

ijo musi*: Game Design Document

A game about learning toki pona through the exploration of mysterious ruins.

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1 Formal Aspects

- Type: video game (3D).
- Tools used: Godot, Blender, possibly Beepbox and other software.
- End product: browser game if stable enough (unlikely). Executable otherwise.
- Platforms: PC.
- Needed hardware: PC and usual devices (monitor, mouse, keyboard, sound system).
- Available languages: toki pona only (possibly with some *very occasional* english).
- Genre: exploration, narrative, language learning, mystery, puzzle.
- Number of players: 1.
- Duration of play: a session could be as short as a few minutes or as long as it takes to complete the whole game in one sitting. The total duration of the game will depend on how many levels can be created within the time constraints of this project. Furthermore, playtests will be necessary to estimate it. There is little to no replayability.
- Target age group: 16+.

*Please note that toki pona uses no capital letters. In this document, sentences beginning with a toki pona word - such as will often be the case when referring to the game's title - will then start with a lowercase letter.

2 Design Pillars

The game design must:

- Go about language acquisition through *exposition* and not through translation¹.
- Construct the language barrier as *a series of small obstacles to be overcome* and not as a list of chores to be dealt with.
- Encourage the player to *investigate* the environment to find clues and context that allow both to understand the story and to acquire toki pona as a language.
- Regulate access to content based on both *passive* (comprehension) and *active* (expression) uses of toki pona skills.
- Illustrate that toki pona was developed as *a language for thoughts*, and not as a tool of efficient communication.
- Invite the player to reflect on some questions essential to *philosophy of language*².

3 Design Values

3.1 Experience

The player will:

- Move through the game space.
At all stages of play, they should feel:
 - Inquisitive
 - Curious
 - Immersed

During early stages of play, they should feel:

- Wary
- Disoriented
- Overwhelmed

¹To clarify: the game should never, ever, link a toki pona word to an english word in order to communicate its meaning. Of course, the player themselves will often make that link in their head once they get the meaning of the word, but the *act* of getting to that meaning should never pass through translation. For example, a fruit could be sitting near a label that reads "kili". This would lead to the player understanding that "kili" is a word that can refer to fruits. In their head, they will likely link the toki pona word "kili" with the english word "fruit". But the game itself should not put the player in front of a text that explicitly makes that link *in the game*.

²The idea here is not to educate on specific philosophical concepts or models, but rather to put the player in an environment prone to stimulate philosophical reflection.

- Intimidated

During late stages of play, they should feel:

- Confident
- In control

- Investigate scenes to find contextual clues³.

At all stages of play, they should feel:

- Inquisitive
- Curious
- Smart (they should not feel like they stumble on knowledge or solution to puzzles, but like they conquered it)
- Empathetic (the player does not have to identify with the characters or be "on their side", but they should care about each character's actions and their consequences)
- Rewarded (by their better understanding of the plot, a strengthening of their toki pona skills, and by their ability to solve puzzles thanks to environmental clues)

During early stages of play, they should feel:

- Lost

During late stages of play, they should feel:

- In harmony with the environment (for example, the location of objects should make sense to them)

Occasionally, they should feel:

- Various emotions towards characters (mostly: sad, angry, amused, annoyed)
- Intrusive (like they are snooping where they don't belong)
- Surprised

- Read texts of various forms and types that are dispersed throughout the game space.

At all stages of play, they should feel:

- Eager to learn more about the story and characters
- Active (extracting information rather than receiving it)

During early stages of play, they should feel:

³These clues might give insight about the plot (such as locket containing a portrait) or help formulate theories about toki pona and its vocabulary (such as a sign displaying a message in toki pona akin to "caution: dangerous cliff ahead" in front of said cliff). As much as possible, clues should do both at once (such as a name written in toki pona on the door of a character's room).

- Frustrated (it should be enough to motivate them to overcome the challenge posed by the reading of texts in a foreign language, but not enough to make the act of learning appear as tedious)

During late stages of play, they should feel:

- a

Occasionally, they should feel:

- Various emotions towards characters (mostly: sad, angry, amused, annoyed)
- Fill the blanks or change the words in some of the toki pona texts in order to either 1) gain access to new texts or 2) manipulate the environment⁴.
FILL HERE THE EMOTIONS THE PLAYER SHOULD FEEL.

3.2 Themes

EXPAND THEMES BASED ON JAVET'S PRESENTATION.

- Language as a way to shape one's mind
- The struggle for peace through simplicity
- Responsibilities and how they spawn both rigidity and looseness
- Hubris
- Artificial consciousness
- Independance and parental control

3.3 Point of View

3.4 Challenges

The main challenges posed by the game will be the following:

- Navigating the space
- Deducting the meaning of toki pona words based on contextual clues
- Using the acquired toki pona knowledge to decipher the various texts spread across the game space

⁴In the first case, correctly filling the text relating to an object would make a dialog appear. For example, labelling an apple as "kili" (in this context: "fruit"), would give access to the transcript of a dialog relating to said apple between two characters. In the second case, there only would be a few possible words for each changeable space, and changing them would alter the environment. For example, a locked door would initially be labeled as "lupa pini", (which can be translated as "closed door") The player could change the word "pini" (in this context: "closed") for the word "open" (in this context: "open"), resulting in the door unlocking.

- Using the acquired toki pona knowledge to fill the blanks in some of the texts in order either to reveal information or to manipulate the environment
- Connecting the available pieces of information together to uncover the wider narrative

3.5 Decision-making

The decisions made by the player will be the following:

- What thread to investigate
There are no right and wrong options for this type of decisions. Even the pursuit of a thread that is not well developed in the narrative should result in the player discovering information relating to other threads.
- Where to go and what to look for to investigate said thread
Player can choose "wrongly" relating to this type of decisions. For example: if they investigate the death of a character that was poisoned in the dining room, going to the library is unlikely to yield any useful information.
- When filling blanks, what word to use
There are right and wrong options for this type of decisions. While each toki pona word has a wide list of possible meanings, labeling a waterfall as a "kiwen" (which can mean things such as "hard object", "metal", "stone", "solid"), will not be validated as a good answer. There will be no consequences outside of a negative feedback (such as a trembling screen).
- When changing words, what word to use
While there are no actual wrong options relating to this type of decisions, some words will be useful or not depending on what the player is trying to accomplish. Trying to get a door to unlock will require to use the toki pona word "open", for example.

3.6 Skill, strategy, chance, and uncertainty

There is no uncertainty and randomness that comes from the game side of the experience. The player might base some of their decisions on randomness, but the game itself should not react differently to the same series of inputs. Uncertainty will come from the learning experience. The player might be uncertain that they have correctly assessed the meaning of a toki pona word⁵. They might also be uncertain that they have correctly interpreted

⁵In that regard, the game should contain many occasions for the player to test their hypothesis. The texts with blanks fill this role, as they should give a positive feedback when correctly filled, and a negative feedback when incorrectly filled. To a lesser extent, the texts with changeable words also provide positive feedback, though it is less direct. In that case, the words won't be validated as "correct" or "incorrect", but they will result in an alteration of the environment that might match with the supposed meaning of the word - indirectly validating the hypothesis - or not match with the supposed meaning of the word - indirectly invalidating the hypothesis.

the narrative.

Strategies put in place by the player should relate to:

- The acquisition of toki pona
- The use of toki pona
- The navigation of the game space
- The investigation of narrative elements

3.7 Target Audience and Access

ijo musi is aimed at adults with previous experience of video games and an interest for toki pona. There is no need to be both an avid player and a conlang enthusiast to appreciate the game, but at least one of these two characteristics will likely be needed to enjoy the game⁶.

As such, the main way for people to hear about the game will be posts made on various forums dedicated either to toki pona or to independent game development.

The game is meant to scratch an itch similar to games like *Outerl Wilds*, or *Return of the Obra Dinn*, although with my current skills and resources, its design will be much less efficient and its scope will be *much* smaller.

3.8 Conditions of Play

ijo musi is meant to be played alone in a setting that allows for immersion (without too much outside stimulation). It is meant to be played on a computer using a keyboard and a mouse. Controller support might be added if time allows it.

4 Features

The features are divided into four categories: "must have", "should have", "nice to have", and "bonus".

4.1 Must Have Features

Those are the features needed for the game to run at all.

- A character that can walk and rotate in 3d space
- An FPS camera that can look around
- Collision handling for the player character, the environment, and objects

⁶A rather unfortunate but essential characteristic of ijo musi is that it is not fully playable by toki pona speakers, as they already understand the language. Hopefully, the narrative will be interesting enough to provide an entertaining experience to them, but they will inevitably miss most of the gameplay that consists in the translation and acquisition of a new language.

- A global light
- Low-poly 3D assets for key elements (the main tool used by the player, the walls, some furniture, some other objects)

4.2 Should Have Features

Those are the features needed for the game to be any fun

4.3 Nice to Have Features

Those are the features that could transform an okay-ish game into a good one.

4.4 Bonus Features

Those are features that are shiny and appealing, but not realistic to implement within the resource constraints of the project.

5 Gameloops

6 Graphics and Concept Art

7 UX and UI

8 Characters, World, Synopsis