



Making the Player the Detective

Bjarke Alexander Larsen
mail@bjarke.it
Aalborg University
Copenhagen

Henrik Schoenau-Fog
hsf@create.aau.dk
Aalborg University
Copenhagen

ABSTRACT

Detective stories in games have long been a heavily used inspiration source and setting for games, and it is indeed a fitting genre at first glance with its clearly defined set of expectations, rules, and type of storytelling relying on uncovering the past. It is curious then, that until recently, most detective games have followed a more traditional adventure game structure, with little emphasis on actual investigation in the player's actions, but where the player more acts as a proxy for the plot to follow its course. However, in recent years, a number of games have shown a tendency to shift this balance, and push the bulk of the detective work onto the players themselves, to leave them with an inscrutable mystery to slowly uncover over the course of the game, to decipher the story of the crime in their mind. This paper will investigate a few of these games as well as compare with literature on traditional detective stories to understand how detective games have typically been a different type of detective story all together, which is crucial to understanding how we can make the player the detective instead of an observer of a detective.

CCS CONCEPTS

• **Software and its engineering** → **Interactive games**; • **Applied computing** → **Computer games**.

KEYWORDS

Detective games, mystery, detective fiction, crime, environmental storytelling

ACM Reference Format:

Bjarke Alexander Larsen and Henrik Schoenau-Fog. 2020. Making the Player the Detective. In *International Conference on the Foundations of Digital Games (FDG '20)*, September 15–18, 2020, Bugibba, Malta. ACM, New York, NY, USA, 8 pages. <https://doi.org/10.1145/3402942.3402969>

1 INTRODUCTION

Video games have used detective settings and metaphors since the early days, as seen in games like *Déjà Vu* [23] from 1985, and *Gabriel Knight* from 1993 [33], all the way to modern games like *L.A. Noire* [37] and *Her Story* [5]. The idea of the player being a detective, piecing together a story of events and uncovering the lies of a criminal is an obvious fantasy and is easy to understand the

appeal of. And even, in games studies and criticism, detective work is often a used metaphor for play when we talk about how players piece together clues from the environment, from clues etc. as we can see in e.g. Henry Jenkins' use of the metaphor in 2004 [24], in relation to environmental storytelling. Clara Fernández-Vara's idea of indexical storytelling [14], which builds on environmental storytelling, is this idea even more clearly: The player is constructing a storyline of what happened previously in a space by studying the traces left behind, and pieces together a narrative covering the complete picture of events. Detective games have been categorized as a game genre by several sources [2, 28], but as noted by Jenkins [24], detective work can also appear in non-detective stories, in games like *Myst* [12, 29] or *Gone Home* [20], which are not directly speaking detective games or crime games as there is not necessarily a detective involved, but the player performs investigative work as part of the experience. However, while games have often used the detective genre as setting or structure or plot, or detective work being invoked as a type of play, it is less common to see games that entirely rely on the player to work as a detective.

Clara Fernández-Vara, who has done a lot of work on detective games [15–17], did an analysis of many Sherlock Holmes games in 2014 [15], and how they mapped to Sherlock's portrayal in the original Arthur Conan Doyle stories. Her findings then were that most games were more typical adventure games where the player's primary interactions were lock-and-key puzzles to progress to the next story-bit where a new clue could be found, eventually leading to the final revelation of the culprit, without the player necessarily performing detective work to uncover it. The one outlier here was *Sherlock Holmes: Consulting Detective*, a rework of a popular board game of the same name, that distinguishes itself by allowing the player to follow clues and search in databases and come to their own conclusions about where to investigate next, rather than have the game control the flow.¹ Fernández-Vara held a short talk in 2015 [17] on how games tend to have the player do less of the actual solving of the case, and instead focus on other parts of the story, the characters, the consequences of the investigation, a move that actually echoes more modern detective fiction. Formica [18] did a transmedia study of Poirot in different mediums, and found how the games she studied did not allow much of what she had hoped for in terms of letting the player take up the role of Poirot, but instead follow him in a role that more resembled his "secretary", as the player was playing as another character, and it is only when Poirot agrees with the questioning and conclusions of the player, that they are allowed to progress. These two examples illustrate well the functioning of many detective games, where the puzzles

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FDG '20, September 15–18, 2020, Bugibba, Malta

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ACM ISBN 978-1-4503-8807-8/20/09...\$15.00

<https://doi.org/10.1145/3402942.3402969>

¹It should be mentioned that not included in this paper are the two newer Sherlock Holmes games "Crimes and Punishments" and "The Devil's Daughter", which, especially the former, was lauded for allowing more freeform detective work, and interpreting of evidence, although still within an adventure game frame.

are less about executing the actual investigation but more about allowing the player to witness the next part of the investigation.

In her 2014 piece, Clara Fernández-Vara identifies some primary areas games should improve in in order to have the player perform more as Sherlock Holmes procedurally [15], the two most general and important of these: *Examining and interpreting evidence*, and *modeling insight thinking*. The other categories (*performing as an expert*, *master of disguise*, and *smoking and drug use*) are more related to specifically Sherlock Holmes as a character, whereas these two categories can easily be extrapolated onto any detective work. To add to this, Mark Brown, a youtuber known for the “Game Maker’s Toolkit”-series, mentioned 4 aspects to detective work in his video about the genre [39]: *Expose lies*, *follow leads*, *find connections*, and *make deductions*. *Exposing lies* and *follow leads* can easily be seen as two additions to Fernández-Vara’s categories, where the other two are already covered by hers. These are the kinds of activities the player should be concerned with, if they are to act as a detective.

However, before we continue with how games proceduralize detective work, we should take a step back and understand what the genre of detective fiction is narratively, and then we can begin to correlate that to games, which will give us a better understanding of the player’s role as a detective.

2 RELATIONS TO DETECTIVE FICTION

There has been a lot of scholarly work on detective fiction over the years, breaking down how it works. There are two important points from this work we want to highlight here. First, is Todorov’s classical split of the stories of any detective novel [35, 38]. Any detective story follows a crime and the uncovering of this crime, and thus there are two stories at play. The first, *the story of the crime*, usually has already happened at the beginning of the novel, and we then follow the second story, *the story of the investigation*, as it is uncovering the first story. - usually with no prior knowledge of the story of the crime. This narrative duality - the story of the crime vs. the investigation of the crime - is at the heart of any detective story.

Bernard Suits’ paper, “The Detective Story: A Case Study of Games in Literature” [36], points out that the linear medium of detective stories can itself be seen as a game. Suits sees a detective story as a two-move, non-turntaking game where the first player (the author) lays out a mystery with clues in a set order, and the second player (the reader) plays to uncover the mystery, hopefully before it is revealed to them by the first player’s hand (the story).

Detective fiction in the traditional inter-war-age style of Agatha Christie etc. [32] is a prime example of a tradition that leans heavily on this type of puzzle-like presentation. What matters often in an Agatha Christie story is the position of the characters in time and space, and deducting and ruling out possibilities based on evidence and small details, while the motivations, character depth or character development are either in the background or non-existent [32]. This goes so far that characters in Christie stories have been described as “marionettes” by Knight [25]. This leads it naturally to a puzzle-style game rather than a character-driven narrative, as seen in other crime stories of other eras and styles [32], through its plain, straightforward descriptions and language. The puzzle-like nature of these types of detective stories can further

be seen in the rules created by authors and analysts of the genre S.S. Van Dine [42] and Ronald Knox [26], who created a set of rules for authors to follow, in order to ensure a “fair game” for the story, and not cheat the reader with an unfair premise, for example the detective themselves being the murderer, or the existence of more than one secret passage. This set of rules—and the idea of a “fair” game—very clearly echo the sentiment that this is thought of as a game with a specific set of boundaries that, when broken, eliminate the fun of the game.

Torodov [38] identified three kinds of detective stories, *the whodunit*, *the thriller*, and *the suspense*. The whodunit is where the story of the crime is the main drive, and thus it is a more puzzle-like story, as seen in e.g. Agatha Christie novels. The thriller is where the focus is on the detective and their story during the solving of the crime, further crimes may be committed during the second story and the two stories may thus impact each other. Furthermore, the detective is not necessarily holy or guaranteed safety, and they are primarily the narrator of the story, instead of there being a secondary narrator. This tradition was introduced and popularized primarily in America in the post-World War 2 era “hardboiled” genre [22, 35] (as exemplified by Raymond Chandler and Dashiell Hammett and similar). The suspense genre is a mix of the two, in which the story of the crime is kept intact, but the second story is in focus by giving emphasis on the uncertain future of the characters. [35]. These categories are, by Torodov, delineated historically as each has a historical precedent and period in which they were the predominant style.

Suits’ point to these different traditions is that detective fiction thus does not have to be played as a game, but can follow the depiction of this game being played by other characters, and thus follow the tropes without the reader having to play the guessing game. Columbo [30] is a well-known example of this: Since the culprit is known, the mystery puzzle is not the point but rather to follow the detective (Columbo) do the work required to find the suspect. It, to Suits, is thus an imitation of puzzle-solving and not an actual puzzle to be solved, and is a different beast altogether. It is important, when we consider detective fiction a game, to remember that we do not necessarily include all depictions of detective work in fiction as a game, but rather only the subset that allows the puzzling of the first story, and one that has that as its focus, a deliniation we will also carry into the medium of games.

Peter Hühn’s analysis of detective fiction [22] is also relevant as the final one we will mention here. He did a narratological reading of detective fiction, with the point that detective fiction thematizes narrativity itself as a problem and procedure, because the point of a detective story, from the detective’s point of view is to reconstruct a narrative of the crime. Thus, detective stories become about deciphering plots. Following Todorov’s split of the two stories present in detective fiction, Hühn defines that the story of the crime consists of action, and the story of the investigation is concerned with knowledge. Using narrative language, Hühn lays it out this way: The criminal authors the first story, which the detective reads over the process of the second story, an investigation which is often read and narrated by a second party (the Watson character), to then be read by us, the superreader who’s reading the actual piece of fiction. The story of the crime is thus mediated in the discourse of the investigation, and the investigation is mediated

through the narrator, to us. In both cases the first story is sufficiently hidden that we as superreaders are trying to puzzle out both the first story of the crime *and* the story of the investigation. This pattern, Hühn mentions holds for almost all classic detective fiction from the inter-war era and earlier, but it has been intentionally broken down by later fiction, in e.g. the hardboiled tradition or the postmodern tradition. Hühn brings up hardboiled detective fiction as an example of the genre intentionally breaking with the idea of even being able to read the story of the crime as an elegant puzzle, and how that genre instead muddies the distinction by making the story of the crime and the investigation affect each other. Thus the work becomes more about the investigation itself and how it affects the world rather than the “simple” uncovering of a crime. This, we bring up to highlight that it is not necessarily a more preferred structure to keep it to this classic puzzle-like rigidity, because plenty of modern detective fiction intentionally does not follow it. It is just fiction of a different focus and design.

To summarize, detective fiction can narratively be described as two stories in one: The story of the crime, and the story of the investigation. The solving can be described as a game, played by the author and the player, with the author’s turn laying out a list of clues (as the criminal lays out clues for the detective), and the player’s turn trying to solve the mystery before it is revealed. However, this is primarily in the puzzle-like whodunit form of the genre, and less so in the thriller or suspense variants. And it is important to keep in mind this distinction, as the two sub-genres have different goals in what they want to achieve and how they expect the reader to read them.

3 DETECTIVE WORK IN GAMES

From these descriptions of literary detective fiction, we can explain how typical adventure-style detective games go wrong in letting the player work as the detective. Games like those exemplified by the adventure game tradition by Clara Fernández-Vara and Formica are more concerned with the depiction of the second story of the investigation, and script that to follow a certain, predefined path, which the player unlocks over the course of play. This is, at first glance more similar to more modern detective fiction which is more concerned with the second story (something Clara Fernández-Vara also suggests in her paper about detective games as post-modern detective fiction [17]). If we consider the reading of the crime to be the primary objective of the detective, and we instead want the player to play as the detective, the first alteration must be that the player’s primary job is to read the story of the crime. This is where most traditional detective games differ, because they are more concerned with the depiction of the investigation, and the game thus lies on the reading of the investigation. The player thus becomes the Watson instead of the Sherlock². Whereas, if we want the player to perform actual investigation and detective work, they should be performing as Holmes, and thus be *in charge* of reading the story of the crime.

If we are to consider a game in the whodunit style, where the player is the primary instigator of the solving of the crime, they

cannot be lead to which parts of the story to read at which times, as the primary object of work for the player should be to decide *how* to read the first story of the crime. The player must, instead of following a depiction of the second story, enact the second story by themselves successfully reading the first crime story. As the second story is concerned with the uncovering of knowledge from the crime, the primary gameplay the player must concern themselves with is uncovering knowledge.

Thus, it can be said that most detective games mentioned here, using terms from fiction, are not whodunits, but rather, thrillers or suspense-stories, as they are fundamentally more about the depiction of the story of the investigation than the story of the crime. Within this, we would consider games like *Heavy Rain*, *L.A. Noire*, and the *Sherlock Holmes* games analyzed by Clara Fernández-Vara etc., not because they have no detective work as part of their gameplay but because their primary focus is not on the performance of the player as a detective, but rather as a progressor of the investigation. There is nothing wrong with this by itself, but when presented like this, it is clear to understand Fernández-Vara’s [15] and Formica’s [18] frustrations with the detective game genre, as they are expecting to be acting as the detective and not as the “secretary”. If that was the expectation up front, then this would not necessarily be a problem, but when presenting a game as a mystery for the player to solve, and then have them follow the investigation rather than leading it, it is bound to cause some frustration. Therefore, this distinction is important, as in detective novels of the hardboiled tradition, we do not read them with the expectation that we are reading a puzzle, but rather to read a thriller. This split can thus also exist in games, but we must be clear about what intentions the game has before we can play a game in the manner suited to the work. Perhaps the issue is with the term “detective game” itself as this does imply the game-like structure of a puzzle, and thus when the words “game” and “detective” are invoked, it is natural to assume that there is a game, and this game will involve detective-work.

For clarification, we will thus propose two terms to help differentiate between the types of detective games, and bring it into the medium of games rather than purely reuse terms from fiction. The two terms are “puzzlebox detective games” and “adventure detective games”. *Puzzlebox* detective games are games that follow a rigid structure, of a whodunit-style detective story, but proceduralize this by letting the player be the primary performer as the detective, and let them lead the story of the investigation, and thus enact it. *Adventure* detective games are games that involve detective stories and mysteries, but the focus is rather shifted to the investigation and the player following a defined investigation path, even a partially defined one. This style might also involve detective work, but does not require it in the same way as the first does.

Notice here how, while they can both be called detective games, what qualifies them as this is quite different. For a puzzlebox detective game, the qualification lies in what the player primarily does, similarly to how other game genres are often defined by the primary verb (shooter, platformer). For adventure detective games, it is rather a subset of adventure games, with the story content being *about* detectives doing work, similarly to how adventure games are defined not by the fact that players do adventures (many games do

²Note that we are here not talking about the fictional characters but rather their symbolic counterparts. *Sherlock Holmes: Consulting Detective* [34] is a good example of a game where you are explicitly not playing as Holmes fictionally but are still performing as Holmes because you are chiefly reading the story of the crime.

that), but rather by similar conventions.³ Thus, these two "genres" should be considered quite different, even if they share the same name, and overall umbrella of "detective games", this umbrella is no more descriptive of the types of games and interactions inside it than "pirate games".

The easiest way to distinguish between them is by looking at whether the game is focusing on the story of the investigation or the story of the crime, and how the player uncovers it: If the player is in charge of uncovering the story of the crime without prescribed paths, it is a puzzlebox. If the player is primarily led along an investigation story about someone uncovering the story of the crime, it is an adventure detective game. Note that these genres, while being different in definition, can overlap and mix and are in no way mutually exclusive. You can have elements of both in one game, and many modern adventure-style games do have some elements of detective work in them.

Similarly, we can have games not within the detective genre involve detective work. There are moments in e.g. *Life is Strange* or *Dark Souls* (as will be discussed) where the player can be said to perform detective work. However, few instances of work is not enough to fall into a genre, as one puzzle is not enough to turn a game into a puzzle game, so these games can still exist as their respective genres without interfering with the detective game genre(s).

Finally, there is an odd paradox here. It is strange, perhaps, that the puzzlebox, the ruled based, rigid structure is the one least copied in the rules-based structure of games, and instead follow the looser, more character-focused thriller-structure instead. However, this is probably because of the types of games that typically tackle detective fiction. As exemplified by Fernández-Vara and Formica [17, 18], most game adaptations of detective fiction are adventure games, and adventure games are notoriously non-rules-based structures that lean themselves more to narrative progression and dialogue than most other types of games. Thus, it is perhaps a curious choice of genre, but here we propose that it is a problem of adaptation: Notably, the cases mentioned are all adaptations of existing detective stories in other mediums. In adapting an already written detective story, one will inherently read the second story and try to adapt that, rather than trying to, as Fernández-Vara is searching for [15], proceduralize the acts of the detective. For detective games that are not direct adaptations, the waters do muddy significantly, even if there are still many modern detective games that lean more on the adventure game roots than the puzzlebox roots, such as *L.A. Noire* [37], *Deadly Premonition* [1], and *Disco Elysium* [43] etc. But there are also games that blend the lines more, such as *Lamplight City* [21] or *Contradiction - Spot The Liar!* [4], etc.

It is, however, still rare to see games in the pure puzzlebox genre. Yet, there are games, even games without any detective fiction trappings, that can be considered puzzlebox detective games. The next chapter will detail some examples of different detective games unlike those previously discussed by the literature mentioned above, and these will serve as cases for how detective games can shape themselves to fit better the whodunit style structure in gameplay, by following the puzzlebox genre.

Before we venture there, though, allow us to make one final clarification. One might ask what is the difference between a puzzle game, and a puzzlebox detective game? If they are simply puzzles that require logic, inference, and potentially lateral thinking, is it then not just a puzzle game? Yet, there is one key difference between a puzzlebox detective game and a traditional puzzle game (here we are thinking of games like *Portal* [41] or *Sudoku*). In a clean puzzle game, every piece of information the player needs to complete the puzzle is given in the beginning. It is a prerequisite to solve the puzzle that the player knows all the moving parts in order to be able to fit them together—otherwise it is hardly a fair puzzle. In a detective story, the detective or player does not start with all the clues. They have to find them first, which requires work (play, in the frame of a game), and then also potentially figure out which of them are trustworthy. It is, in a sense, an unfair puzzle, which is perhaps why it feels fun to complete. If the detective had all the clues from the moment they found the crime scene, the solution would be, as a famous detective is known to say, an elementary puzzle. Note that the solving of a puzzle is included as part of the detective work, and it could be argued that puzzlebox detective games are a type of puzzle game, but it is only after the gathering and sorting of clues, that this can be effectively achieved (in most cases).

4 EXAMPLES OF DETECTIVE GAMES

4.1 Kamaitachi no Yoru

To take an example of a game similar to the traditional vein of adventure games, but yet a little different, *Zero Escape* creator Kotaro Uchikoshi highlighted in a GDC talk [40] how he was inspired by an old Japanese adventure game (then called a "sound novel") by the name of "Kamaitachi no Yoru"⁴ [11]. This functions differently to most (western) adventure games, because it does not necessarily funnel the player to one ending where the true murderer is revealed. Instead, the game asks early on to pick choices based on who the player currently think the murderer is and then progresses based on what you chose. The game thus can end with a "bad" ending if you put in the wrong choices, which you are likely to do the first times through when you have no clues to guide you. But, during the "bad" storylines, you learn more clues (and rule out possibilities), which will eventually lead you to restarting the game and choosing in the right answers, finally ending the game with the "good" ending, where the correct culprit is discovered.⁵

This is a good example of two things. First, that the game allowing the player to be wrong and dealing with the consequences of their wrong choices, thus requiring the player to perform detective work (or guesswork) in order to progress. Second, that the game in no way expects or prescribes an order of storylines, and thus clues (except for the opening). The player is free to pick any combination of choices and see how the story unfolds, and the game merely serves the appropriate ending upon executing this path, without

³As a curious aside, this echoes Raymond Chandler's view of the detective story as an "adventure in search of a hidden truth" in his essay "The Simple Art of Murder" [10].

⁴Directly translated as "Night of the Sickle Weasel". The English versions of the game typically took other names, such as the most recent "Banshee's Last Cry". A "Kamaitachi" is a Japanese mythological creature, directly translated as "Sickle Weasel".

⁵This description is based on Uchikoshi's description in his GDC talk, and a playthrough of the modern remake of *Kamaitachi no Yoru* for iOS devices, named "Banshee's Last Cry", which is an americanized version of the tale. It is unclear how many differences there are between the two versions.

saving what the player knows or has found out. The only variable that changes is thus the knowledge of the player. However, this is still similar to the adventure game structure, as there are still predefined paths. The next three games will be examples that break this mold and, in doing so, each are successful examples of the puzzlebox genre.

4.2 Her Story

Her Story, a 2015 game by Sam Barlow [5], is perhaps the cleanest, most literal example of the two-move non-turn-taking game in game-form. The game places the player in front of a virtual desktop with a video database of police interviews. In order to access this database, the player must write search terms, which are words that are spoken in the videos, and will only access the first 5 results based on said search term, but in no chronological order. The game doesn't end the case at a scripted point, and the player can never confirm the answer to the mystery by inserting it in the game, so they are finished purely when they themselves feel satisfied that they know the answer, and leave the game. This is not to say that there isn't a right option; we would wager that most people who've watched most of the videos in this game have, generally, a fairly non-variant idea of what went on. Where it differs from the adventure detective game is obviously in structure. Since Her Story doesn't reveal the murderer simply by "reading to the end", it is up to the player to deduce what is going on by inserting enough keywords and watching enough videos and making enough deductions from the information given. The gameplay is "purely" writing a word and watching up to five videos, and rinse repeat. However, all the detective work is happening in the writing of the words. You could just type a random word and see what the game spits back, but most likely, you are writing something related to the videos you just watched, then to that one, and thus creating long chains of information that may or may not be related. The work of the player is entirely in what word to write and the limitation of the game is in that you cannot watch all videos at once. Here, the player is exclusively left to read the story of the crime, through, ironically, someone relaying the story of the crime through a series of interviews. This database of videos is the rawest form of the story of the crime the game gives access to, and therefore it is what we as players read.

Sam Barlow's next game, Telling Lies [6], is in the same vein, but is different from Her Story in that it has a time limit and thus you are limited to watch a certain amount of videos before the game ends, however also without revealing everything. Here, the primary focus is also on reading the story of the crime, but the ending does turn a little into focusing on the story of the detective, as the player is playing as a defined character with stakes in the story, which you will make a choice based on at the very end.

4.3 Return of the Obra Dinn

Return of the Obra Dinn, a 2018 game by Lucas Pope [27], is not just one mystery, but a series of 60 small mysteries that add up to one large story of what happened to a ship in the 19th century (the titular Obra Dinn). The player can (through a magical watch) see the moment of the death of each passenger on the ship and is tasked with answering three questions in a notebook: Who where they?

Who/what killed them? And how?. Each option has a dropdown of choices, but in each, the options are so many that it is impossible to merely guess. The one help the game does provide in solving this is that it consistently confirms correct answers whenever three correct answers are locked in, thus giving the player feedback that they are on the right track. It is incapable of lying and will never give a false choice because the game revolves around solving crimes to narrow down other crimes. Here the detective work of the player is almost as freeform as in Her Story. No answers are given by the game nor is it decided beforehand in which order you must solve each murder (except for the first set of three, which acts as a tutorial). The player can explore every single passenger and area of the ship before placing a single crime in their notebook. Thus, while the exploration of the ship is happening in a hub of linear paths, the actual solving of the mysteries is a lot more undetermined. And often it takes the player watching the entirety of a path and then working their way backwards to even begin establishing enough clues to narrow down suspects. Clues are found in the words people say, in their posture and actions, pictures and lists of names, in the environment through objects or weapons, and the process of elimination. The player is then left to deduce and infer based on limited, often incomplete clues. As the primary acts, the player spends a lot of time studying clues in every part of an environment, focusing on details in specific words or expressions, and thus it is in many ways a great example of performing as the detective. The multiple stories of crimes are all solved by the player freely marking out the space and thus forming their own story of the investigation.

4.4 Outer Wilds

The final puzzlebox detective game we want to highlight is Outer Wilds, a 2019 game by Mobius Digital [13]. While not a detective game at first glance, it is in fact very much a detective game, it is just not about solving a crime⁶. Specifically, this is a puzzlebox detective game, where instead of a mystery of a crime, it is about understanding what happened in the game's strange solar system before you begin exploring it.

The player plays as a novice space explorer given free reign over a miniature solar system, armed with a space-ship and a translator, that can translate alien text. With this, you learn of the race of aliens who lived here before you, of their project and how it ultimately failed. You do this by reading snippets of conversations, learning how the various physics systems of the game operate and how you can manipulate and use them, and accessing hard-to-reach areas through exploration and learned techniques from the previous two methods. Solving the game's mystery is, however, more than just the understanding of the mystery, but the enactment of the project they were not able to complete. Completing the project is solved through much the same types of actions you've been doing the whole game, but just in a very specific manner. The entire game is thus a set of clues revolving around a single key action that leads to the finale of the game, but in order to be able to understand this single action you have to have gathered 3-4 key clues from across

⁶Detective fiction is often said to need a crime (as can be seen by the frequently used term "crime fiction" for the genre). However, Knight [25] pointed out that plenty of Doyle's Holmes stories had no severe crime whatsoever, but merely had a mystery. See for example "A Case of Identity".

the system (which are all difficult to get to and have their own sub-mysteries to access), in order to be able to actuate the puzzle's solution. Thus, the game is itself one giant lock which an unclear solution, while the key is also the game itself. However, instead of the lock-and-key puzzles of adventure games, the player is tasked with learning the shape of the key itself and use detective work to find it. The reason this is a detective game is that it requires genuine detective work to uncover these mysteries. You scrape up clues of what happened on one planet, and combine that with the knowledge of a specific phenomenon on another, make logical inferences from that, and test out your hypotheses on the world, which allows you to access new areas and new clues. As described above, a large part of the puzzle of *Outer Wilds* is first discovering the full extents of the puzzle, and this is why it fits within the puzzlebox detective game genre, for this paper. Like *Her Story*, the world state or player character of *Outer Wilds* never changes. You could finish the game within your first 20 minutes of play, but the finale requires such a specific set of information and actions that is highly unlikely for anyone to achieve this within their first 10-15 hours. The game thus almost has no effective save-states or progression states⁷. The game hides itself from the player in this sense, because in the beginning, while it is clear that there are mysteries out there, it is not clear what exactly the mysteries are, nor what solving them even means; the player will themselves have to make the deduction about how to finish the game, which is only possible once you understand what the project entailed. Thus, instead of talking about the story of the crime in this game, we are reading the story of the project, or the world. You play as a detective in all but name, with the clues instead of being about murder weapons and motives, being about astrological bodies, scientists' ambitions, and physical phenomena. This thus shows how detective work in games, in our mind, is broader than the mere idea of "detective fiction", requiring a crime. There is no wrong-doing in *Outer Wilds*, no abhorrent action to be corrected, and no criminal to punish. There is only a strange set of objects and the question of what they were used for. Yet, this is still a puzzlebox detective game because of how the primary actions of the game rely on this detective work, the uncovering of knowledge, by the player.

4.5 An Adventure Game: *Disco Elysium*

Disco Elysium is a 2019 game by ZA/UM [43], and it is a great modern example of the opposite of the last three games: A game in the adventure game tradition, that very much does not follow a puzzlebox structure. Instead, this game can be said to be much more similar to postmodern detective fiction, as it, while using the crux of a murder investigation to start its story, does not much particularly care about the actual crime. There are parts of the story where the two main characters deduce possible suspects and question them, but the story is much more concerned with the future outcome of this murder for the characters in the world, not the least the detective himself, than trying to puzzle out a previous story of the crime. The characters who are still in alive are very much the

focus, and they act, not all as suspects, but as political entities with motivations, that each try to sway or coerce the detective into their way of thinking, without caring much about the actual truth behind the crime. The truth, too, turns to be fairly banal, and *Disco Elysium* breaks several of the whodunit rules, but it does not matter as the story is much more concerned with the investigation than the crime. This is a great counter-example to the last three games that show that these two types of detective games can lead to excellent and successful games in their own right.

4.6 A Non-Detective Game: *Dark Souls*

Dark Souls, a 2011 game by From Software [19], is not a detective game of either of the two genres described here, but it is an example of a game which holds a lot of mysteries, through its incomplete and obfuscated characters, item descriptions, and environmental storytelling. There are facts to be construed from the world of *Dark Souls*, as can be seen by the numerous stories assembled by the game's community, but the game is not about that. You can "finish" *Dark Souls* without understanding anything about what you were doing or what the world was or has become when you do so, and thus it cannot be said to be a detective game, as no solving from the player is required or even expected. However, in order to find these stories, the player will have to perform what is effectively detective work (as laid out by the previous examples), by connecting different clues and making deductions based on given information, which does allow a backstory to be constructed based on disparate, non-linear information. This is an example of how games can incorporate detective work in games that are not about detective work at all, as Jenkins also described [24]. Similarly to how people who watch movies or read books can perform detective work on non-detective genres and thus discover new information, find new ways to read the narrative, or find subtle hints at future or past events the authors left in the design. This is a kind of detective work that can be more or less intended, but even if it is intended it does not make it a puzzlebox detective game, as that would necessitate some semblance of detective work in the playing of the game itself. Neither is *Dark Souls* interested in depicting the story of the investigation (as there is no investigating being done by the main character), so it cannot be said to be an adventure detective game, either.

5 THE STRUCTURE OF DETECTIVE GAMES

If we look at the broad structure of these three games (here primarily concerning ourselves with *Her Story*, *Return of the Obra Dinn*, and *Outer Wilds*), the structure of these is key in order to understand how they are successful. Elin et al. [9], described six different structures of narrative games, linear, branching, foldback, broom, hidden, and opportunistic. The key one for this example is the "Hidden" structure. In games with a hidden structure, the game intentionally obfuscates or hides its paths, and it is not clear how to proceed from one segment to the next. Contrast this to a linear or branching structure, where, even if there are multiple paths, each path is visible for the player at the moment of the choice (the Hidden structure is also similar to Marie-Laure Ryan's structure "The Hidden Story" [31], which, not surprisingly considering the name, is very similar). Structurally, these three games can all be defined

⁷The only exception to this is a rumour-board that helps the player keep track of where they've explored and exhausted, to help guide where they should investigate next. But this doesn't matter much to the point as this is arguably the same as the player's current knowledge, which is the one thing that does change despite the game's progression state staying the same.

as hidden structures. In neither game, it is entirely obvious which term to search for next (Her Story), which murder to solve next (Return of the Obra Dinn), or which planet to access next (Outer Wilds), and the truth for each game is that there isn't one path that is the correct one, but rather many paths that each can lead to the same end. This is relevant because part of the discovery and solving of the game is in discovering the structure—or discovering the elements of that structure which are obfuscated. And much of the challenge comes in navigating this structure that you cannot see the entire map of. This is where the detective work comes in: You have to make conclusions and assumptions and follow leads without knowing or being able to see the full picture. This echoes the idea that the detective work is about uncovering knowledge, as the knowledge of where to go and which part to solve next is part of the work. From what we can so far conclude based on the games we and the scholars above have analysed, this structure is then a requirement, as any structure where the player can see the correct path would eliminate the sense that they are discovering and deducing the correct next move along their own journey. Said succinctly: A Hidden structure is a requirement for a puzzlebox detective game.

Detective work is a mental process, and thus the game needs to allow a lot of the detective work to happen in the player's minds, and thus "only" be the facilitator for mystery and ability to discover, manage, and reassess clues, but not govern when and how and where the player finds the clues, and, crucially, when the player solves the mystery. This must be left up to the player for the game to function as naturally as possible as a detective puzzle because a puzzle that solves itself is not a puzzle.⁸ The key difference puzzlebox games have over whodunit fiction is that they do not have to reveal the murderer in the end to feel satisfying if the player has not realized it, but can wait until the player *is ready with the script*. Since the player is playing as the detective, they do not have to be in competition with them to find the culprit, but can instead be the sole investigator of the crime. In Hühn's language, the reader and the superreader thus collapse into the player, as they act as both simultaneously.

A final point to add about games following the rigid, puzzle structure of whodunits is the social implications of doing so. Knight [25] discussed how both Doyle and the inter-war crime fiction writers eased the worries of the upper middle class (in England, typically), by the crime being a disruption of order and the criminals "anarchistic enemies of order, respectable people gone bad, or aristocratic villains" [25]. This is then set right again by the detective who, by reading the obscured story of the crime, reasserts order into society, and thus making everything all right in the world (for the upper middle class, and typically only them). The rigid puzzle-like structure was well suited for this, as it is an easy way to make everything feel as though it falls naturally into place once the detective has revealed all the clues and read the obfuscated crime successfully. It would thus be an easy trap for games to fall into the same inclinations through whodunit structures, however, the games we have looked at do not seem to be doing so. Return of

the Obra Dinn is perhaps the closest, but it does offer some commentary on the matter by having the player act not as a detective, but an insurance investigator. Outer Wilds (without spoiling too much) is specifically about not re-establishing the previous order but accepting an ending to embrace something new, and Her Story does not reinstate a simple, peaceful order for the characters in the story, but rather leaves their fates ambiguous.

Another criticism of the puzzlebox style can be seen in Borges, or at least in Boruchoff's reading of him [8]. Borges' story "The Death and the Compass" [7], is a story of the downfall of a detective because of his stringent following of pure logic and his need to overanalyze patterns into the world. We will refer to the reading of this story to that paper, and others, but use this as another mention that the use of a pure puzzlebox logic to describe the world will often fail to describe the actual muddiness, contradictions, inconsistencies, and accidents that happen in real life. Thus, it is a danger of the puzzlebox style, as it was for the whodunit, to describe its worlds too cleanly, and too focused on letting the mystery fit neatly together.

As a concluding example, in the end of Persona 4[3], the player is given a question of who they think the murderer is, and the game proceeds to give a multiple choice of every single major and minor character in the game, for the player to choose from. Until this point, the game has followed a linear structure, and one where the player has followed the crime but without doing any of the detective work as part of the game. But here, right before the climax, the player is given the primary decision, and the game then switches identity: It is willing to wait for the player to pick out the right option. The game is constructed carefully enough that there aren't many sensible options left at that point, and thus the player can work through their knowledge to select the killer, without the game telling them so. This game in many ways, like Kamaitachi no Yoru, follows closer to the adventure game style, but breaks with the tradition by letting the player act as the detective at the very end.

There is not one way to design detective games. We are not with this paper saying that every game that involves detective work should be a Hidden Structure puzzle-box with open, explorable space and nothing else. Detective work can come in many forms, and the game does not have to be dominated by it, to still serve a solid, satisfying mystery. We hope the examples given in this paper help show this. Yet, with the distinction clarified in this paper, we can begin to distinguish between games where the player acts as the detective as their primary mode of interaction, and ones where they are not, but are instead acting as something else. The puzzlebox games presented serve as a revelatory break with the previous tradition of detective games as lock-and-key adventure games and thus help us offer a new path, and a new direction for these types of games to go in, that paradoxically echoes more closely an older style of fiction.

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