

# **The longest walk: a retrospective of biographical game design**

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# The Longest Walk: A Retrospective of Biographical Game Design

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## **Abstract**

This paper discusses the design of an original biographical game that is of deep, personal relevance to the designer. *The Longest Walk* was designed and developed using documentary process and interrogated through Narrative Portraits to authentically convey my father's experience of living with depression and suicidal intent in an interactive experience with documentary quality. The game takes place on a walk over the Tay Road Bridge (Dundee, UK) – an infamous local landmark for those seeking to take their own life – and makes use of interview audio and point cloud data to strive for indexicality and as a method of expressive framing. This paper reflects on the interweaving of documentary practice with game design practice and serves as a demonstration of how a documentary-like quality can be achieved in games based on lived experiences.

CCS CONCEPTS • Applied Computing ~ Computers in other domains ~ Personal computer s and PC applications ~ Computer games

**Additional Keywords and Phrases:** Documentary Game, Lived Experience, Biography, Mental Health, Walking-Simulator.

## 1 INTRODUCTION AND RELATED WORK

Over the past five years, Dundee City has been one of the council areas with the highest suicide rate in the whole of Scotland [1]. The Tay Road Bridge – an infamous local landmark for those seeking to take their life - has been labelled a “crisis area” by local councillor Lynne Short [2]. The biographical documentary game I designed titled *The Longest Walk* aims to reduce feelings of isolation through shared experience and encourage those who are struggling with depression or experiencing suicidal thoughts to reach out for help. Through my father’s sharing of his personal experience in an open and frank manner, this documentary game aims to raise awareness of and provide an insight into what it is like living with depression in order to provoke discussion and help tackle the stigma around opening-up about mental health issues. Whilst my father’s experience and the locations depicted in the game are specific to him, the thoughts, feelings, and message conveyed through his recollection of lived experience are universal, allowing his story to resonate with a wider audience.

Games such as *Actual Sunlight* [3] and *Depression Quest* [4] are two indie games that explore themes of depression from an autobiographical standpoint through being informed by lived experience. O’Neill described *Actual Sunlight* as “almost 100 percent autobiographical” [5] although the story is told through the fictional character; Evan Winters. *Depression Quest* was developed by Zoe Quinn and Patrick Lindsey who have both experienced first-hand what it is like living with depression [6], however, the game’s protagonist is nameless and benefits from support networks and resources they themselves didn’t have.

In *That Dragon, Cancer* [7] Ryan and Amy Green took an autobiographical approach to depicting the impact that losing their son Joel to cancer had on the family. The game is narrated in a reflexive, poetic manner by both Ryan and Amy and features short excerpts of recordings from Joel throughout.

These games used the lived experience of the developers to narrate the impact of renegotiating identity through periods of ill health. It is through playing such transformational experiences that players can empathise, comprehend, and engage with realities potentially far from their own.

At its heart, *The Longest Walk* takes a similar approach to player interaction to games such as The Chinese Room’s *Dear Esther: Landmark Edition* [8] or *Everybody’s Gone to the Rapture* [9], where the incentive for player progression is driven by narrative discovery. The visual representation of space in *The Longest Walk* is minimalist; opting for an approach of multiple vignette island environments interconnected by an endless void. The game is available to download and play for free at: <https://thesandymancan.itch.io/the-longest-walk>. In this paper I provide an overview of the development process and an outline of the play experience and intentions behind the final version of the game.

## 2 GAME DESCRIPTION

*The Longest Walk* is a short, first-person walking-simulator game developed in Unreal Engine 4 and was released as a free Windows .exe download on itch.io. In the game the player virtually walks in the footsteps of my father as he recollects his lived experience of depression and suicidal intent through narrated excerpts taken from a 54-minute-long interview. The final game as an approximate play time of 9 and a half minutes.

### 2.1 DESIGN GOALS

The aim of this research is to explore the design and application of games as a medium for interactive biographical storytelling centered on personal stories of health. In addition, the game serves as a practical investigation into the potential for the medium to work as expressive, meaning-making frames for the conveying of lived experience. The ambition for the project is to partner with external organizations to improve outreach and assist in promoting the game to relevant communities.

### 2.2 INTERVIEW, NARRATIVE PORTRAITS AND EDITING

This project explores documentary from the perspective of a game designer with little prior knowledge in this field. Research was conducted into traditional film documentary theory and practice [10] [11], and the emergent field of documentary games [12] [13] [14] [15] to inform the process. For a biographical health game to be created, it requires the narration of a life lived in illness to be captured using interview. Whilst a staple in documentary film, the process of conducting interviews is not traditionally inherent in game design practice. As such, this section seeks to convey the key learnings from theory and observations from undertaking this practice-based research.

It is the role of the designer to facilitate not only the conveyance of information from a participant, but to engage in deeper-level conversation that provokes the interviewee into self-examination. Rabiger states:

*“Think of interviewing as a form of displaced authorship; it means midwifing others into eloquence, particularly those unused to speaking about their innermost lives... Even when all questions have been removed, the interviewer’s power as a catalyst, selector, and organizer remains written all over the screen.” [10]*

The designer - who takes on the role of the director/researcher/interviewer/auteur - must come prepared to the interview with structured questions yet also be willing to engage in reflexive interviewing practice. Interview questions should be structured in a question-answer format and include some rapport building questions to ease the participant into the more difficult subject matter. Unlike a typical conversation, the interview should be weighted towards the participant’s response; the interviewer poses the question, the participant responds in depth, and the interviewer leaves a pause at the end of the response to allow for easier editing.



**Figure 1: Photograph of my father taken during the interview process. © Alexander Tarvet**

The open-ended identity-focused questions used in the creation of *The Longest Walk* were presented in a semi-structured format and were based on questions posed in *Renegotiating identity: cancer narratives* [16] and additional questions were informed by engaging with biographical documentary filmmaking tutorials.

By using the interview audio directly in the game, it allows the participant to serve as the narrator of their own story. This ‘raw’ delivery captures and maintains the formal characteristics of the interview whilst delivering the message through an intimate, emotive, authentic, and frank account. It also aids in the claim to indexicality. In comparison, the use of re-enactment or the creation of fictional accounts runs the risk of verbosity, or poetic and ornamental delivery from the voice actor, diluting the potency of the message.

Whilst the designer should enter the interview with a hypothetical focus for the game, they should maintain a reflexive approach when interrogating the interview transcript. For *The Longest Walk*, the Narrative Portraiture method established by Edgar Rodriguez-Dorans and Paula Jacobs [17] was applied to code, deconstruct, and reconstruct the interview data into a narrative portrait. This method is used to assist the researcher in reflecting, interpreting, and communicating narrated experience.

Coding the interview data for *The Longest Walk* involved highlighting 1) Characters; 2) Time; 3) Space and Circumstances; 4) Key Events; and 5) Intersection of phenomena of interest. Through this, alongside identifying powerful phrases and moments that appeared crucial to the interviewee, the designer can take a structured approach to the deconstruction and reconstruction of the transcript into an effective Narrative Portrait. Some of the key themes identified in the transcript were: Identity, social stigma, escapism, and suicidal thoughts/intent. During the interview a participant may provide a fragmented recollection of events (providing a non-linear account of their experience). In the instance of *The Longest Walk*, this fragmented pattern of recollection was imitated in the environmental structure of the game itself. However, the process of creating a Narrative Portrait does allow for information about an event mentioned earlier in an interview alongside additional information about said event recollected later in the interview to be edited in such a way that it appears to the listener that the memory was recalled sequentially.

A documentary script was created to present the early draft of the written portrait. This format follows a two-column style; one for Narration and one for potential visualisations for each scene.

Scene 1 - All Black - Introduction	
Narration	Visual
<p><b>[Sound Cue 1] - Walk Trigger</b></p> <p>I felt, um... anxious</p> <p>So anxious that I was burning</p> <p>I was, my heart was beating really fast</p> <p>I couldn't sleep</p>	<p>[Unknown] All black abyss, swirling fog in the distance to draw the player in.</p> <p>As the player walks, luminous footsteps appear in front of them in a rhythmic fashion (ripple effect when they appear?).</p>

Figure 2: Excerpt from the documentary script depicting both narration and visual columns. © Alexander Tarvet

Whilst a first draft portrait may appear to flow in written form, when rearranging the interview audio there may be inconsistencies with inflection or tone in voice that cause issues with your intended arrangement. To test this, a series of audio sketches were created using the interview audio as a method of gauging viability without requiring too much time, resource, or commitment.

The process of editing within constraints - whether self-imposed or otherwise - means that arguably important content from the interview must be cut from the final edit. For *The Longest Walk*, an entire section on stigma and social perception alongside other content was cut to keep the game under 10 minutes playtime. This ruthless editing process is common in documentary and film making practice; however, it is important that the designer does not lose focus of the message they intend to deliver. Galloway's MDTI framework [12] provided a solid foundation for documentary game development and analysis; encouraging the designer to establish the Modality, Tonality, Discourse, and Interactions. By establishing these aspects at an earlier stage, they provide a blueprint for the designer to refer to throughout development to ensure the overall message and intentionality of the documentary game is retained throughout development.

### 3 POST-MORTEM

Following the use of interview technique in the research and concept development phase, an interview of 54 minutes was captured, reviewed, coded, edited, and then used to drive the creative process behind an original autobiographical game, *The Longest Walk*. This section provides a post-mortem of this game, walking through the decisions behind the visual design, genre selection, audio design, narrative design, and pacing.

#### 3.1 VISUALS AND EXPRESSIVE FRAMING

The game makes use of accessible 3D scanning technology for the visual representation of character and environment. *3D Scanner App* [18] – a free application for LIDAR-equipped iOS devices - was used to capture point cloud data, which was then imported and rendered in Unreal Engine 4. The use of point cloud data rather than traditional 3D models or exported scanned models was an artistic choice to provide a realistic, yet expressive and artful depiction of these environments and my father. This visual style – an almost 3D version of Pointillism - obscures the finer details in the scenes which would likely have been omitted from memory over time; text becomes illegible, and environments become fragments of reality. It is through these visual fragments of space that nonlinearity and an illogical transition between environments can be achieved, mirroring the disjointed sense of place in the interviewees' fragmented recollection of events. It also serves as a symbolic representation of the imperfection of the participant's memory and perception of reality whilst in an altered emotional state.



Figure 3: Comparison between photograph and 3D scanned environment. © Alexander Tarvet

### 3.2 WHY A WALKING SIMULATOR?

By using the established walking-simulator genre as a basis for the experience, the player's expectations for the level of interactivity are set. Due to the focus of the game being on the semantic and emotional trail of the narrative, the mechanics in *The Longest Walk* are constrained to moving (walking), observing, and listening. From an interactivity perspective, the player is a tourist; the actions they carry out have no bearing on narrative events, other than on pacing of delivery. There is no fail state, nor a high level of mechanical complexity obstructing the user from engaging with the story. They are free to engage with the content at their own pace and can choose to pause, reflect, then move on when they are ready. Whilst interaction is limited and the narrative trajectory is predetermined by the designer, this genre of game still affords the player the sensation of being an active participant through the pleasure of exploration, spatial navigation, and striving for narrative closure.

### 3.3 AUDIO

The omission of music from the project was by design as the intention was for the emotional experience to be guided by the player's subjective response to the narrated content, rather than being manipulated by an affective score. This heightens emphasis towards the importance of the spoken word. Whilst music was not implemented, ambient environmental audio from these locations was captured to provide a natural diegetic soundscape, heighten claims to indexicality and to help guide the player's emotional experience. The soundscape breathes life into these vignettes, enhancing the sense of presence for the player.

Subtitles were added to the build to improve accessibility of the narrative due to my father's Scottish accent. The subtitles are displayed using a custom font and presented as white lettering with a black outline. This choice of colouring allows for the dialogue to be legible in both the introductory level (black) and the bridge level (white).



Figure 4: Example of subtitles shown on a black and white background. © Alexander Tarvet

### 3.4 NARRATION AND PACING

Like Pinchbeck [19] during the development of the original *Dear Esther (Half-Life 2 mod)* [20], rough timings of exploration determined the positioning of plot triggers in the game world. At first for *The Longest Walk*, audio clips were triggered upon entering an island. However, this meant that if players were to pause and listen whilst the audio clip played to completion, they would be left to slowly navigate large gaps between islands where no narrated content was delivered. To remedy this, the audio clips themselves were deconstructed further to allow for a more granular delivery. In the final build if the player continuously walks towards their destination, the linear narrative will play as one continuous exposition, with the inclusion of short pauses to aid in dramatic delivery and to provide the player with moments of respite to reflect and facilitate introspection. In total, there are 24 audio snippets in the game paced in such a way to ensure the verbal, visual, and emotional rhythm feels balanced throughout.

There are 6 distinct areas in *The Longest Walk* which are delineated by a shift in narrative topic or tone, and in some instances accompanied by environmental parameter shifts.

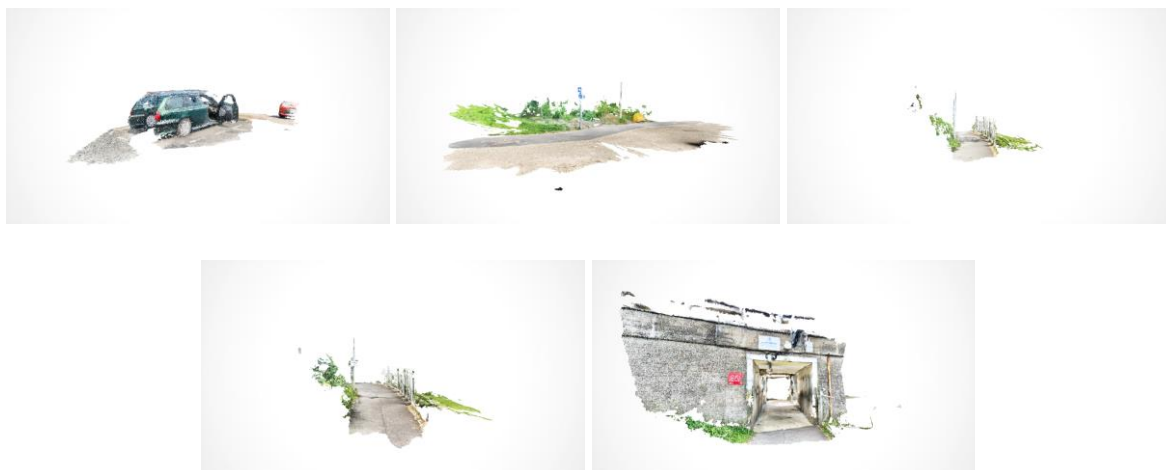
In the first area – “All Black” – the player is encouraged to walk towards a distant swirling fog in a barren landscape. To assist in guiding the player, ethereal footprints will appear slightly ahead of them when walking in the correct direction, inviting them to follow in my father’s footsteps. The soundscape in this section is designed to be overwhelming; with subtle whispered voices, an ambient glitching swirling sound, and the sound of a heartbeat, the volume of which progressively increases as the player walk towards the fog. Upon entering the fog, the player’s walk speed is gradually slowed to little more than a crawl as they move towards the point-cloud depiction of my father curled up in a ball on the floor.



**Figure 5: Screenshots from “All Black”. © Alexander Tarvet**

This segment introduces the player to the narrator – my father – and provides insight into his internal world, mindset, and circumstance through abstract visualization without explicitly stating that he is suffering from depression. The intention here is to imply an unclear ending and trigger curiosity in the player. The scene ends with a fade to black before you can reach him, then transitions to the next map.

The purpose of the second area – “Worthless” – is to make what was implicit in the first scene explicit; it is here that my father provides an oral account of his first mental breakdown and attributes the label “depressed”. Thematically, this section also covers the impact of work, social pressure, loss of interest in hobbies, loss of social connection, and spiraling feelings of negativity and worthlessness. From a visual perspective, this area is a strong contrast to the introduction; the environment is now surrounded by a void of white. Initially only one island is visible. Once the player walks into proximity of the island the next island reveals itself, guiding the player from the bridge’s south access carpark to the underpass. This mechanic of unveiling islands serves to guide the player throughout the rest of the experience. The vignette islands are sequenced and positioned in virtual space in such a way that it mimics the real-world geographical layout. A looping audio track containing the sounds of a gentle breeze and distant traffic provides a subtle backdrop to this section of the journey.



**Figure 6: Screenshots of the islands in “Worthless”. © Alexander Tarvet**

The third area – “Numb” – introduces a new momentum to the experience, breaking down sections of story into smaller groups of three islands. It is deliberately shorter as it deals with the difficult and emotionally heavy subject of suicidal intent. This

segment of the experience takes place on the bridge's central pedestrian walkway. For those suffering from suicidal thoughts, it is from this part of the bridge that they may cross the carriageway in an attempt to take their own life. Upon triggering the first narrative snippet in this section, an environmental state change takes place where the previous islands in "Worthless" are veiled in white once more, then removed. The player will then be unable to return to the previous section, constituting a reduction in the environmental set and emphasizing to the player that – as with my father - they cannot dwell on the past and must continue moving forwards. This also increases the game's performance as these set pieces are no longer required. As the player progresses towards the bridge and walks on the walkway, I wanted to replicate the overwhelming sensory audio experience of traffic rushing by the player on both sides and the clacking of tyres on the joining segments, to compliment the overwhelming intrusive thoughts my father is recollecting at this stage.



**Figure 7: Screenshots of the islands in "Numb". © Alexander Tarvet**

The fourth area – "Clear" – thematically mirrors the content of narration; there is a shift in location from man-made to natural, in audio from the overwhelming sound of traffic ceding to the calm lapping of the waves and the gentle burbling of a nearby stream, and the shift in narrative content and tone from contemplating suicide to taking the first steps towards recovery. This virtual space provides the player with a moment of peaceful reflection, contemplation, and emotional respite, as running on the beach did for my father.



**Figure 8: Screenshots of the islands in "Clear". © Alexander Tarvet**

The fifth area – "Episodes" – was of importance to highlight that depression is not always something that occurs once and is fixed. Even with medication, professional help and a being equipped with the knowledge of helpful techniques, depression was a recurring illness for my father. The narrative also states the importance of recognizing signs, identifying triggers and – although it is a difficult battle – retaining the knowledge that things will get better. Upon returning to the bridge in this section, the beach scans from "Clear" are veiled, removed, and the player will be unable to return to previous sections.



**Figure 9: Screenshots of the islands in "Episodes". © Alexander Tarvet**

The purpose of the final area – "Insight" – is to communicate how depression was a transformative experience for my father, alongside providing the indirect message to the player that if they are suffering from depression that things will get better if they reach out for help. It also encourages the player to be vigilant for symptoms and signs of depression in others. This message is achieved through the narrator reflecting on the impact that his depression had on his children, and how he hopes that through hearing his lived experience it will equip them with the knowledge and awareness to help themselves and others.



The virtual act of the player successfully making it to the other side of the bridge is symbolic of the mental journey that my father went through.



**Figure 10: Screenshots of the islands in “Insight”. © Alexander Tarvet**

#### **4 CONCLUSION AND FUTURE DEVELOPMENT**

Interviewing forms the foundation of documentary films, and by association, should be at the heart of documentary game design. In Rabiger’s words:

*“...if the resulting film itself tells someone’s story well, if it builds through exposition and specific emotional detail to a satisfying climax, then we have the sensation of seeing into a human soul.” [10]*

I believe that this project successfully utilises documentary technique and process alongside game design practice to convey my father’s story within a documentary video game.

To increase the outreach and accessibility of *The Longest Walk*, I plan to port versions of the game to additional consumer platforms such as the PlayStation 5 and Meta Quest 2. This development will go alongside end-user engagement through playtesting.

The emphasis of this project is an artistic exploration of how documentary games can be produced. This work provides a foundation for stimulating conversation around biographical game design, personal games, and how lived experience can be integrated in games design through careful consideration for audio, editing, pacing, timing, mechanics, and visual representation.

Future development seeks to utilize the methods outlined and tested in the development of *The Longest Walk* in the creation of a biographical story game framework for a collection of lived experiences. Taking a modular approach will allow for a wider array of health narratives and perspectives to be captured and portrayed in a single parent experience/ storyline rather than having to create bespoke games for each story.

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