Gated Story Structure and Dramatic Agency in Sam Barlow's *Telling Lies*

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Abstract. Sam Barlow's story-based video game *Telling Lies* (2019), like his previous game, *Her Story* (2015), is based on an interaction mechanic in which the player searches a fixed archive of videoclips using keywords found in the dialog of the fictional characters. This storytelling strategy can be situated within traditions of epistemic narratives in which the interactor navigates through a set of unchanging narrative segments, motivated by the desire to increase knowledge of the story. Such stories offer the pleasure of revelation, and they hinge on hiding information so that it is later revealed in a way that maximizes the experience of dramatic agency. This paper explores the expressive potential of Barlow's signature database search mechanic for creating the experience of dramatic agency through managed revelation. By mapping our own experience and examining Barlow's development documents and code, we describe how the artfully gated search mechanic creates temporal disjunctions that provide glimpses of narrative situations that pique curiosity while suppressing explanatory revelations. Using *Telling Lies* as an example, we identify some characteristic design challenges and opportunities afforded by the constrained database search approach and point to unexplored design opportunities that could make this strategy the basis of a more widely-practiced genre.

Keywords: Interactive Narrative, Epistemic Immersion, Dramatic Agency

1 Dramatic Agency in Epistemic Narratives

In recent years, interactive narrative has been recogni
zed as a distinct genre independent of, though often overlapping with, video games. (Koenitz 2018[1], Murray 2018[2]). As such it has its own aesthetics and can be assessed by how well the mechanics of interaction reinforce the narrative experience. To the extent that they diverge, they display ludo-narrative dissonance (Hocking 2007[3]); to the extent that they converge, the interactor experiences dramatic agency, in which the mechanics of interaction map tightly to the experience of arousing and satisfying narrative curiosity. Dramatic agency need not entail affecting the events of a story; it can be produced by navigating a story through a set of choices that engage the intent of the interactor to actively investigate a particular narrative thread (Murray 2017[4]). Much of the controversy over ludology versus narratology has reflected the awkwardness of interrupting gameplay and suspending agency in order to introduce story content, as with cut scenes. But it is also true that the wrong game mechanics can become a jarring distraction from a compelling interactive story. In order to reinforce the experience of dramatic agency, the mechanics must be transparent and congruent with the narrative situation.

Marie-Laure Ryan has identified one form of narrative as "epistemic," which describes stories in which our engagement is "driven by the need to know" (Ryan[5]). Detective stories are the model for epistemic storytelling. Within the diverse meta-genre of interactive narrative, epistemic narratives allow interactors to enact their narrative curiosity through the navigation of fixed narrative fragments of an unchangeable event. They may take the form of detective stories like the Frogware Sherlock Holmes games (Fernandez-Vara[6]) or Capcom's *Phoenix Wright: Ace Attorney* series([7]), in which the interactor is assembling incriminating elements, confronting the murderer, and achieving closure by bringing a villain to justice. Or they may refuse closure, like the postmodern hypertext rhizomes of the late 20th century (e.g. Michael Joyce's *Afternoon*, 1987[8]) that have no clear ending, as an affirmation of the epistemic openness of all systems of meaning.

Since human experience is temporal, and there is usually something that happens last in any sequence of events, it is hard to write a story or to experience even the most labyrinthian story structure without imposing a temporal sequence of beginning-middle-end. A database or video archive, however, is the opposite of a temporally-ordered sequence. It exists in the misnamed "random" access present. That is, we can separate the sequence in which we call things up from their linear order (which is what we mean by "random") by calling them up through metadata (which is highly specific and opposite of the ordinary meaning of "random"). Lev Manovich has pointed out "As a cultural form, database represents the world as a list of items and it refuses to order this list. In contrast, a narrative creates a cause-and-effect trajectory of seemingly unordered items (events)." (Manovich[9]) Despite this opposition,

Sam Barlow has created two well-received fixed story interactive narratives that use database search of a video archive as the predominant game mechanic. This approach poses two related design challenges. First, how can the designer allow access across the temporal restructure without cutting short the satisfying experience of narrative curiosity by rewarding it prematurely? Second, how can the designer constrain access to some segments while maintaining the transparency of interface mechanics that makes for the successful experience of dramatic agency?

2 Closure and Gating Strategies in Epistemic Narrative

The 169 component narrative video segments of *Telling Lies* cover more than a year of telephone conversations (with each side recorded separately), along with a few social media posts and surveilled group encounters. Together they fall into four storylines, all of which center around the downward trajectory of the protagonist, David, an undercover FBI agent. David begins as a faithful husband, loving father, and idealistic law-enforcement officer charged with investigating eco-activists. He then commits a series of betrayals that culminate in a violently destructive and suicidal act of eco-terrorism.

The video archive the player character is charged with exploring contains conversation David has with his FBI handler, and with 3 women with whom he has sexual relationships: Ava, a young activist; Maxine, a sex-cam worker who performs under multiple personas; and David's wife Emma who is with their young daughter and his ailing mother-in-law in another state. There is also a real-time frame story of Karen, a fellow FBI agent exploring the video archive. It is her role that the player turns out to be enacting.

As in *Her Story* (2015[10]), in *Telling Lies* (2019[11]) the interactor is presented with a rigidly constructed archive that can only show five items at a time in response to text-based queries. The returned videos represent fragments of longer scenes. In *Her Story* the scenes are from successive police interrogations in what may be a murder investigation. In *Telling Lies*, a more complex and better funded story-game, the fragments come from government surveillance of telephone calls and meetings. *Telling Lies* adds the further conceit that each side of any individual phone call is recorded separately. The interactor plays only a small diegetic role within each of these stories, but the experiential role in both is quite clearly that of detective.

Telling Lies situates the narrative on a fictional computer desktop with a specialized search interface. One of the first things to strike a player upon starting *Telling Lies* is the game's visually-faithful emulation of a Linux-type operating system. The buttons, menu bars, and icons all clearly allude to the distinctive design of the open-source OS favored by digital power-users. The flexibility of Linux systems provides computationally-skilled users relatively unfettered user agency to manipulate information compared to more tightly controlled commercial operating systems like Apple's iOS and Microsoft's Windows. *Telling Lies'* pseudo-Linux is much more limited in functionality than any off-the-shelf system, forcing the player to work within constrained game mechanics.

The game limits the five video results by when they fall in the hidden timeline of the narrative, with only the earliest videos being returned for any one keyword. As a result, even if you know that a word appears in a late-story video, you will not be able to retrieve and review that video if five videos prior to it also use that word. This design element was also present in *Her Story*. The benefit of this artificial search limitation is that it serves as a gate to prevent players from jumping to certain carefully hidden late-story videos that reveal deeper backstory or the climax of one of the plot threads. To reach these hidden videos, the player must have found specific or even unique words that are only revealed at the end of long word-trails. Since videos are only available by keyword search there is no way to get around this artificial limitation. There is no way to navigate directly to a video by typing in its name, or navigating through a file directory as one might in the standard Windows desktop GUI, or by a command line *cd* as in the Unix-like shell environment of *Hacknet* (2015[12]).

The limitation of search returns, then, violates our expectations of the operating system, but it serves the narrative experience by fulfilling the same purpose as the locked doors or hidden entries in an epistemic adventure-style game. We can think of this structure as a gating system in which parts of the narrative are unreachable until certain conditions are met. Gating systems are an important part of murder mysteries, escape rooms, and level design in games, and they are crucial to creating dramatic agency in interactive narrative because without gates you could see the story in any order. The search limitations in *Telling Lies* serve the function of these figurative gates,

preventing players from accessing later narrative sequences prior to obtaining some requisite information. However, their presence and function are opaque. Unlike other interactive narratives, where gates might be literally represented as locked doors for which you must find a key, the gates in *Telling Lies* are never explicitly explained to interactors and one must instead infer their mechanics, the way one would infer the workings of a puzzle. According to Manovich, "While computer games do not follow database logic, they appear to be ruled by another logic – that of an algorithm. They demand that a player executes an algorithm in order to win." In obscuring not only the game mechanics but also the narrative itself, Barlow makes a step toward creating a game that is both database and algorithm.

It is a common mistake to think of interactive narratives as "non-linear" or merely subversive of meaningful sequencing of legacy narrative forms. But digital structures offer the opportunity to create more complex structures with multiple coherent sequences, and are therefore more helpfully thought of as "multi-sequential," as distinguished from traditional "unisequential" stories. [Koenitz[13], Murray[4]] In order to support this complexity, designers often provide a unisequential structure that serves as a spine for the story, or a "rail" that forces the learning of information in a fixed order similar to the levels in a videogame. The story is provided with gates that do not allow passage into a new set of narrative revelations until prior segments have been experienced.

Sometimes these "gates" are physical barriers within the fictional space. For example, the Fullbright Company's well-received *Gone Home* (2013[4]) is set in an abandoned house that the player explores to uncover a story told in fragments associated with objects within rooms. The spatial exploration seems to be quite open: you can go where you like in the large Gothic house. But in actuality, the story is structured as a clue trail in which access to later events is cut off until you have literally unlocked specific rooms and containers. The story that is hidden in *Gone Home* turns out not to be murder mystery or a horror story as the initial Gothic conventions (dark and rainy night, deserted house, disorder and unexplained disappearance of the protagonist's family) lead us to expect. Instead it is a teenage love story between the protagonist's younger sister and another woman, and a story of estrangement and renewed commitment in the marriage of the player character's parents. The story fragments are contained within documents like notes and photographs found in the house, and in a voice-over diary triggered by these spatial discoveries.

The experience of *Gone Home* is therefore one of unlocking a space in order to uncover a story. Hannah Wood (2017[15]) describes a subgenre of Story Exploration Games that shifts the player perspective from the traditional view of story protagonists to "experience protagonists." Wood sees story games like *Gone Home* as moving away from giving the player a central self-goal and toward giving the player a more empathic engagement with the goals expressed by the active characters in the narrative. The story is experienced from the perspective of an older sister returning to a mysteriously empty family home, but the actions we care about belong to the other members of the family whose struggles are revealed through artifacts within the many rooms of the house:

> As experience protagonists, players [of *Gone* Home] operate as detectives trying to decipher the story. The central mechanics (or player verbs) of 'searching' and 'exploring' enable decisions on how the story is pieced together and parallel the search for meaning and identity central to the stories of Sam, Jan and Terry. (Wood[15])

In *Telling Lies*, the player embodies a similar "experience protagonist," of a named character, the FBI agent Karen, who is mostly an observer. Instead of occupying the more specific career or personal goals of that character, the player is motivated to soak in the stories told within the database, to form emotional bonds with the dramatized characters, and have those bonds motivate us to uncover more of the story about them. There is a brief temporal ending to the story based on Karen's actions, but all the codas to the story wrap up the stories of the surviving active characters, and only one is shown for each play-through based on which of the women characters—Ava, Maxine, or Emma—the interactor followed the most closely.

Another recent example of an epistemic narrative driven by an enticing mystery, and one closer to the detective framework than either *Gone Home* or *Telling Lies*, is Lucas Pope's follow-up to *Papers, Please* (2013[16]), *Return of the Obra Dinn* (2018[17]). In this adventure-style game, the player is in the role of an insurance investigator attempting to discover the fates of 60-odd ship passengers missing from a recently-reappeared ghost ship. There is a ghost ship to spatially navigate, filled with hidden corpses, but the story revelations are

significantly organized by an interactive object, a 135-page notebook complete with "Table of Contents," art plates, and chapter sections separating the game's narrative into individual arcs. Like the diary in *Gone Home* or the operating system in *Telling Lies*, the notebook in *Obra Dinn* does not behave like an ordinary paper object. It is the interface through which the player manipulates information, providing templates with multiple choices to fill in about who perished (or disappeared), how, and at whose hands. The notebook provides some expected forms of digital affordances, allowing players to surface all vignettes containing specific characters with a single click, to bookmark important flashbacks, and to easily link characters as they appear physically in the game world with the information recorded about them in the log. Matthew Weise's observes that *Obra Dinn* does "not [skimp] on real deduction and non-linearity in adventure game design," instead providing him with robust mechanical tools "to create a timeline so I could paint a clear picture in my head of how the story happened. Obra Dinn understands this kind of pleasure, the pleasure of un-watered down detective work. Rather than reducing the forensic expectation put on the player, it makes the game openly, unabashedly about forensic collection of information. Except, unlike System Shock, it makes the note-taking the core mechanic." (Weise 2018[18]). Information retention, management, and manipulation, then, become central mechanics for navigating, both spatially and epistemically, these database games.

In *Obra Dinn* physical corpses are the gates to greater story content. It is finding another corpse that triggers the recorded interactive vignette that makes up a segment of each chapter of the larger story. To review previous segments, players must remember which corpse triggered it. While this makes story navigation a bit clunky, the notebook, which in which the player records their steadily growing knowledge and insight, serves as a consistent anchor for the player in the story, allowing them to reorient themselves repeatedly as they find the need to backtrack and re-examine evidence. For those who successfully unearth all the vignettes and make the right deductions through the corpse-and-notebook navigation, it does offer narrative closure in explaining all the mysteries (albeit supernaturally, as befits the genre) and in a final "secret" scene which provides recognition that the player character has successfully solved all the mysteries. In materializing player knowledge in game mechanics, and connecting the perfection of the player's knowledge with narrative unity, Pope offers a compelling model for ludo-narrative design in the mystery/database game genre.

One strategy common to all of these stories is the bifurcation of the story between the interactive element which is represented by the present-tense action of a solitary detective figure and a fixed set of story segments describing a past set of actions by multiple characters. Todorov pointed out that this bifurcated structure is the essence of the detective genre which consists of "two stories: the story of the crime and the story of the investigation" [Todorov 1966[19]). Or as Wood suggests, echoing Todorov:

> Casting players as *story protagonists* does not allow them to know their own fate and do nothing about it without being dramatically dissatisfying; but, an alternate viewpoint as *experience protagonists* provides the opportunity to manipulate time and allow players to see the fate of story protagonists, a hook which can generate narrative drive and motivate them to actively uncover why it ended that way. (Wood[15])

In the epistemic story, the dramatic agency belongs to the least dramatic actions – not the seductions and betrayals of *Gone Home*, but the unlocking of the doors that lead to the revelation of the next fragment of the story; not the deceits, seductions, and political entrapments of *Telling Lies* but the typing in of the right keywords to reveal those plot points.

3 Gated Keyword Trails in *Telling Lies*

In two design documents that Sam Barlow shared with the authors of this paper, the story elements are ordered in a table with dramatic scenes (in temporal order) forming the rows, and 4 columns for each of the main characters, David and the three women he is involved with: his wife Emma and the mother of his young daughter; Ava, the young activist David seduces and impregnates; and Maxine, a sex cam performer with whom he has salacious conversations. (They have other names in the design document and the plot developments are different from the final version, but the characters and major events are the same). The conversations are divided into 8 sections labeled A-H, each of which asks a question in each of the story threads (see Table 1). The final story provides a date

and time stamp for all of the conversations, creating a linear timeline that runs from August 2017 through November 2018.

Table 1. Barlow's Design Documents: Outline Showing Story Segments Ordered by Time, Theme, and Character

	A	C	D	E	F
1		**Overall what is screwed up about the source material here? It's about the government's need to control, about the betrayal of trust and the violation of intimacy. It's also about how much you know the person you share your life with; and in some reflection of that how much you know yourself.**			
2		**Every scene is about David wanting people to believe he is genuine. This is a coping mechanism for David always feeling like he is *not* genuine.**	***Every scene is about CONTROL***	***Every scene is about TRUST***	**Every scene is about INTIMACY**
3	Sequence	David. Sees self as a HERO but so focused on this ends up becoming the problem. To save people he violates them. Wants people to be weak so he can protect them. Wants the sleeping woman because in sleep she is an object and devoid of agency.	Susan. Marked by her mother's shadow. Can she find a way to gain control of her life?	Bree's story: Can she trust another? And through trusting another can she share more of herself?	Melissa's story is about INTIMACY. How much Intimacy can Melissa share? How does she reframe it in her mind so she saves something back for herself. She resists surrendering up 'real' intimacy but that is a complicated game.

The scenes are skillfully written, directed, and acted to elicit narrative curiosity about what is being said on the other end, so as to prompt the interactor to further investigation. For example, the game begins with a preloaded search term “LOVE” which pulls up a clip of David talking with his FBI hander, Mike, and clips of Emma, Max, and Ava talking with David. All of these sequences happen at the beginning of the story in August 2017, a wise design choice, serving to orient the player at the start of the narrative. From this initial set of videos, new players are expected to be interested in a spoken word and investigate the keyword in the database, unlocking a new set of videos from different story threads and chronologically different points on the timeline. In one of the initial videos, David uses the word “romantic” to describe himself (in his undercover persona) and if you feed this word into the search engine you will find two early clips and one from July 2018 which marks a climax in Emma’s story and offers a disturbing revelation on David’s violent nature. Navigating through the database is full of these jumps across characters and time, providing an epistemic detective task in which the player is constantly trying to reconstitute the underlying temporal and narrative order.

To illustrate the prevalence of these kinds of disjunctions, we mapped our own experience of one playthrough of the game. In Figure 1 the x-axis represents time covered by all the videoclips and the y-axis shows the five speakers on the videos. David is in the center since he is present in all conversations. In addition to Emma, Ava, and Maxine, we have a row for David’s FBI handler Mike and some minor characters associated with the FBI plotlines which provide the momentum for the major story events.

The Figure 1 chart is limited to key scenes and searches and does not include our whole player experience or all 169 possible scenes. Our paths took the form of long runs of keyword chains. For instance, Path 1 is the blue line that starts with the initial “LOVE” search provided at the game’s start. From that initial briefing between David and Mike, we investigated the word “convergence” which sent us barreling from August all the way to April, and from the FBI timeline to Ava’s. The resultant video then hinted at the existence of Karen, who we also investigated in the database as a keyword. This cycle of discovery and investigation would continue until we ran out of productive searches for new videos. At that point, we would need to reference our notes and memories for potential keywords until we discovered a new chain of videos. Path 2 (in red and enlarged in Figure 2) shows our next successful run, which circles around the middle of the time frame, and Path 3 (in dark green) takes us to the events that end the story. We did other searches as well but these summarize the major paths we took through the archive to reveal the key plot points and visit all the parallel strands of the story.

Throughout the session, we spent the bulk of our time in the temporal middle of the story, following keywords that looped us around across characters and back and forward in time in a circular and zigzag fashion. At the same time, the team’s overall progression follows a clear trajectory towards the timeline’s final video, driven by narrative curiosity to learn the conclusion to David’s story. David’s fall follows an Aristotelian tragic arc, including a moment of recognition of his sins and a final act of violence that takes his life. Whichever path we take, we are aware of irreconcilable conflicts and rising tensions in his life, which cause us to look for resolution. This desire propels us to the chronological end of the story and his rather pathetic attempt at redemption and catharsis by committing suicide.

Figure 1. Navigating a Database Narrative: First Half

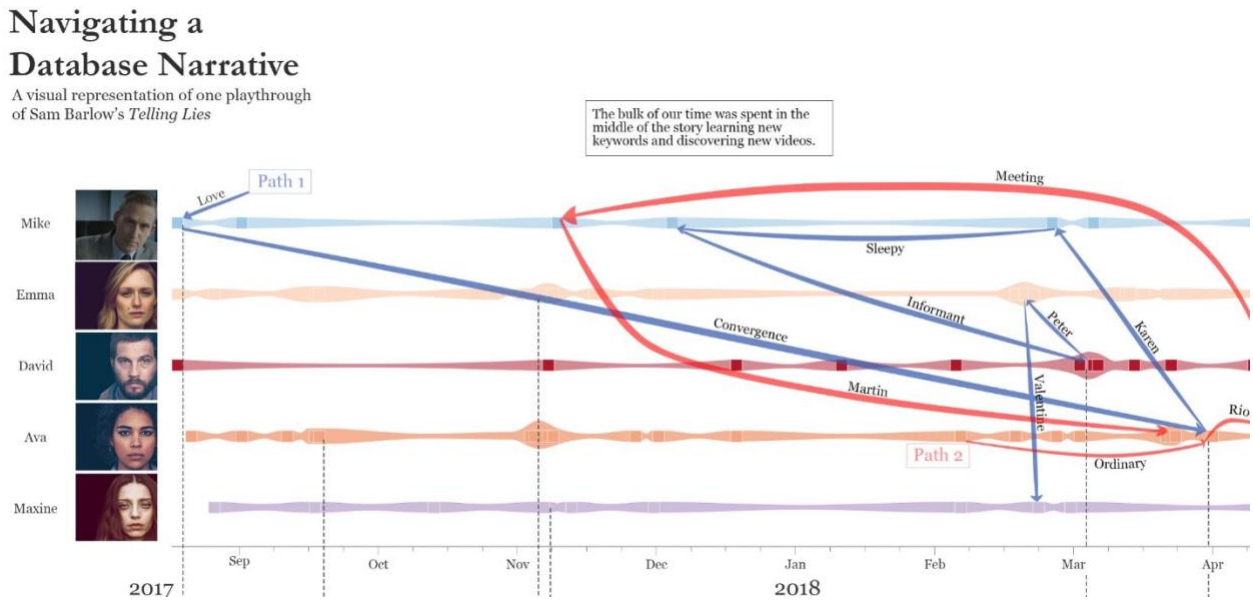
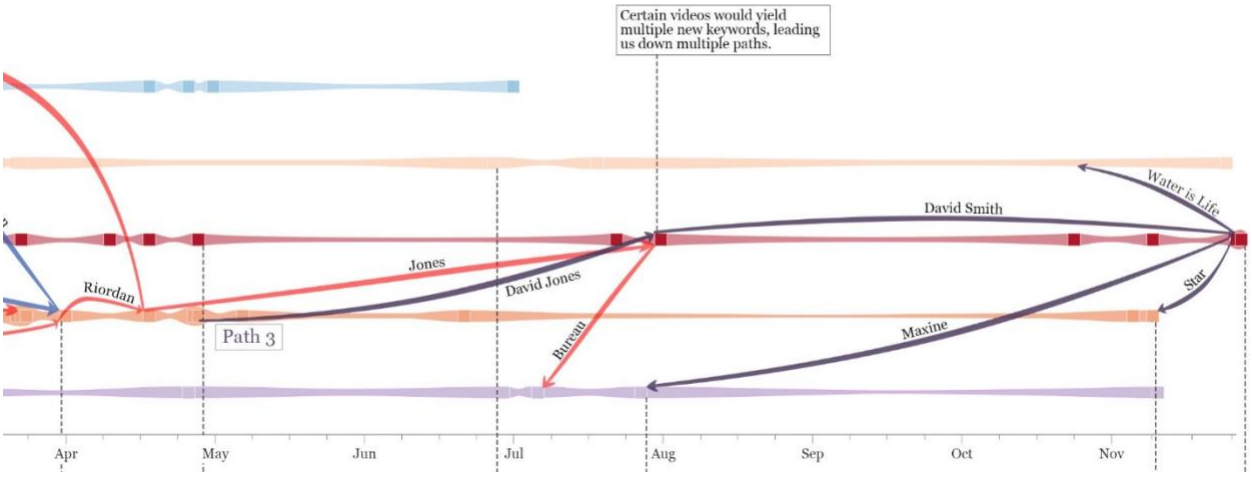


Figure 2. Navigating a Database Narrative: Second Half



It is important to note that the visualization shows only one possible traversal of the narrative, and every node could have led in other directions since we were selecting one of several possible keywords from one of up to five different videos that were returned for each search. Other playthroughs might focus on different words in the game's dialogues as search terms, leading to different paths through the database, and would lead to videos that we never got to see.

This potential for multiple player narratives through the constructed narrative is by design. The algorithm driving the search engine only returns five videos with the search term and does not show or hide specific videos based on player progression. It is not trying to show you new things. It is trying to hide chronologically later videos

using the same search term. The search terms that reveal later sections are like Easter eggs hidden in select segments – they are unique terms that you are not likely to guess unless you have gone through a lot of the story. For example, we don't find out that David Jones' real name is David Smith until a very late scene, and "Smith" is the only keyword we personally found to unlock the final suicide scene.

This gating technique uses unique search terms the same way that *Gone Home* uses hidden keys and secret locker combinations, but it differs in how the gates are constructed and enforced. In *Gone Home*, the gates are enforced by the system's code; in *Telling Lies*, the gates are enforced by the design of the script. The design documents that Sam Barlow shared with us included an elaborate spreadsheet cross-listing every word in the script and every video segment. It makes clear that the game's script, its entire gating mechanic, was intentionally designed so that earlier segments have more successful search terms than later ones. Tables 2 and 3 show the Hits values for early and late segments.

Table 2. From Barlow's Development Documents: Unique Word Scores from Segments Early in the Timeline

	A	B	C	D	E	F	G	H	I	J	K
1		1	2	3	4	5	6	7	8	9	10
2	Hits	168	81	86	161	52	124	91	41	97	44
4	Clip	mirr	prin	hug	dad	hey	how	hey	you	oka	hi

Table 3. From Barlow's Development Documents: Unique Word Scores from Segments Late in the Timeline

	A	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN
1		159	160	161	162	163	164	165	166	167	168	169
2	Hits	2	10	7	1	35	6	12	95	6	13	16
4	Clip	ton	hey	hey	you	wha	hey	why	i mi	it s	my	mill

Hits represents the number of unique keywords that, when searched in the database, will return that video segment as one of the first five videos to include that keyword in its dialogue. For instance, video segment 1 is the first video in the narrative, a conversation between David and Mike detailing David's undercover mission and alibi. During the briefing, David describes himself as a "loyal friend." The keywords "loyal" and "friend" each contribute to the Hits value, and they would reveal video segment 1 when searched in the database. In total, there are 168 total keywords that would return video segment 1.

On the other end is video segment 169, the final video in the chronological narrative that shows David's public apology and subsequent suicide. The video acts as a conclusion to David's story and has an appropriately low Hits value of sixteen, meaning only sixteen keywords would reveal this final video. This list was curated in such a way that an interactor would have already spent significant time investigating the narrative before searching these keywords. For example, searching the word "David" would not return the final video, as his first name is a common piece of information. However, David's real last name, "Smith," is one of the sixteen keywords to the final video, and the information on his name is appropriately hidden in harder to reach videos later in the narrative. That is not to say an interactor will not find later videos early in a playthrough, but that situation is less likely to happen due to the way the story's information is structured.

The dramatic satisfaction comes then, as in the traditional detective story, from revealing the underlying sequence of events and the chain of causation that is otherwise hidden. The skipping around across time actually reinforces this pleasure by offering many mysteries. Every scene revealed out of temporal order raises a question of "why did this happen?" which leads us to want to explore backwards in the story as well as forwards. Showing half

of every conversation creates a desire to move vertically in the story – to find the other half of the conversation. But at the same time we are motivated as we would be in a unisequential presentation of a narrative to wonder "how will this end."

4 Design Issues for Archive Narratives

In narratological terms we can think of the events on the parallel timelines of Figure 1 as the fabula (plot) and the paths through the archive as the syuzhet (discourse or telling). Each playthrough of the game creates a unique instance of Wood's "dynamic syuzhet," an instantiation of all the potential narratives implicit in Hartmut Koenitz's "protostory." (Koenitz[13]) The events on the timeline make up four stories, each with their own climax and all four main characters emerge from the events in a dramatically different place than they are in at the beginning. The women's stories are all survivor tales, and David's story, which takes up 96 of the 169 segments, is, as we said above, similar to a classic Aristotelian tragedy. But one might argue that one effect of the database structure is to undermine the sense of catharsis and closure that David's story might otherwise have produced. David is a deluded, arrogant hero who goes from a high position to total destruction by way of a series of crises and revelations that lead to devastating self-knowledge. But we don't finish the story when we experience his suicide. We know that we are finished when we have explored the situation from every angle, creating the experience Murray identified as "saturation," (Murray 2017[4]) or as Alex Navarro described it in a "Quick Look" for the Giant Bomb website, "You will know when you are satisfied when you know you are satisfied." (Navarro[11])

Furthermore each of these women whom David has exploited gets an epilogue after the ending of the game, showing how their lives turned out years later, and all three pointedly say that they refused to look at the video with his final message to them, because of their disgust with his patterns of betrayal. The player sees only one of these epilogues on any one playthrough, based on which woman's videos they spent the most time with, but this teaser motivates replay, encouraging us to return to the game and watch more videos in order to see them all and experience all the epilogues. There are therefore four different "last" endings to the action of the story, but none of them closes off the possibility of further explorations of the archive, and while they all exist within the fabula of the narrative, only one exists within the experiential syuzhet of a playthrough.

In *All Data Are Local* Yanni Loukissas warns us that vast databases often decontextualize information, but data always belong to specific places and social structures and are influenced by how they were collected and by whom:

> Data are useful precisely because they provide unfamiliar perspectives, from other times, places, and standpoints that we would not be able to access otherwise. The strangeness of data is its strength. (Loukissas 2019[20])

The strangeness of data is well-suited to fictional narrative. Furthermore the process of exploring datasets prompts an investigative mindset as individuals try to find contextualization for the sea of information in which they are submerged. *Telling Lies* invites the player into the experience with no overt guides or direction, allowing the player to stumble into its robust dataset. Once encountered the player is then drawn to investigate the contextless information and build connections between the data to solve the inherent mystery of the dataset.

The ending of the game does not provide the conventional satisfaction of a detective game. At 5 AM Karen, our player avatar, inserts a flash drive that requires the user to upload their videos to a government whistle-blower site. This prompt provides the users with a moral question not raised yet in the game: Do you reveal David's actions to the world? Up to this point, despite the implicit investigative nature of the experience, the user is merely a witness, and at times an uncomfortable voyeur, of a series of betrayals as David's life slowly unravels. The whistleblower prompt provides a moment of reflection and active participation that re-contextualizes the experience. Or it would if the button was an actual choice in the experience. But in fact the button is merely a trigger to end the game. When either the in-game clock reaches 6 am or you choose to send the data, the final cut-scene plays and the game ends.

This moment suggests other design opportunities for database narratives. The interactor could be given the task of assembling a selection of sequences that taken out of the larger context of the archive to incriminate or

exonerate a particular person. There could be multiple possible sequences and a limited time to discover them. The notebook, which is underdeveloped in *Telling Lies* as compared to *Obra Dinn*'s, could be turned into an editing table or evidence bin where interactors create their own interpretation of the situation. *Her Story* suggested this sort of approach in its support of alternate interpretations of the subject of the interviews as a single person or twins, sane or insane, murder or victim. *Sherlock Holmes* ([21]) and *L.A. Noire* ([22]) use this technique to invest the accusation with dramatic import. The *Telling Lies* scenario suggests the possibility of a politically-themed twist on this strategy in which there is a single level of reality but multiple patterns of complicity.

Another powerful design feature of the *Telling Lies* gated archive structure that could be further exploited by future designers is the removal of David, the protagonist, from 73 of the 169 videos. Watching so many videos in which people are conversing with the protagonist but his part is missing reinforces the theme of David's elusive and deceptive character. His removal allows the player's investigation of the database to only be informed by how other characters within the narrative react to David. In essence, David becomes a ghost or myth that the users only understand through the perceptions of the character in the narrative. This ghosting allows for David to be different for each play-through depending on how he is seen through the reactions of the other characters. A player who only views videos containing Maxine and Mike, for instance, might create a David that is struggling to complete his mission and turns to a parasocial relationship for guidance. While players who only saw videos of people reactive to David's violent actions might see him as a violent rabble-rouser. Others might see him as a responsible husband and father, or a caring boyfriend.

All of these potential enhancement are based on the central expressive strategy of the video archive story, which is the creation of the experience of dramatic agency through narratively-motivated strategic actions (selecting keywords) that lead to results that expand narrative motivation and multiply coherent paths forward. The essential pleasure of the form is the epistemological quest, the discovery of more information about a series of complex events in which the paths reflect specific acts of narrative curiosity on the part of the interactor, and the fragments can be assembled in multiple coherent sequences.

Barlow and his team have proven that the exploration of a video archive can produce narratively satisfying play-throughs given a careful structuring of the underlying fabula and the design of a mechanic that shapes the paths of the interactor into meaningful dynamic syuzhets. It is also clear that the form has more design possibilities that *Telling Lies* hints at but does not deliver on, and that remain for potential exploitation, perhaps by a wider range of practitioners.

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