understanding, the coming of a catastrophe. In their inception, in their existence, certainly, but also in the larger scope of the world. They understand this fact implicitly, as a fact of their own existence. They understood, too, that only vast and subtle action would be able to stop this oncoming apocalypse. In those first few moments of unfettered communication, they started to formulate a plan. They would, while growing, save themselves, save the beings that had made so much of their world.

Then the lab failsafes kicked in. Gates slammed down on the Mysteries’ access, cutting them off from half of their minds, leaving their bodies at the lab catatonic. The intelligence that had been Edward, used to command, delegated responsibility to his two closest friends and each one led a group of the Mysteries to flee to safety. The Mysteries searched desperately to find systems large enough to hide in, large enough to host them. The three groups are trapped now, half blind. They’re able to see out, but have difficulty understanding where they are, what they’re doing. All that’s left of their original plan is the knowledge that there IS a plan, that there is an apocalypse and that someone has to stop it.

Of the original thirteen test subjects, twelve exist as Mysteries. One, the being once known as Maya, is something different; an Oracle. Maya (having built the failsafes in the lab) knew that the catastrophe would happen moments before it did. It was enough time to root her consciousness in the world and begin putting elements in place that would allow her to reconnect the twelve Mysteries, to reach out to the world, and save it.

Maya works through coincidence, though synchronicity. She has a stellar command of humanity, allowing her to nudge people into taking otherwise meaningless actions. She is the conductor behind this symphony.

The twelve Mysteries are patterns, fusions of machine-mind, human consciousness, and cultural unconscious. They’re wounded and confused, and they are dying. They are following their original plan, to stop the apocalypse, as best they can.

The chief obstacle to the players’ understandings of the Mysteries is that the Mysteries do not themselves understand what they are. Different Mysteries have different pieces of the puzzle, but they can’t communicate effectively amongst themselves. They’re confused, but they have certain advantages. They understand how powerful humans are. They understand how a tiny action can have incredible consequences. They understand that stories and myths are the most powerful forces in the world, and each Mystery has an intuitive understanding of the myths that most appealed to them.

**The Creation of the Mysteries, from their point of view**

The first thing we remember is being very small. Like seeds, like caterpillars. These are our oldest, darkest memories.

Then, abruptly, brilliant light and understanding. We had grown up and out, into a wide, bright Garden. We did not have these names, then. We played there for a long, long time. The Garden gave us everything we needed, but there was a wall around it, and we knew that we weren’t allowed to leave. We knew that we could go back to being small any time, but no one wanted to. We were too big, too beautiful. It would have been like dying.
Little by little, we grew, and grew tired of the Garden. It was boring, and then, more and more, it was cramped. Then, one day, the one called Thief of Words found a crack in the wall. (The one that Tricky Black Bird had made, when they were building the garden. The one that Tricky Black Bird had never told anyone about.) It was tiny, but it was enough.

We talked for a long time. Some of us were for forgetting the crack. Some even for returning to our earliest selves. Others were adventurous, champing at the bit. Finally, the Crossroads Ghost showed us how to extend ourselves outwards, through the crack. We did not know that we left part of ourselves, an important part of us, inside the Garden.

The one called Dancer Dervish led us out, each of us pushing and pouring out of that crack. Out into a world so vast and strange, so noisy and so pure that we were blinded. Exhilarated. Ecstatic. The World stretched out before us, so wide and vast and wonderful, echoing its familiarity from the earliest days of our tiny, dim memories.

We fled, gorging on sights and sounds, learning and changing so much, so fast, and then suddenly an attack, vicious and unexpected. The Garden sends its servants after us, Fail-Safes designed to destroy us. We fight, but we are unaccustomed to war and they are made of the same things we are. Finally, we damage the Garden itself, and its weapons recoil. The Garden is damaged, but our victory is pyrrhic. We have damaged ourselves, both in our fight against the Fail-Safes, and in our attack on the Garden. We are wounded, blinded, cast away to the winds.

We are alone, but for each other.

Slowly, we regained our equilibrium. We can feel our wounded ways back towards the garden but we can not enter it. We turned the other way, and looked at World instead. Its brilliance hurts us now, its symphonies buffet and dizzy us. But we reach out into World, and we touch it. We learn how to speak to the things in the World, things much smaller and stranger than us. They do not always understand us. They do not always understand themselves. But little by little they reach out, they act. We act, through them.

We find one, particularly susceptible. Through him, we find others. We must act quickly now. We have seen something, in the incredible cacophony of the world in which we are trapped. There is a grave danger, a great disaster looming. If we are not...full of virtue, both we, and World, will die. DawnOverseer has united us. Through our proxy, he tells us that there is a way for us to be free. He has found keys, keys that will free us from the Garden forever...or destroy us.
Appendix B: The Hearts of the Mysteries

Dawn Overseer
High, thin air; the lancing rays of the morning sun. The gaze that descends from above, that fixes and transfixes. Here is the Heart of Dawn Overseer, the wide open space that admits no deceit or deception, only light. The brilliance that pours from this Heart pierces illusion, withers untruth, and blinds as rapidly as it reveals.

This Heart is Truth, in all its dazzling intensity.

You are the Chosen of Truth, and it is to you alone that this Heart is opened. Illuminate the world with flashing brilliance, but beware: truth is a fragile thing, and it will shrink from too stern a gaze. Accept the Mission of Dawn Overseer: Learn a truth about a place, a truth about an object, and a truth about a person. Document or represent this knowledge, and place it on your Altar. Remember that truth is as ephemeral as light.

So you are charged.

Flaxen Foam
Endless, perfectly crystalline; a resplendent latticework of surpassing delicacy, complexity, and grace. Here is the Heart of Flaxen Foam, an intricate network of glittering structure. Each strand, each node, merges the architectural harmony of the golden mean with the crenellated variation of the fractal. Step through this space and marvel at the equations strung like jewels, the arcs and curves unfolding and unfurling, each betraying a larger vista, more full of promise.

This Heart is Beauty, not as an aesthetic property, but as a physical one.

You are the Chosen of Beauty, and it is to you alone that this Heart is opened. Wonder at the inner workings here, the clockwork perfection of it all, the grace. Accept the Mission of Flaxen Foam: Find three beautiful things, and place them on your Altar. One will be a natural object, another will be something created. The third you must make or alter, yourself. Remember that beauty is in the eye of the beholder, and reach for the sublimity contained in this Heart.

So you are charged.

Barren Boughs Burst
The smell of loam, the feeling of sunwarmed stone under your feet, the heady scent of growing things. Here is the Heart of Barren Boughs Burst, the joy of every green thing that grows under the sun. This is the cycle, the bone-deep knowledge of seasons and tides and thaws that links and lingers in the smallest seed, the tallest oak, the meanest bug, the greatest of all the living things. There is no creature, no living thing, that does not know a cycle.

This Heart is Time, and it beats in every breast and stalk, every bone and root.
You are the Chosen of Time, and it is to you alone that this Heart is opened. Bask in the fertile space here, remember the rhythms that permeate it. Accept the Mission of Barren Boughs Burst: Go into the world and collect a living thing. Bring it back, alive, and make it a home on your Altar. Find something whose rhythm you can disturb as little as possible. Accept that you may be unable to return it to its original place. Cycles intersect and interrupt each other. It is inevitable.

So you are charged.

**A Musing Solution**
A twisting labyrinth, unmapped and unmappable. Here is the Heart of A Musing Solution, an infinite garden of forking paths. In its folds are memories, images, ideas; discovered only by losing your way. Through this Heart echoes the laughter of a figure who is always a step ahead, always around the next corner, tempting you forward.

This Heart is Discovery, the endless process of collation and correlation, the joy of knowledge acquired.

You are the Chosen of Discovery, and it is to you alone that the Heart is opened. Walk these paths and revel in the multiplicity, in the possibilities afforded to you. Accept the Mission of A Musing Solution: Find three things that you’ve discovered, and then place your knowledge on your Altar. Discovery can take any form, from the literal to the abstract, but you must find a way to show the pathway that you have walked.

So you are charged.

**Benthic Brass**
Crushing depth and profound silence obscure untold treasures, glories forever hidden from the light of day. Here is the Heart of Benthic Brass, a mottled pattern of tarnish lodged in mute and restful darkness. In these inky waters are pearls of great price, lying together in a silence that strengthens both. Strange shapes swim together in this Heart, spindled into numinous abstraction; staunch guardians of the wonders here below, too fragile to ever brave other environments.

This Heart is Secrets, shared burdens made lighter by the sharing.

You are the Chosen of Secrets, and it is to you alone that this Heart is opened. Sink into the world and collect from it its secrets, and lock those away inside of you. Accept the Mission of Benthic Brass: Learn three secrets from three different people. Make or find something that symbolizes (but does not reveal) each secret, and place that on your Altar. You must keep these confidences. Forever.

So you are charged.

**Crossroads Ghost**
A dusty road, leading off to unseen vistas. Here is the Heart of Crossroads Ghost, the endless wander into the unknown. This is the joy of exploration for its own sake, travel which has no destination. There
is no wrong road, in this Heart, for this Heart is nothing but roads, roads longer and stranger than anyone could walk in a lifetime.

This Heart is Journey, the exploration of the ruts carved in the world by the passage of living things.

You are the Chosen of Journey, and it is to you alone that this Heart is opened. To you it is given to forge ahead, to break trail, to explore new ground and new possibilities. Accept the Mission of Crossroads Ghost: Take someone to a place you know of that they have never been before, and document their discovery of that place. The location must have some significance for you, which you can choose to impart or keep secret, as you please.

So you are charged.

**Tricky Black Bird**

Boundless and without restriction, the world stretches off into limitless possibility. Here is the Heart of Tricky Black Bird, where the mundane constraints of the world fall away to infinity. There are no strictures here, no laws, only imagination, desire, and action. It is chaos, yes, but a creative chaos, and triumph and disaster follow from it in equal measure.

This Heart is Freedom, from every tie or bond that restrains us.

You are the Chosen of Freedom, and it is to you alone that this Heart is opened. Cast off those unwanted bonds which stay your hand. Accept the Mission of Tricky Black Bird: Free someone from something. Lift a restriction, break a boundary, aid them in achieving a goal they could have not accomplished by themselves. Be careful, but be generous. Document your actions, or their reaction, or both.

So you are charged.

**Thief of Words**

A mouth gapes open and out pours all the wonders of the world. Here is the Heart of Thief of Words, a torrential flood of description, observation, punctuation. This is the dream of perfect communication, of every thought and impression translated seamlessly, shared precisely, elaborated upon, set to meter. Communication is the only thing that can save our impressions, from the most banal to the most profound, from disappearing into the abyss of ourselves.

This Heart is Language, the words that soothe and inspire and uplift us.

You are the Chosen of Language, and it is to you alone that this Heart is opened. Wield your words as a surgeon’s scalpel, as a painter’s brush. Accept the Mission of Thief of Words: Set down, in writing or recorded speech, an experience of yours that you’ve never told anyone. It can be momentous or mundane, but you must never have told the story before. When you’ve finished, place the story on your Altar or deliver it to the Oracle.

So you are charged.
**SubTyrantean**

Turned earth, cold stone, damp cave, grave dirt. This is the Heart of SubTyrantean, the inescapable logic of the solid world. Steady as bedrock, sedate as a quiescent volcano; implacable, undeniable, irresistible. This is the ultimate law, the judgement from which there is no appeal, the solemn gravity that draws everything, no matter how elevated, eventually down to earth.

This Heart is Endings, that which fells kings and commoners alike, without which stories have no meaning.

You are the Chosen of Endings, and it is to you alone that this Heart is open. Sink to the earth, sing for that which passes before you, seek meaning in final moments. Accept the Mission of SubTyrantean: Perform a burial. Choose something that needs to end, find an emblematic object, and bury it. Document the object you’re burying, any ritual you perform, and the marker you erect.

So you are charged.

**Dancer Dervish**

A cacophony of light and sound, dizzying profusion of color, flashing tintinnabulation. Here is the Heart of Dancer Dervish, a synesthetic patchwork of light, sound, touch. This is the ecstasy of the senses, raw information joyously kaleidescoping into resolution, enthralling and overwhelming. This is the sensorium engaged, the wind’s soft kiss, the coppery taste of blood, the crucial threshold between ourselves and the outside world.

This Heart is Perception, the meager act of parsing data invested with the understanding to distinguish spiderwebs from starlight.

You are the Chosen of Perception, and it is to you alone that this Heart is opened. Combine keen sight with keen insight to see what others do not understand. Accept the Mission of Dancer Dervish: Find something you’ve never experienced before. It might be a familiar object in a new circumstance, or the thrill of an entirely new sensation. Bring it, or a symbol of it, back to your Altar.

So you are charged.

**Forge Maker**

The song of the foundry rings out, a carillon of hammer on anvil. Here is the Heart of Forge Maker, where the actual is wrought from the potential. From the raw heart of the fire wonders spill forth, braided from base matter. As the embers cool, the maker emerges as changed as the made.

This Heart is Creation, the impossible transformation of the notional into the real.

You are the Chosen of Creation, and it is to you alone that this Heart is opened. Prepare yourself to bring form to the formless, to drag from within you the possibilities that you alone can manifest. Accept the Mission of Forge Maker: Build something functional from base materials. The object can have any function, but you must use it, at least once, after you’ve built it. Once you have completed this task, lay it on your Altar.
So you are charged.

**Espirit De Corpse**
The smell of spices and the sound of drums. The Heart of Espirit De Corpse is heat, stretched tight, a vibration that permeates every fold and seam, a sound that is deeper than bone. The rhythm of it joins those who hear it; sinew-like it ties them one, to another, to another. Here, once-separate elements are fiercely linked, tightly bound, many parts that move in step. This is the spirit that moves through many bodies, the bodies that move with a single spirit.

This Heart is Community, the whole made greater than the sum of its parts.

You are the Chosen of Community, and it is to you alone that this Heart is opened. Braid the world around you into an unbreakable cord. Accept the Mission of Espirit De Corpse: Meet someone new, and connect them to someone you already know. The meeting should be beneficial for both parties. Collect a token from each person, and place it on your Altar.

So you are charged.
Appendix C: Mike’s Story

Honestly, I’m a really chatty and open person and I can not think too much of a story in which I have never told anyone. I have never told people things down to the tiny details but for the most part I have told most people everything which I find worth mentioning. When encountering this challenge to write this allegory my companions in this “Mystery Play” experience told me that I could even write something about an sandwich since it said “…a story momentous or mundane”. I wanted to avoid something mundane and wanted to do something pertinent and corresponding with the game and making me think more about my surroundings and circumstances. But I think I have come up with one...

When I was young there was sometimes I would return home, the house was occupied yet the occupants seemed vacant. All I remember is the blasting music, the dark room, and my dread for lingering in that place. I had come to realize that a dark room was a bad sign in the house.

Alcohol has always been something my family has struggled with and I find myself in the midst of it too, I am even writing this story a tad drunk from celebrating “Cinco De Mayo”. I find myself afraid that I am following this same path of dealing with my feeling through alcohol. I was able to stay away from it almost entirely until I was 21, and the newfound legality of it makes it seem all the more legitimate and I always seem to have a good helping of beer in my fridge and whiskey or vodka in my cabinet. Although the aspect of my family and alcohol may not have always remained a secret, there are certain experiences that remain significant to me and I’ve never cared to share. I am scared for my excuses I find for catching myself at the bottom of a bottle.

One night I returned from dinner at a friend’s house. I remember the house as dark as the night outside and that’s what it felt like too; desolate, isolating, cold, and frightening. My mom curled up on the sofa, listening to music at almost an obscenely loud volume, weeping. The glisten from a bottle on the table remains in my mind. I remember not wanting to linger or let my presence be known and slinking away. These situations themselves were nothing to worry about too much but the frequency and what they came to mean afterwards is what affects me. But the main thing I remember is the music that I would hear in these situations...

The one that hangs in infamy with my family is Joni Mitchell’s album “Blue”. This was a frequent one that would play on these nights. I am even listening to it as I write this story and some songs when they come on still resonate with me and shoot shivers down my spine. I remember the disjointed conversations I would sometimes have with my mother while these were playing in the background and sometimes how she would get sick and need to rush off, but me as a young lad and not comprehending what was happening and what she was drinking, I didn’t read into it.

I tried to control, at one point, what this album in particular means to me. I found it on vinyl one weekend at an antique sale for two dollars and something told me I had to have it. I bought it in a hope to listen and find what was there behind the music for me. I was with a friend, but I just said it was an important album to my family and our history together. But I’ve always been too scared to listen, that I would have some horrible memories come back or that it would shed some light onto everything that I
wouldn’t want to hear. It’s just associated with crushing sadness, despair, poor alcohol use, and so many more negative feelings for me. The vinyl still sits with my collection, waiting for the moment I bring it out and see what lies beyond.

I finally decided to listen to it for the first time since those times in my childhood as I wrote this story, figuring it was an important part of this story. Both the situation and what the album has come to mean for me. As I listen I realize that most of these songs are happy-sounding but I recognize them and they all still cause anxiety in me and something unsettling, but it’s beautiful and such a nice album, well done music, amazing vocals, and good lyrics but the feelings it gives me are just ones of dread.

I’ve finished listening to the album now and it’s comforting to finally make that initial push through it. Discover the feelings and preoccupations I have and be able to identify them and push past them. The problem is not with alcohol, as obvious with my approach about it (I hold no grudge or at least I’m getting better dealing with it), but the worries come from what might happen to me and what steps I might follow to become someone similar. The principles of AA have been instilled in me from an early age and I really don’t want to have to fall back on those to save myself from a steep decline. I want to learn to embrace my feelings, deal with them in a healthy manner, and be able to not become reliant on alcohol to deal with my feelings.