
Blindfold – An audio-only adventure game

Durval Pires

Department of Informatics
Engineering
University of Coimbra
3030-290 Coimbra, Portugal
durval@student.dei.uc.pt

Bárbara Furtado

Department of Informatics
Engineering
University of Coimbra
3030-290 Coimbra, Portugal
bfurtado@student.dei.uc.pt

Luís Reis

Department of Informatics
Engineering
University of Coimbra
3030-290 Coimbra, Portugal
lfmreis@student.dei.uc.pt

Tiago Carregã

Department of Informatics
Engineering
University of Coimbra
3030-290 Coimbra, Portugal
tlgc@student.dei.uc.pt

Abstract

In this paper we report on a game design exercise that focus on the sensoriality and sensemaking participant dimensions for conceiving and evaluating gameplay experience, by framing design intentions, artifact characteristics and user participation.

Starting from an initial intention of creating an audio-only adventure game that would attempt to be able to evoke emotions, we describe both the specification of the design proposal, and the process that was performed in order to achieve it.

We also give an overview of the model that guided the game design process, referring also to a pattern language that guided the sound design process.

Author Keywords

Soundscape; Audio-game; Blindfold; Sensoriality; Sensemaking; Game design; Sound design;

Introduction

The main challenge of the Blindfold project was to design an audio-only game as soundscape that would allow the players to experience a rich emotional and introspective trip. The game artifact would have to be able to evoke emotions on the player through a soundscape composition. This choice of design theme was initially motivated by the scarce research available on game design for audio-only games, and thus the opportunity to contribute with a relevant design case.

Moreover we found that there is much work to be done towards understanding the impact and meaning of alternative sensorial stimulation in gameplay, in this case exploited through a rather extreme sight deprivation exercise. Also, it is important to study the relations between the experiencing of an interactive sound composition, the player's emotional state, and aspects related to how to invoke player participation across several dimensions of gameplay.

Design Proposal

The main motive behind the Blindfold project was to design a game as soundscape that would allow players a rich, emotional and introspective experience. While considering the challenges of an audio-only game, we wanted to elicit specific forms of player participation, though an emotional soundscape composition. In embracing the design challenge we wanted to contribute to a better understanding of the roles sound can play in games and, considering the participation model of gameplay, focused on sensoriality and sensemaking as dominant perspectives in design.

We consider the design of a videogame as the creation of a special kind of context. This context consists of elements that promote or inhibit forms of participation, from which experience and meaning emerges. In order to design a videogame it is then necessary to consider how the elements composing the game medium will be translated by the player, so as to support the intended forms of participation and, consequently, a game playing experience. Thus, we find that the concept of participation to be closely related to the gameplay experience and consequently to the design of games as participatory media. With this aim the Participation-Centric Game Experience Design and Evaluation Model

(in Table 1) proposes three operational foci: a) Intent: What is the participation ideal that the videogame is suggesting? b) Artifact: How does the artifact support the idealized forms of participation? c) Participation: What characteristics of the actual player participation are consistent with or revealing of the participation idealized?

Regarding the aforementioned model, there were two dimensions that were highly important: Sensoriality and Sensemaking.

Sensoriality would be a natural focus since sight deprivation would heighten attention and contribute to focus on perception through hearing. The main idea behind Blindfold concept was to make an audio-only game, rich in soundscapes and ambiance that would put players' emotions to the test. Game design had three premises: first, to build a game with the potential to provide sighted players an intense experience of being blind, second to provide a game blind people can play and last, to build a game that would level interaction among sighted and blind people in a multiplayer scenario.

Sensemaking would mostly be explored though a narrative backdrop that, while not explicit (since for simplicity of interaction there would be no dialog or narration) it would help structure the design of specific sonic vicinities as soundscape components. The narrative would start with a traffic accident experienced in the first person perspective, followed by a period of blindness and disorientation where the player is challenged to interpret what just happened and try to decode possibilities for interaction as she moves around the soundscape.

	Intention	Artifact	Participation
Playfulness	exploring, discovering, recreating, customizing	the nature of a player's agency, the variety of interactive elements of the game (objects, characters, actions, etc)	degree, variety and tendency of exploration
Challenge	overcoming a challenge, strategising, mastering a skill	nature of challenges proposed, type of penalties and rewards, intensity and organization of challenges	control, pace, progress, efficiency in performing tasks
Embodiment	physical involvement, physical performance	representation of the physical game world, player's representation on the game world, interpretation of player's movement	control and rhythm of movement, aesthetics of the movement
Sensemaking	interpretation of a role, fantasy, self-expression	theme and underlying narratives, models and representations of phenomena, roles and motives, significant actions	alignment between actions and roles, understanding and or critique of the represented phenomenon
Sensoriality	contemplation, wonder	style, nature of the stimuli, visual and sonic compositions, synesthetic explorations	degree of exposure and responsiveness to stimuli, inter-action or engagement with sources
Sociability	competition, cooperation, friendship, identification, recognition	diversity and nature of social interactions and relationships, models of social structures (team, hierarchy, etc.)	the intensity and types of interactions between players, affective bonds

Table 1- A Model Proposal for Participation-Centric Game Experience Design and Evaluation [3]

Also, Blindfold is also a game of free movement and exploration of a virtual space that allows simple interaction with key elements and assets, which ends up being quite a challenge. The game simulates a realistic sound setting, allowing players to make sense of the sound driven experience. A player will interact with cursor keys plus one action key, while equipped with headphones and a blindfold. The use of the blindfold and headphones provide a more intense

experience as the player gets more isolated from the outside world while playing the game.

Design Process

To study the model applicability in supporting experience design in the Blindfold design case, we proceeded to develop a Design Research project, which contained different phases.

The design process started with brainstorm sessions in which we followed a three step process: generation of as many ideas as we could; thinking what goes with what, what complements what and what's missing; trimming the less valuable concepts until there is only the essential elements.

Following, an initial design proposal was developed incorporating the model as guidance for design. The model's role in this process was to provide lenses to support translation of design intentions to design proposals and an actual artifact. The directions given by the model were also useful during the sound and narrative design. Due to the nature of our project, these two aspects were crucial.

Our main guidance in sound design was Alves's approach to Sound Design in Games based in Design Patterns [1,2]. It helped us to select which patterns of sounds were compatible with the ambiance, atmosphere and gameplay we wanted to introduce in our game.

On the other hand, the narrative creation process was almost entirely by our own. Part of this decision is a result of the type of narrative we wanted to implement. There were aspects that we found critical, as the desire to create a type of narrative solely using sound stimuli. Furthermore, we also wanted to give the player the possibility of deciding the order that he would be experiencing the action sequences we wanted to design. In sum, all our efforts were a result of our desire to make the game as non-linear as possible.

This work resulted in a Petri-Net created to represent our game flow, and the possible branches in the

experience, along with our proposal for the game's architecture. The last thing we needed before creating a Proto Game Design document was prototyping the game. To do this, we used Roque's Paper Prototyping technique (see [4]), which we used to test and refine most of the ideas that were being refined during the design process.

References

- [1] Alves, V. and Roque, L., A Pattern Language for Sound Design in Games. In *Proceedings of the 5th Audio Mostly Conference: A Conference on Interaction with Sound (AM '10)*, (New York, USA, 2010), ACM, 88-95.
- [2] Alves, V. and Roque, L., A proposal of soundscape design guidelines for user experience enrichment. In *Proceedings of the 4th AudioMostly Conference: A Conference on Interaction with Sound*, (September, Glasgow, 2009), ACM, 27-32.
- [3] Pereira, L. and Roque, L., Towards a Game Experience Design Model Centered on Participation. In the 30th ACM Conference on Human Factors in Computing Systems (CHI2012), Austin, Texas, USA, 2012, ACM.
- [4] Roque, L., Early Game Design Rehearsal with Paper Prototyping, Proceedings of SBGames 2010, Florianopolis, SC, Brazil.