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Braid: The Potential of Puzzle Games

> *There's something in the human personality which resents things that are clear, and conversely, something which is attracted to puzzles, enigmas, and allegories.*
>
> —Stanley Kubrick

1. Introduction

Humans are drawn to many things. We are driven in part by a thirst for knowledge, and that drive attracts us to mysteries and contradictions, sources of potential insight. We are also driven by our social desire to communicate, and that can inspire us to express ourselves and our thoughts and ideas. Puzzles, games, and narratives, concepts that date back to the beginning of human civilization, are results of some of these elements of human experience, and have continued to evolve as people have created new forms of expression. 'Puzzle video games,' or 'puzzle games,' have the potential to draw together all of these concepts in order to create unique, meaningful experiences; however, few puzzle games have taken this potential as far as *Braid*.

2. Background

People have been puzzling ever since there were people to puzzle. As with many human traditions, puzzles, originally in the form of riddles, arose out of speech: according to Archer Taylor, a researcher of folklore, proverbs, and riddles, "the oldest recorded riddles are Babylonian school texts," and those riddles existed in oral tradition long before they were recorded in those texts (12). There are a variety of ancient and

legendary riddles that require ingenuity and consideration to solve. Probably the most famous is the Riddle of the Sphinx, from the Greek myth of Oedipus. During his journey to Thebes, Oedipus contends with the Sphinx, eater of travellers unable to solve its riddles. In the most recognizable form, it goes: "What goes on four legs in the morning, two legs at noon, and three legs in the evening?" The answer, as Oedipus provides, is "man," i.e. a person, alluding to the mobility changes a person might experience over the course of their life, with said course represented metaphorically as the course of a day: crawling on all fours "in the morning" of life, walking on two legs "at noon," and hobbling on two legs with the aid of a cane of some sort "in the evening" (Floyd). Early forms of more interactive puzzles, involving manipulation of tangible elements, include the *Ostomachion*, a dissection puzzle documented by Archimedes. This was a puzzle that involved rearranging 14 irregular geometric pieces together to form different shapes. Archimedes, however, was interested in solving a difficult mathematical problem, one in "a field that did not come into its own until the rise of computer science": he wanted to figure out how many distinct ways there were to arrange the pieces into a square, and in doing so wrote a far-ahead-of-its-time "treatise on combinatorics," finding the depth hidden in a superficially simple shape-reasoning puzzle (Kolata).

People have been playing games for just as long. The *Royal Game of Ur*, one of the earliest currently-playable[1] board games, dates back at least four and a half millennia, when "it was played in the Middle East by the Sumerians, who probably invented it". The *Royal Game of Ur* is a race game (the same genre of board game as

[1] You can play an online version of the *Royal Game of Ur*, graphically adapted from pictures of the game board and pieces from the British Museum's collection, against a computer at gouzigouza.com/ur. If you'd rather watch two opponents play it, see the YouTube video "Tom Scott vs Irving Finkel: The Royal Game of Ur," included on the Works Cited page.

Backgammon and *Sorry!*), a tense and competitive game of choices and chance where players move their pieces along a route toward an endzone, eliminating opposing pieces as they go, which involves "a great deal of excitement." The currently understood rules of the game were mostly deciphered by Irving Finkel, a curator at the British Museum, from an ancient (though far less ancient than the game itself) tablet written in cuneiform, which Finkel proclaims to be the "oldest book of rules in the whole world." Although it flourished for three thousand years, it was likely superseded by Backgammon, which Finkel calls "kind of a better version of this game" ("Tom Scott vs Irving Finkel"). However, a community of Cochin Jews, now mostly living in northern Israel, had been playing a clear descendent of the game for seemingly thousands of years; after seeing photographic evidence of this, Finkel interviewed one seventy-year-old who recalled it being a "popular pastime for women and girls when she was growing up," and although some of the rules had shifted over time, he could tell that "it was clearly the descendant of the game played in their ancestral homeland of Babylon 4,600 years ago" (Green).

In the second half of the twentieth century, in the midst of the Cold War, computation and display hardware was just beginning to enable new experiences like *Pong*, exciting new combinations of video with games (Donovan ch. 1). For most of the 1970s, 'video games' were only playable within the confines of the arcade, as custom circuit boards had to be designed for each game in order to compute the necessary information quickly enough, and the games tended to be fast, frenetic, and quarter-hungry. Later on, as microprocessor-powered computers started to become more accessible to the average computer programmer, slower, more traditional games

began to be brought over[2]: "There were countless versions of tic-tac-toe, hangman and roulette, dozens of copies of board games such as Battleships and swarms of games that challenged players to guess numbers or words selected at random by the computer." However, once the 'video' part of this equation had caught up with those currently content to convert old puzzles and board games, with the advent of the home computer, these ancient ideas would start to mingle with and inspire so many new ideas that the idea of 'puzzle video games' (or, more succinctly, 'puzzle games') would start to take form. Early text-based 'adventure' games — 'text adventures' — were focused on puzzle-solving through riddles, situational logic, observation, and deduction (Donovan ch. 5). Players would gather and use an 'inventory' of items as they navigated fictional worlds through simple commands: 1978's *Adventureland*, the first of these games for home computers, uses a two-word-per-phrase interpreter into which the player would type, for example, "GO NORTH," "GET AX," and "TAKE INVENTORY" (Adams 36). Text adventures would only get more and more ambitious from there: in 1980 arose both *Zork!*, wielding an interpreter that could recognize "proper sentences and detailed descriptions," and *Mystery House*, inspired by Agatha Christie's 1939 mystery novel *And Then There Were None*, which displayed "black and white line drawings that illustrated each location alongside the text" (Donovan ch. 5). More puzzle-focused games began to come out: 1982's *Sokoban (*倉庫番*)*, a game about moving crates around a grid-based warehouse wherein positional planning was of utmost importance, innovated a whole sub-genre of 'block-pushing' (or just 'Sokoban-style') puzzle games and garnered attention from Artificial Intelligence researchers for its latent complexities (倉庫番の歴史 [History of Sokoban]; Culberson). Puzzle games could now scratch the

[2] These kinds of games were necessitated by the teleprinters in use at the time, which at their best could "print a new line every two seconds" (Donovan ch. 5).

same itch as traditional puzzles, and they were beginning to head toward narrative and artistic experiences… But just *how much* could they be capable of?

3. Captivation

In video games, there tends to be a divide between concepts of 'story' and 'gameplay.' As will be discussed later, this doesn't have to be the case[3], but for now, let's stick with that idea. Gameplay is a bit of a hazy concept, but it essentially is the minutiae of the player's interactions with the game and the subsequent perceived or felt effects within the game. Puzzle games are among the few video game genres that tend to focus, in a specific, single-minded way, on their gameplay. This can be an extremely effective way to express certain feelings: as Ian Bogost, a game designer and professor at the Georgia Institute of Technology, argues, "procedural representation is significantly different from textual, visual, and plastic representation . . . only procedural systems like computer software actually represent process with process. This is where the particular power of procedural authorship lies, in its native ability to depict processes" (14). Because video games can start, not from describing an experience, but from actually representing it, they can use that experience as a direct line of communication with the player, twisting and contextualizing it to convey thoughts and emotions, and the directness of puzzle games can be incredibly effective at drawing the player into this. Not all puzzle games take ownership of their gameplay like this; some are content to just be interesting, engaging puzzles. However, when a game does exhibit full control over the persuasive potential of its gameplay and weaves it into a story that feels designed into the experience, when it is able to "braid gameplay with themes and motifs," it can become truly exceptional (Bissell 48)…

[3] It can also be argued to only be a problem as the result of the influence of film as does later-mentioned game designer Jonathan Blow (Bissell 47).

But first, as promised, a discussion of the arbitrary separation of gameplay and story. If the story, or text, is what keeps you turning pages in a book, then many games frame gameplay as the act of turning pages: you do it to get to more of the story. Jonathan Blow, designer of *Braid*, argues that doing this makes it so that "interactivity 'directly sabotages . . . the way that effective stories are told'" (Bissell 46). However, in truly captivating books, the page-turning and word-reading melt away as your true form of interaction with the book becomes *feeling* the experiences, emotions, and thoughts within the writing. Video games can have experiences like this, too, although they tend to come from different parts of the experience. If the act of 'turning pages' is given so much depth and meaning that an intuitively expansive web of interactions comes forth, the 'text' of the 'pages' is what melts away as your interaction with it becomes *feeling* the experiences and emotions stemming from, say, precise acrobatics, considered tactical decisions, or navigation and comprehension of a complex, thought-provoking space. However, as I'm sure you can imagine based on the premises of this metaphor, games can go further toward capitalizing on their potential to really captivate the player. While the nature of how most games' writing is presented makes it impossible for them to benefit from the captivating, flow-inducing *pacing* of a great book, there are games that are able to make the 'page-turning' thematically essential to the 'text'. Not just in a 'moving forward' sense, either, but in the sense where 'turning the pages,' interacting with the rules of the game, conveys the meanings and messages of the 'text' just as the story conveys the feelings of the gameplay, where everything that makes games unique is essential to the experience. It is here that we find the aforementioned *Braid*.

4. *Braid*

Braid, designed by Jonathan Blow, is a puzzle-platform video game in which you control Tim, a man who can 'rewind' time, through a series of imaginative, puzzle-centric 'worlds' with temporal quirks. These worlds are framed as Tim's "thought experiments" (in the words of David Hellman, creator of *Braid*'s artwork) on the relationship between time and human experiences: the first four worlds are presented with the titles "Time and Forgiveness," "Time and Mystery," "Time and Place," and "Time and Decision." Although the game begins strikingly with its silhouetted urban sunset, its concept initially comes off as extremely simple. You can run and jump within a two-dimensional space, and the conflict presented at first is archetypical for platform games: "Tim is off on a search to rescue the Princess. She has been snatched by a horrible and evil monster." That does not put a whole lot of doubt in the player's mind. However, *Braid* introduces a few wrinkles from the beginning. It throws you off a little by beginning in World 2, as opposed to the conventional World 1 and up approach that would be expected of a game about rescuing a princess from her vile captor by way of running and jumping about. You can't help but ask yourself some questions: how exactly could this be structurally significant to the narrative, what exactly would World 1 constitute, what else might be a clue? More pivotally, however, it presents a series of passages, presented (and referred to from now on) as books, green atop their white podiums, that inform some of the initial themes of the gameplay. Directly continuing on from the initial princess-rescuing premise, the nature of Tim's conflict is cast into doubt over the course of a few books:

> This happened because Tim made a mistake. Not just one. He made many mistakes during the time they spent together, all those years ago. Memories of their relationship have become muddled, replaced wholesale, but one remains

> clear: the Princess turning sharply away, her braid lashing at him with contempt. He knows she tried to be forgiving, but who can just shrug away a guilty lie, a stab in the back? Such a mistake will change a relationship irreversibly, even if we have learned from the mistake and would never repeat it. The Princess's eyes grew narrower. She became more distant. (*Braid*, world 2)

Immediately, something feels strange about these books. They are presented in these cloudy transitional areas between Tim's house and the puzzle worlds, so, despite being written from a third-person perspective, they are unmistakably *him*, sympathetic to his point of view[4]. This point of view initially comes off as that of a toxic partner: he has "learned from the mistake" — the details of which are tellingly avoided — "and would never repeat it," so why can't you just forgive him? If this princess is a person (something that seems unambiguous at this early stage) she must be sick of Tim's self-victimizing. The books go on to elaborate on World 2's name, "Time and Forgiveness," in the same vein:

> Our world, with its rules of causality, has trained us to be miserly with forgiveness. By forgiving too readily, we can be badly hurt. But if we've learned from a mistake and become better for it, shouldn't we be rewarded for the learning, rather than punished for the mistake? What if our world worked differently? Suppose we could tell her: "I didn't mean what I just said," and she would say: "It's okay, I understand," and she would not turn away, and life would really proceed as though we had never said that thing? We could remove the damage but still be wiser for the experience.

[4] Blow has stated that "one way to interpret the screens of text is that they're like little meditations or little ruminations that the main character is having prior to embarking on each of these journeys through each world. So things that he's thinking about, or things that have been happening in his mind" (Dahlen).

[In the succeeding book, as an illustration of the perfect world Tim is imagining:]

> Tim and the Princess lounge in the castle garden, laughing together, giving names to the colorful birds. Their mistakes are hidden from each other, tucked away between the folds of time, safe. (*Braid*, world 2)

By this point, the game has set up a conceptual puzzle for the player. In the context of this game's world, the player is Tim, and yet the player is presented with a little bit of Tim in these books and, at the very least, they feel like there's something off about him. So, the game prods you to consider, if Tim is an unreliable narrator, *are you* Tim, as the person controlling his present actions? Well, since the answer to the question, as far as can be surmised at this point, is 'sort of' — you control Tim's running and jumping but seem to exist separately from his thoughts and past — you are instead brought into World 2 with all of Tim's ideas still in your head. It is here that *Braid* begins to get the gears turning in the player's mind. You navigate Tim through a world constructed of familiar platform game shorthands. Grassy fields, sunny skies, forbidding flame pits, and bouncy foes abound. However, as the player will likely find out after a careless slip into a burning, spiky death trap, or perhaps a bad encounter with an aimlessly ambling foe, this game has a unique concept of failure. Tim dies, falling out of the world, and everything comes to a standstill. An icon of a button is shown above the frozen, hanging Tim, and if the player holds down that button, they find that the entire world begins to move backward in time. Life returns to Tim's body as the "mistake," the action that led to his demise, is undone. The player lets go of the button and overwrites Tim's mistake, and it is "hidden, tucked away between the folds of time."

Here is where *Braid* starts to (to bring back the metaphor from a few pages ago) draw together the feelings and implications of the 'page-turning' and the meanings and

themes of the 'text.' Now, you are forced to reconsider your relation to Tim: despite knowing that Tim is an unreliable narrator, despite the feeling that he's thinking about solutions to problems whose causes he refuses to acknowledge, you are now a part of the narrative that is taking place in his thoughts, interacting with and reconciling his ideas, figuring out the solutions to his puzzles, being drawn into his worlds as you consider the temporal rules that govern them. This just being the beginning of the game, *Braid* goes on to take this much, much further, eventually directly tackling the question of the relation between player and Tim in terms of the alienating desire to seek 'Truth,' a desire at the heart of solving puzzles, but you're just going to have to trust me on that, as this is all I have the time and room to illustrate.

5. Conclusion

Regardless, I think that the basis of this early example shows something remarkable in this normally straightforward genre of this medium which rarely realizes its full narrative potential. Puzzle games can trace their origins back to the dawn of civilization and are rooted in many things that make us human — our desire for order, our propensity for play, our knowledge-hungry minds, our subconscious intuition. Puzzle games have the potential to communicate with us in ingenious, incredible ways that are wholly unique to their form, and when they start to make use of some of that potential some truly special experiences can emerge.

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