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# Designing an interactive theatre game with dynamic asynchronous play

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#### ATLAS PLANTED

Designing an Interactive Theatre Game with Dynamic Asynchronous Play

BY ARDIAN AMITI

## A THESIS SUBMITTED TO THE SCHOOL OF DESIGN, COLLEGE OF COMPUTING AND DIGITAL MEDIA OF DEPAUL UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF

MASTER OF FINE ARTS IN GAME DESIGN

### DEPAUL UNIVERSITY CHICAGO, ILLINOIS 2020

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#### **MFA Thesis Verification Form**

This thesis has been read and approved by the thesis committee below according to the requirements of the School of Design graduate program and DePaul University.

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#### ABSTRACT

This project proposes the use of asynchronous narrative mechanics and dynamic elements of gameplay to further the player's sense of interaction with characters and the environment of the game, inspired by interactive theatre performances such as Sleep No More. The player plants seeds in a garden which is maintained by several Non-Playable Characters, influencing both the environment and the narrative. Scenes occur according to the state of the garden, but do not wait for the player to be present. Plants grow and wilt as time passes. Sometimes the player cedes control as the characters tend to or cut down plants, often blocking access to them. The player struggles with their control over the garden and thus the narrative itself. By removing a level of player control and adding a degree of spontaneity we hope to create an environment in which the player is more dynamically involved.

#### ACKNOWLEDGEMENTS

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#### CHAPTER 1

#### **Description of Game**

The game's sole mechanic is planting. There are four characters: Rayne, who is a human researcher, and three members of her "family", facets of her imagination brought to life by the magic of the garden. These are Curiosity, Mistrust and Subservience. As scenes play, the imaginary characters drop seeds made from their own psychic energies. The player collects these seeds and plants them in plots in various sections of the garden. Each section corresponds to a character, and when a seed of a certain type is planted in that section the character is influenced with the traits of that seed (Curiosity, Mistrust, Subservience), altering the narrative scenes to come. Scenes occur asynchronously, without waiting for the player's arrival or input, as soon as certain planting requirements are met. Plants will grow and produce more seeds, or if left unattended wilt and die. While the player plants, characters will attend scenes and perform their own tasks around the garden, namely Sam will tend to plants that are withering and Mara will uproot weak plants. The game does not have a hard ending; the narrative either reaches a narrative ending and then remains in the garden or in some circumstances the player may lose all plants and be unable to continue planting.

#### **CHAPTER 2**

#### **Statement of Intent**

This project is concerned with exploring the design of asynchronous narrative and dynamic elements of play to mimic the experience of interactive theatre and create a similar form of engagement. Through scenes that occur asynchronously, we achieve a similar experience to interactive theater, wherein the player may walk in and out of ongoing performances by the characters. The player thus receives an agency which is somewhat uncommon in games, the ability to move in and out of engagement with the narrative space of the game. However, through this gain in agency they also lose a level of control and may miss parts of scenes. The player can hear other scenes occurring to their left or right if the scenes are occurring in another room adjacent to the player, so that they are aware both of the space of the garden and the presence of active scenes.

In tandem with this form of asynchronous engagement, the main mechanic of the game is the planting and harvesting of plants in the garden. Once a seed is planted, it grows in spontaneous bursts, eventually reaching a mature state. Once matured, the plant can be harvested, producing one more seed of the same type, which can be planted again, and so on. After maturing, if left unattended plants will begin to wilt and eventually will die and disappear. The player themselves is unable to tend to plants, relying on the help of the characters in the garden, who operate on an action-planning intelligence that is, to the player, not always predictable. This reliance on the characters, who are not entirely predictable or may be too prioritized with their narrative scenes or other tasks to tend to the garden at certain moments, means that the player's engagement with the garden, like the narrative, is very mixed in terms of agency, with agency coming and going through these events and mechanics. The player must click and drag seeds into garden plots to plant them, creating a physical sense to the act both mimicking the act of planting and giving the player a more physical interaction with the world.

Through these mechanics and design choices, we aim to create an experience of influence as opposed to one of control, wherein the player's agency is mixed and in conflict with the character's agency. Similar to interactive theater experiences, the player will have an influence and a presence in the world at hand, but does not retain centralized control over the experience.

#### CHAPTER 3

#### **Rules and Instructions**

Clicking on the arrows will move to another room. Click on the base of a plant to harvest it. This will move a seed directly into the player inventory. Pressing the "I" key or clicking on a garden plot will open this inventory, from which the player may click and drag seeds into a garden plot. Plants emit particles once they are mature. At this point they can be harvested. Plants not harvested will wilt over time and eventually die and disappear.

#### APPENDIX 1

#### **Supporting Materials**

INK queues a scene

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InkScene instance created and saved to host character

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Character sorts playable scenes by priority

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Character inserts top scene into action list Character updates world state

## Character adds actions accordin to world state triggers

## Ŷ

Character evaluates action prerequisites and creates plans

## Ŷ

Characters attempts to execute Plan toward first Action

Figure 1: Character intelligence processes; the character receives scenes to queue by priority and adds them to a queue of Plans created to reach desired Actions. Plans consist of a queue of Actions working towards a final desired Action. This simple action planning gives characters dynamic tasks in between scenes, engaging the player and environment in a negotiation of agency,

#### CREDITS

Visual art and story by Annelise Belmonte Music by Zach "thewerebear" Quick Voice of Sam by Kevin Rouse Voice of Rayne by Kylie Lee Voice of Dr. Curiosity by Jackson McLaughlin Voice of Mara and additional voicing by Annelise Belmonte The following sounds have been used under the Creative Commons Sampling Plus 1.0 License:

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Night Forest by dobroide from http://freesound.org

Twinkel Bell by Jack Braglia [www.BlastAudioSolutions.com]

easter toads by Joe Coffey

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