Temporary

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Interactive Storytelling Art

"Smart, compelling, moving.
Simple illustration and single sound per
image: less is more."

ICIDS 2020 Jury

Temporary, an interactive and personal story

Abstract

This paper describes the creation of *Temporary*, an interactive, story-based experience. Temporary tells the story of my grandmother, who suffers from Alzheimer's disease. It is an illustrated journey, depicting a day at my grandmother's room in a nursing home. The interactive storytelling system relies on simple participation of users, who run the story by pressing a button repeatedly. By attaching illustrations and sounds, the story experience is enriched with a relevant atmosphere. Temporary is also addressing non-linear storytelling and the importance of user actions to unravel a story. This paper will present the decisions I made while designing a system suitable for a specific subject matter and my attempts to evoke users' emotional response, without the use of sophisticated methods or a complex plot.

Keywords

interactive narrative, feedback, illustration, emotional

Introduction

My grandmother, Yehudith (Fineschneider) Getz was born in 1928 in Pultusk, Poland. At the age of 11, the war broke out. She and her family fled to the USSR. During the war years, she endured a long and restless survival journey, alongside her older sister, Rachel, including the loss of her father and young brother. After the war, she joined an organization who cared for Jewish orphans in post-war Poland, and there she met my grandfather. They eventually had the chance to start a new life on a Kibbutz in the newly born state of Israel. They had a child – my father, and later moved to Tel-Aviv, where my aunt was born. Their house in Tel- Aviv will later become a central part of my childhood. Her life was something that can be viewed now as extraordinary. Lost childhood, stolen youth and a new life in a new country.

My grandmother suffers from Alzheimer's disease. Her mother and sister both suffered from it before they passed away, so when early signs started to appear, it wasn't a complete surprise. The disease progressed slowly at first, revealing hints of the future to come. As time went on, visiting her in her nursing home became more and more a dire experience. Every visit revealed a new decline.

After a long visit to her room, I became very disturbed. The disease was very present. I decided to try and write a short comic strip about the experience on that day. I struggled, not knowing what exactly I wanted to say, until I realised that I didn't have words to express it. It was a kind of grief, maybe. I decided to create the comic strip without too much planning. The strip presented real pieces of a conversation I had with my grandmother on that day. I was disappointed with the result, and rejected it. Telling a story without being able to phrase what the story is about is difficult. It seemed at that point that I couldn't articulate my vague thoughts into a coherent story; or at least not in this medium.

Illustrations, storytelling and interactivity

In my practice as an illustrator, storytelling is key. Storytelling in this context does not necessarily require a plot, or a complete story structure, it can be something condensed, as an isolated situation, a moment, an emotion or an idea. When the story is told in just a few frames, efficiency is essential. How much content can one frame hold? An illustration can be an efficient conveyor of clear messages. Illustrations can also express poetic ideas, emphasis on a mood or an emotion, use abstract representations and more.

Using digital technology to display artworks on a computer, promotes innovative approaches to traditional storytelling, by the use of diverse media (McCarthy, Ondaatje, 2002, p. 28), and by interactivity.

Interactivity can give users control over their own experience. An interactive experience is designed to guide and train users to perform certain actions or tasks by clearing unnecessary distractions and providing feedback to the user's actions (Murray, 2012, p. 10). The user has the ability to choose to stop all action and quit the experience completely, but while they are participating, the designer of the system has the power to influence, direct and guide their actions.

In my work as a web designer, I often used illustrations. Given the interactive nature of their environment, those illustrations could be animated, and respond to a user action. Interactive illustrations were my means to generate user engagement and guidance while making the experience richer. My illustrated content could influence and enhance the user's experience, but I was not generating any meaningful response. It felt like printed illustrations plugged into a power source.

Interactive storytelling is commonly associated with complex branching narrative models and methods of creating dynamic, user-influenced content. Complex interactive

narratives may demand complex methods, but I was not interested in a dynamic plot. I searched for other approaches that might also be considered as interactive storytelling. Favouring mood and atmosphere over a coherent plot was a part of this approach.

Design for an interactive environment can rely on conventions, for example the use of images, sounds and motion, or simple actions like clicking a button. I was focusing on basic conventions such as these, and they triggered questions about the ability of a simple action being meaningful. Isolating the event of pressing a button and getting feedback, a basic event, was a door for me.

Creating *Temporary*

The idea behind *Temporary* is simple: to create a story-based interactive pacing system. When designing for interactive environments, images and sounds are the basic source materials. They are often combined, and a user's action (such as clicking a button on the screen) may produce a graphical and an aural response.

Hitting a button on the keyboard to cycle through a sequence of frames is another common behaviour in interactive environments, it is what we do when we run a presentation. By associating a particular musical note with each frame of the sequence, the same presentation can achieve a different feel. A user cycling through a presentation such as this will find that they're creating a tempo with each keystroke, a tempo that can encourage the next keystroke. The sequential notes combine to create music, adding another sensory experience to the inte-

raction.

The use of music in video games is a familiar concept. Music-based games such as Guitar Hero are a prime example. They show how musical participation can produce user engagement (Roesner, et al., 2016, pp. 197–228). However, my motivation was to tell a story to the user, not challenge them to a game. The illustrations I was planning demanded time to ponder and decode, and not shiny buttons or bars.

A linear sequence of images that can be presented in such a system can compile a complete story. It is a system that can deliver a visual story, and add an accompanying soundtrack, played at a pace that is fully controlled by the user. This adds a rhythmic layer to the experience that influences the way in which the user experiences and operates the story.

The concept for my scrapped comic strip, describing one difficult day with my grandmother, came back to the forefront of my mind.

Maybe a pacing system was the right medium for this story that lacked a coherent message of its own. Adding a soundtrack and planning a movement between frames (that represent frozen moments) were means to try and set the atmosphere and mood for the user.

The system was initially designed to show a linear sequence of frames. The frames represent sequential moments in my grandmother's day, but for a person with Alzheimer's, moments feel detached. Distorted time is a phenomenon observed in people with Alzheimer's. Hence, some of the frames were planned to create a coherent continuation of a situation, while others were planned to create confusion. Memories jump in, familiar house objects become strange, and people from the past reappear. Although the story seems unclear, the tempo keeps all the frames on a consistent pace. The whole experience is an unfolding linear story. The frames were first uploaded as separate uni-

ts, then non-linearity was added.

The frames from the linear story can be viewed as a grid of thumbnails. It is like looking at the whole story from a bird's eye view. The user can choose to see each of the thumbnails, in any order. Clicking a thumbnail will make the equivalent frame, with its accompanying note appear (and disappear). The user experiences an incoherent tune, and a disordered story. The disordered story actually helps create an accurate experience of my grandmother's moments, as she perceives them through the lens of her disease. It seems to me that she is experiencing a disrupted order of events. She sometimes struggles to remember what happened a moment before, as if moments are detached units that can be assembled in any order. The disordered story in *Temporary* might be confusing and hard to understand, but fundamentally connected with its origin. The two concepts of linearity and non-linearity coexist in *Temporary*. The experience will initially lead the users to go on the linear route, but they can always change to 'grid mode', which allows non-linear progress. At the end of the linear sequence the 'grid mode' option is presented again, in a pop-up at the centre of the screen.

While the story has a hero, it doesn't take the hero's point of view in all of its frames. It is not trying to be a direct representation of my grandmother's point of view. Instead, it tries to think about the subject of fleeting moments, and maybe blur the boundaries between internal and external points of view. This could be yet another interpretation of the hero's situation. In *Temporary*, users are expected to decipher the situation on their own. The story can be understood (as a story about a woman with Alzheimer's disease, or at least as a story about a woman in a nursing house). But the point of view, the connections between different moments and sometimes the moments themselves, have

something unexplained and maybe undecipherable. It can create misunderstandings, or a partial encoding within the users.

The opening frames of *Temporary* present distant memories, based on family photos.

It starts with a close-up of my grandmother as a child (frame #1). The family in a park (frame #3), her father (frame #2; frame #4), and then my grandfather (frame #5), their wedding (frame #6), the new life in a kibbutz (frame #7), the birth
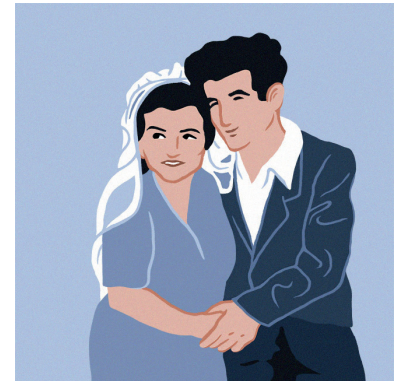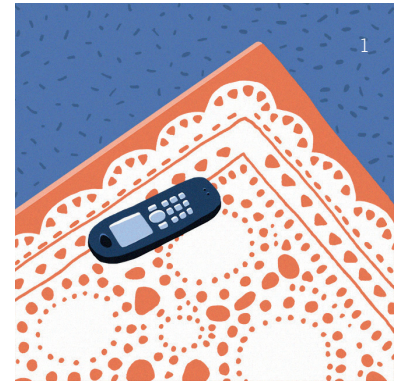
of their first child, my father (frame #9), memories from the years they spent in Brussels.

The story then jumps to her, looking at the mirror, in the present day. The distant memories, including the family house in Tel-Aviv, are painted with blue monochromatic colours, less vibrant than other frames.

However, most of the frames are representations of everyday moments in her small room. The colour palette is very limited, dull and not exciting, as if nothing really happens. And in that nothingness, the drama of the disease slowly reveals itself, as memories and current moments begin to blend together.

The erased faces in some of the later frames are the only attempts to directly acknowledge Alzheimer's disease, or the subject of forgetting. The last frame depicts my grandmother looking at her own faceless reflection in the mirror. Alzheimer's research describes how people with this disease sometimes don't recognise their own reflection. This last frame has two notes attached to it. It is breaking the image-note rule that is the basis of the whole system. In that way it brings a kind of a finale to the piece, or maybe a sad conclusion.

The frames were drawn by simple pen lines on paper, they were later scanned and digitally coloured. I referenced old family photos for the frames that showed distant memories, and photos of her current room. The illustration style is simple as well. Most of the images are objects and sights from that little room

The objects may seem like a random list, some very banal, some unique. A lot of them bear a personal memory, or significance. They are objects I knew from childhood, from her old home. Some of the frames are close-ups of other frames, or a variation of them. I made adjusted and accentuated frames that had particular significance to me.

Choosing the appropriate piece of music

I would use in *Temporary* was a crucial component. I knew I wanted classical piano music, because this is what my grandmother listens to, and the piano was the most suitable instrument for the system. Each keystroke on a piano produces a note. When combining notes in a sequence we get a tune, and if the tune is apparent enough, it will help guide the user through the experience unfolding at the correct pace. This is not to say that there's only one correct tempo for this piece of music, but with a certain range of paces, the tune becomes recognisable. The music will play 'correctly', by keeping a monotonous pace. I chose Wolfgang Amadeus Mozart's Lacrymosa from his famous Requiem in D Minor. A slowed-down midi version of the Requiem was used. It was slow enough to crop it into single notes. The notes were produced with fade-in and fade-out effects, and then uploaded into the system.

The story contains 144 frames and 144 notes (except for note #144 which is actually a double-note). The frames are rectangular, as the grid of 144 thumbnails. The system was designed to be as simple as possible. A clean design, with a minimum of elements on screen. Any key (or mouse click) will trigger the next frame and note. The back arrow key will play the previous frame and note, but it is not directly suggested to the users. The loading screen before entering the experience provides instructions, and the loader element itself is animated at a pace that resembles a possible pace in the experience itself. The code, the illustrations and sound: it all had to be simple, like the logic behind the pacing system. This simplicity allowed me to execute all the details, including the way in which each frame animates. I assumed two arrays of objects (one for image and one for sound, with a matching index). The JavaScript code was pretty straight-forward. The coding part: planning and execution was smooth and fast.

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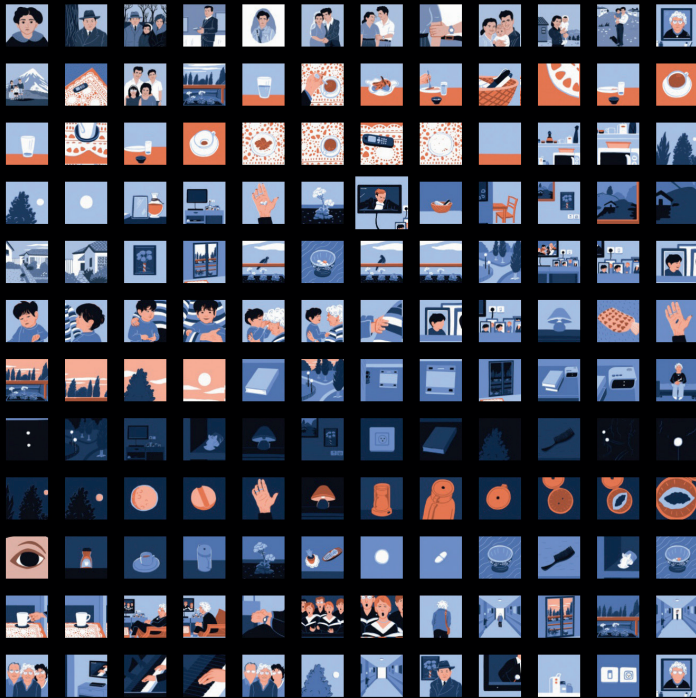
Discussion and conclusion

Temporary is an interactive, story-based experience. It uses a simple system that plays illustrations and sounds to engage users and take them through an experience. It is hopefully generating an emotional response and what Murray defines us as a 'satisfying experience of agency' (Murray, 2012, p. 12). Still, some questions remain. Is it really an interactive story, or maybe it just appears to be? Can *Temporary* be evaluated in terms used in the studies of video games such as reward systems or 'flow'?

This system is not a video game. It is an interactive web-based story. Engaging with the system can be relaxing, and perhaps put the user in a harmonious state. It does not seek to challenge, rather elicit one repetitive behaviour. The user must make choices in order for the story to unfold, but the requested behaviour is the same action, and it always produces the same result, making learning the system nearly intuitive. *Temporary* is an example of a primitive reward system that produces a pleasing response to every keystroke, and invites users to "tune-in" to it, without challenging them with complex game-play. But still, minimum skill is required, and musical participation in itself may create a state of "flow" (Roesner et al., 2016).

The ability to play the story in an uneven pace, to return to previous frames, and to view the story in 'grid mode', add another layer of interactivity to the system, and suggest new ways to experience the story. But the decoded story, whether played in order or otherwise, is the same story of fleeting moments, confusion and forgetfulness, whether it's played in order or not. Building and learning about interactive systems helped me to understand some of the points I was trying to make about my grandmother's condition.

The system's strength has nothing to do

with sophistication or original technological ideas. Its strength is in its ability to create the right environment for the story. A sentimental story, that tries to elicit strong emotional response, maybe like a melodrama (Murray, 2005, pp. 83-94). User emotional involvement in the narrative is a goal, and Temporary is trying to gently achieve that without a complex plot, dialogue and dynamic content. I'm not sure whether this system can be reused to tell other stories, or if this particular medium and subject matter inherently intertwined.

In a way, *Temporary* is a digital flip-book or a web-based musical box. The user moves through it while only one page is revealed at any given time. Pacing is at the heart of the experience, and a carrier of the story's messages. The mechanism may be as important as the content of the frames, the styles and the music. In a way, the users must compose the atmosphere by their own actions. They have to create the

sentences, they are urged to perform the experience that will fade to black and silence when no action is taken. In that way *Temporary* is a suggestion for an interactive story, where the designer produces an area of activity for the users. The artwork's final formation is a result of participative behaviour of users (Kluszczynski, 2010, p. 1).

Beside the discussion about interactivity and system design, *Temporary* started with a different motivation: Telling a story that I couldn't tell in words or drawings. It found a platform that can tell it, by presenting temporary moments. As a means of artistic expression, it allowed me to compose a message at a time when I was lost for words. To me, this is what creating for interactive environments is about: creating a dialogue with users, by creating a dialogue between a designer and the system he is developing.

texts of discomfort

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Images

1. A selection of frames from Temporary: frames number 1, 3, 6, 13, 14, 16;
2. Temporary main screen;
3. Temporary 'grid mode' screen.

Ofer Getz. I'm an illustrator and designer. I've illustrated children's books, created editorial illustrations and participated in several exhibitions. In addition, I worked in the field of interaction design, especially in E-learning. In my Master's degree in visual communications from Bezalel – Academy of Arts and Design, Jerusalem. I expanded my interest in creating interactive experiences, including web-based experiences and video game design. Besides working as an illustrator, I am a teaching assistant at Bezalel's Master programme in visual communication and an illustration teacher at Bezalel Externals Studies. I am also curating and creating digital art exhibitions, by the use of photogrammetry and 3D modelling.