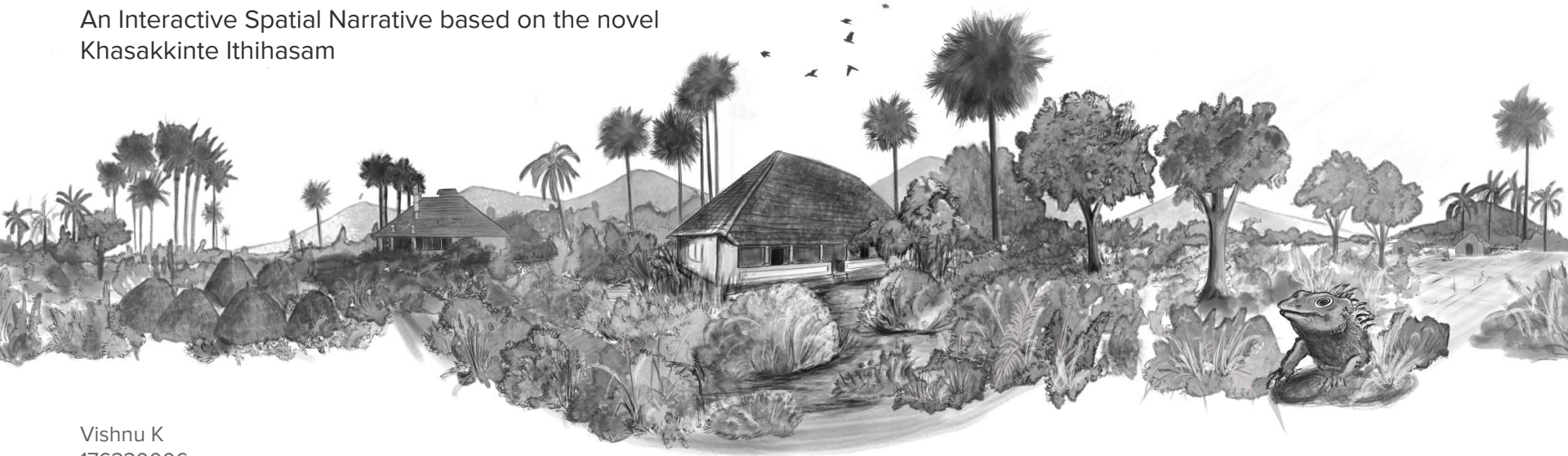


Visualizing

ഖസാക്സ്

An Interactive Spatial Narrative based on the novel
Khasakkinte Ithihasam



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176330006

Guide: Prof. Venkatesh Rajamanickam

Visualizing

Khasak

An Interactive Spatial Narrative of Khasakkinte Ithihasam



Introduction

Khasakkinte ithihasam is considered on the most important work of fiction in Malayalam literature.

Written by O.V. VJayan and published in 1969, the book has fascinated Malayali reader ever since.

The novel is often categorized under the genre of Magical realism, and the novel is compared with 'One Hundred Years of Solitude' the Magnum Opus of one of the most famous proponent of Magical Realism, Gabriel Garcia Marquez.

The novel is set in the fictional village of Khasak, where the protagonist in the novel, Ravi reaches to set up a single teacher school as part of a Govt. program.

Khasask is inspired from a small village named Thasrak in Palakkad district in Kerala.

Khasak's world of ghosts, gods, myths and superstitions are in high contrast with Ravi's outside world of modernity and rationalism.



Initial Direction

Based on the initial explorations and research, the objective of the project was set as

Visualize Khasak, the fictional village in which the novel Khasakkinte Ithihasam is set, to give a new experience of the novel to the Malayali reader. The design shall allow users to explore and analyze the space in literature with the real geography and get a better understanding of the fictional space.

Users: People who have read the novel at least once

Need

Why Visualize Khasak?

Visualization of space in literature can bring in different interpretations of the text.

Developments in geo-technologies and visualization techniques have opened up new opportunities to visualize and interpret literature. But most of the work that has happened are related to western literature.

Help readers connect the literary space of Khasak with the real space. Looking at the novel from a spatial perspective can improve the understanding of the novel.

Research

- **Secondary Research**
- Field Visit
- Interview with Experts
- Interpretations and studies on the novel
- **Literary Cartography**
- **Spatial Narratives**
- **Literary Visualization and Analysis**

Interpretations and studies on the novel

(ഖസാക്ക് പഠനങ്ങൾ)

Khasak Studies

A collection of articles by literature scholars on the novel Khasakkinte lthihasam.

16 articles discuss topics such as Vijayan's writing style, the depiction of various themes in the novel, cultural and social life of Khasak, etc.

Interpretations and studies on the novel

Khasakkinte Ithihasam play

Khasakkinte Ithihasam play by Deepan Sivaraman has visualized the novel using theatre techniques.

The director has used narrations through puppetry, video art, sculptures, dance, music, painting, and architecture to tell his interpretation of the novel.



Interpretations and studies on the novel

Documentaries about O.V. Vijayan and the novel

- Ottakarimpana Kattu
- Khasakkile Sheshippukal

Talks by P.K. Rajashekharan

a well known critic who focuses on O.V. Vijayan's works
gave me valuable insights into Vijayan's depiction of
Khasak and the inner meanings in the novel



Interpretations and studies on the novel

Ithihasathinte Ithihasam by O.V. Vijayan



Interpretations and studies on the novel

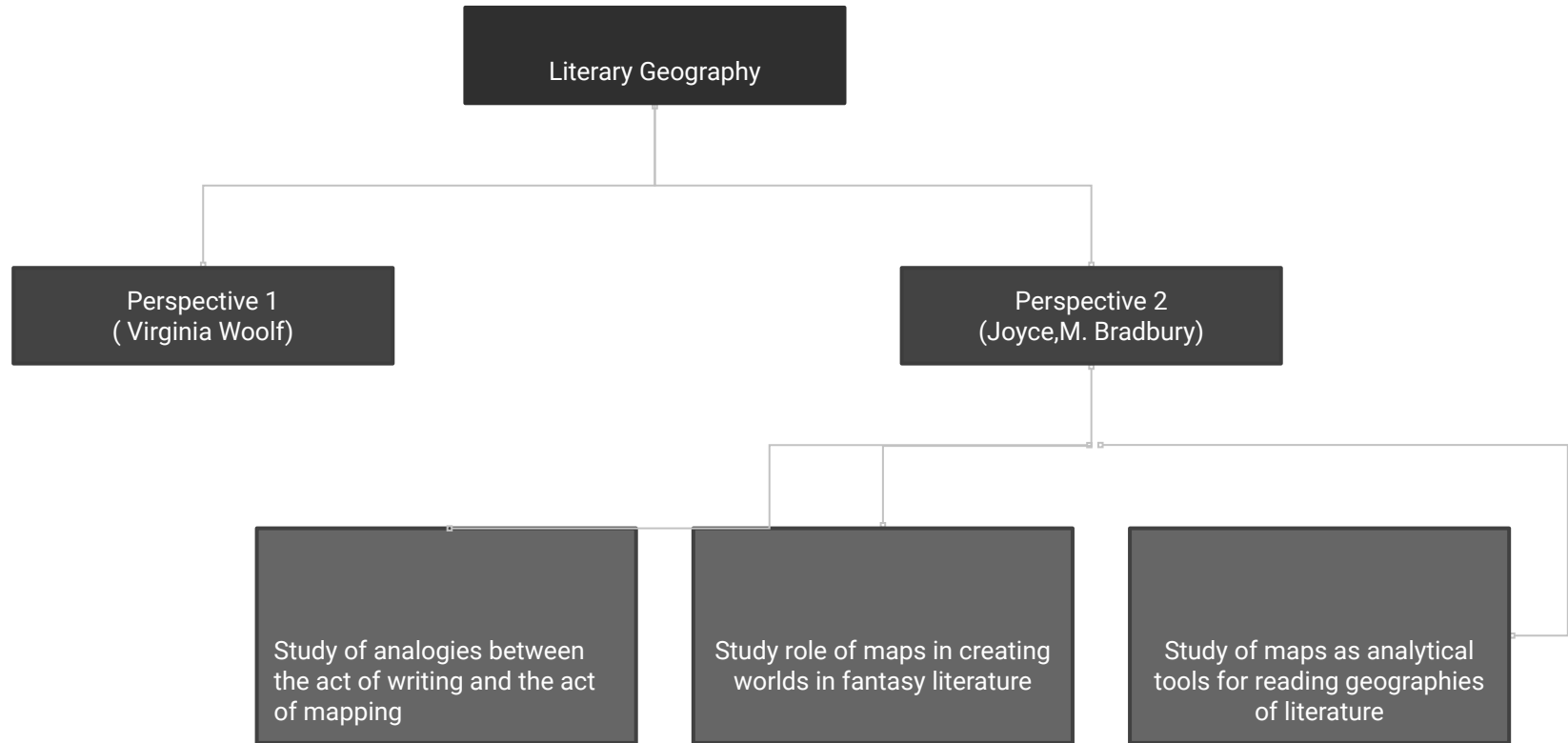
Paintings and Sculptures at O.V. Vijayan Memorial

104 rock sculptures depicting characters, animals, plants, objects, etc. in the novel

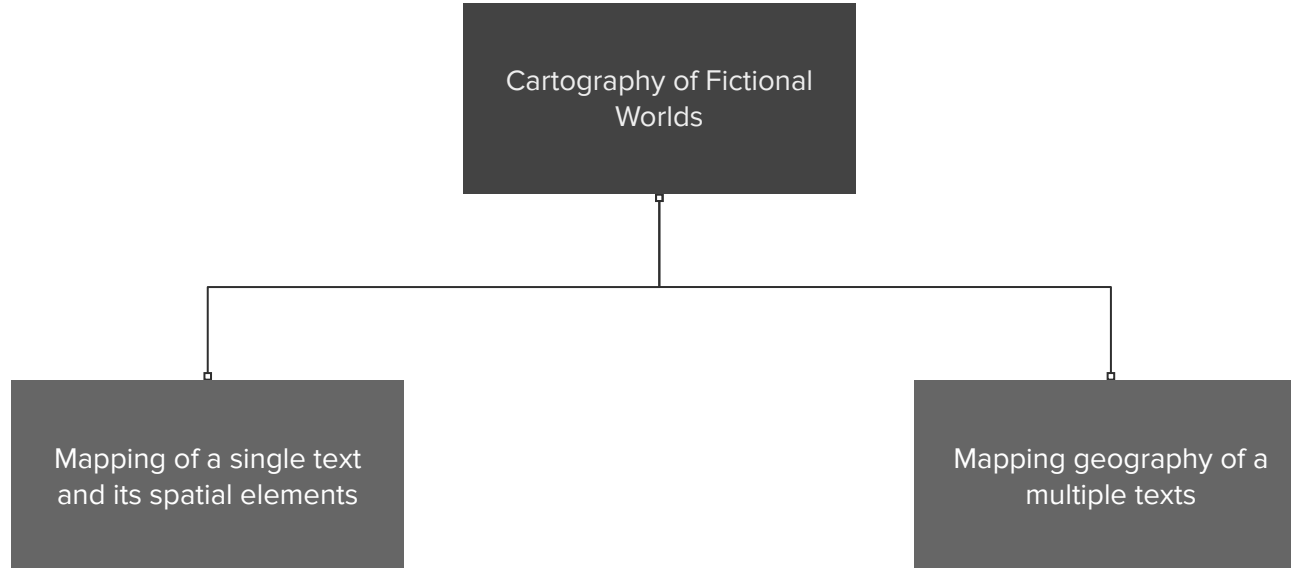
10 paintings in Kerala mural painting style depicting different scenes in the novel



Literary Cartography

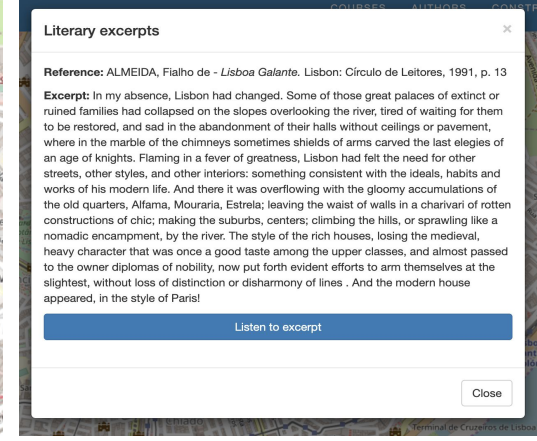
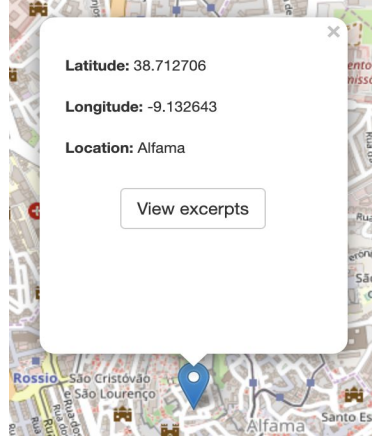
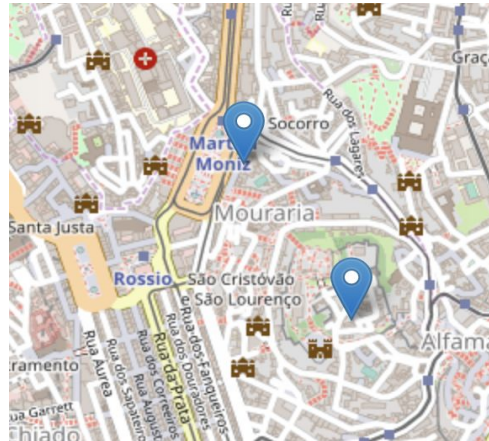
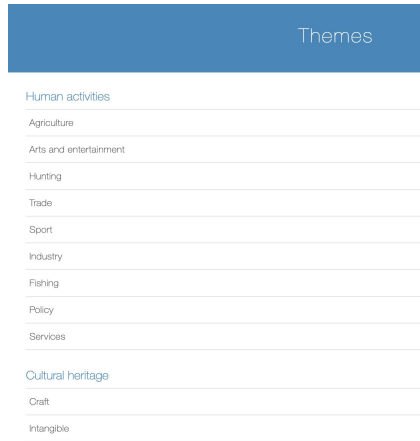


Literary Cartography Projects



Literary Landscape of Lisbon

Filter by themes(human activities, cultural heritage, soil use, flora and fauna, landscape, etc.), books, author, geography



Spatial Narratives

Telling the story from the perspective of space; giving more importance to space over characters or events in the story. Spatial narratives restructure the information spatially, different from temporal narratives

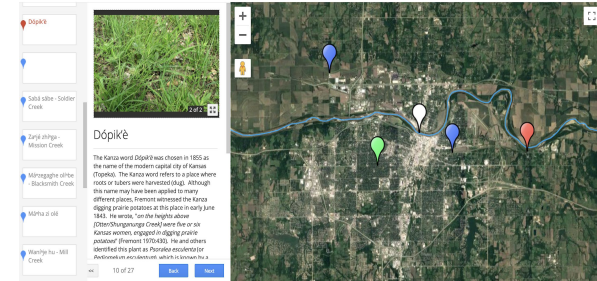
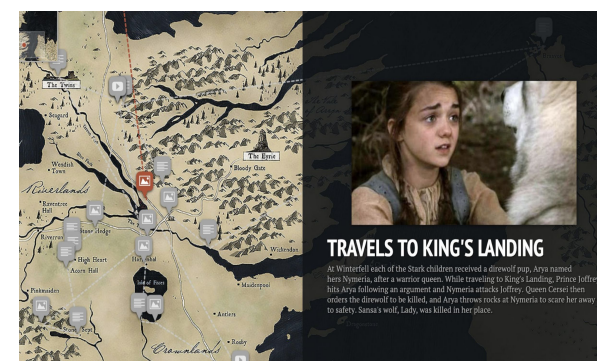
Tools:

Using maps and GIS technologies to embed information from the story to the real geography.

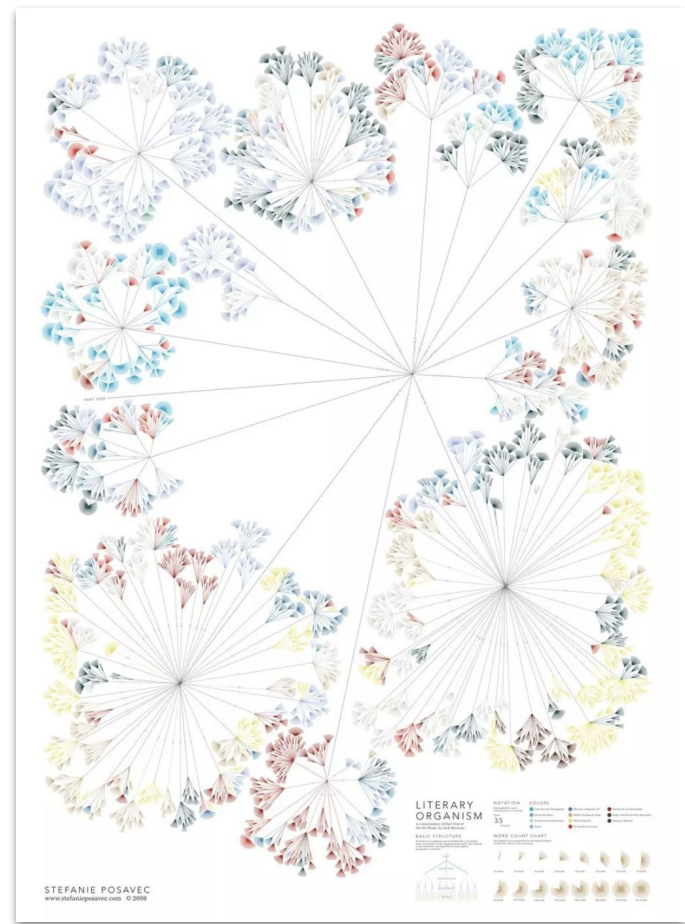
GIS tech and Mapping services makes it easier to map

Using hyperlinks, on maps - more creative options

Tools such as Goggle Maps, Tour builder, Mapbox, ArchGIS, OpenStreetMaps, Storymap JS

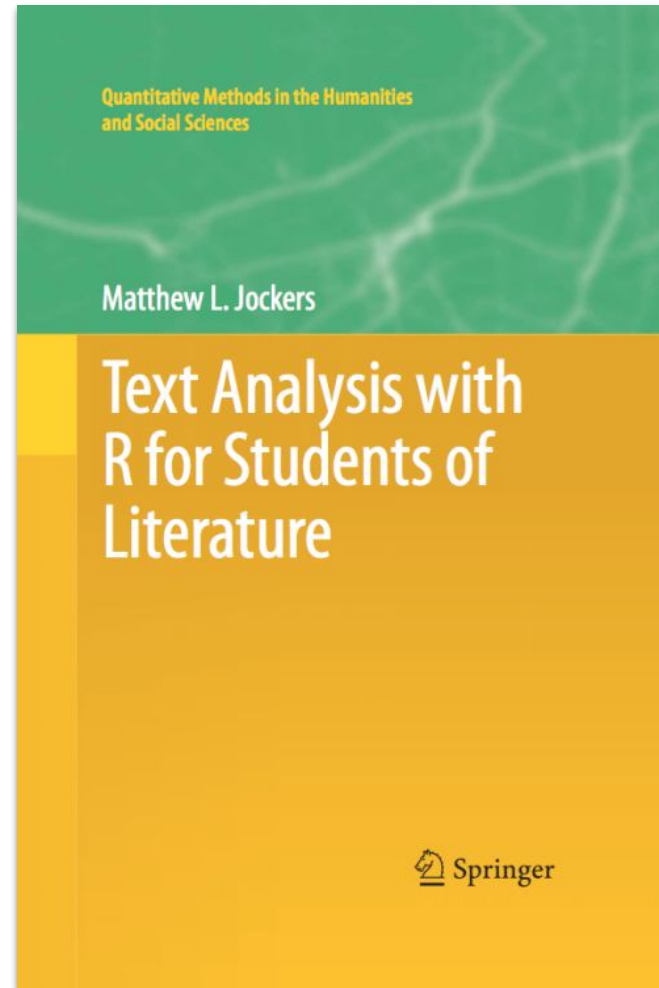


Literary Analysis and Literary Visualization



Writing without words by Stefanie Posavec based on the novel 'On The Road'

Literary Analysis and Literary Visualization



Research

- Secondary Research
 - **Field Visit**
 - Interview with Experts
- **Exploring Thasrak**
 - **Semi-structured Interviews**

Field Visit

A field visit to Thasarak village in Palakkad district in Kerala was conducted on 16th May 2019. The objective of the trip was to understand the geography of the village and collect information related to the places mentioned in the novel. O.V. Vijayan Memorial at Thasarak was visited to collect information and artifacts related to the novel. Photographs were taken at important locations mentioned in the novel.



Research

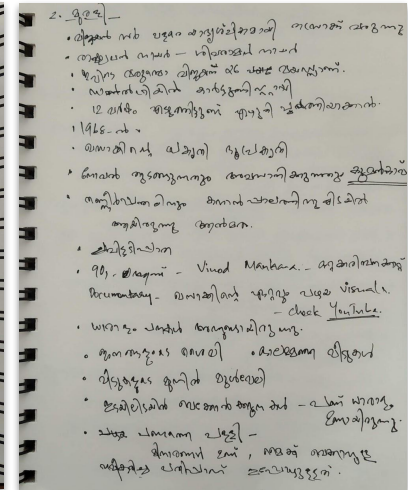
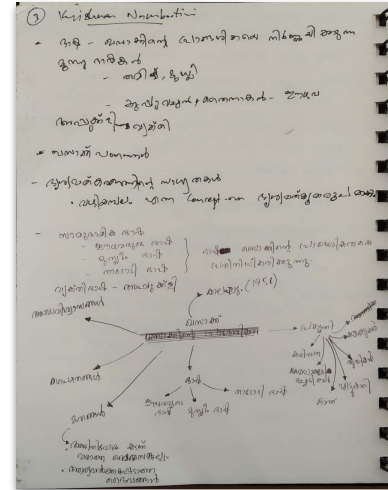
- Secondary Research
- Field Visit
- **Interview with Experts**

Interview with Experts

- Semi-structured Interviews
- Dr. Krishnan Namboothiri, Dr. Achuthanunni, Mrs. Ranjini, Mr. Arun Aravind and Mr. Alamcode Leelakrishnan, who has worked on different aspects of Khasakkinte Ithihasam.



Interview with Dr. Achuthanunni and Arun Aravind



Notes transcribed from the audio recording of the interviews.

Insights

Insights

- **Themes in the novel**
 - Vazhiyambalam
 - Cartoon Novel
 - Philosophical novel
- **Khasak and Thasrak**
- **Khasak's connection to Thasrak**
- **Interpretations of the novel**
 - Paintings
 - Sculptures
 - Play

Paintings - various artists have interpreted the novel through paintings

- **How to represent Khasak?**

This is not the story of any village
- **Vijayan's style or techniques**
 - Foregrounding with words, character names etc.
 - Also with animals, plants
 - Gives a unique ancient feel to the novel

Redefined Focus

Goals:

- Create a new experience of the novel Khasakkinte Ithihasam by looking at the novel from a spatial perspective.

Objectives:

- Visualize the space of Khasak, the fictional village in which the novel Khasakkinte Ithihasam is set, to let users experience the novel from a spatial perspective
- Create an interactive spatial narrative based on the novel, which helps users understand the space of Khasak

Users:

- Malayali readers who have read the novel Khasakkinte Ithihasam at least once. Users are familiar with the main characters and plot.

Based on the findings from the research, it was clear that Khasak has to be viewed as a fictional village and Thasrak should be seen as an inspiration for visualizing the space of Khasak and not as the real geography in which the novel is set. This changed the focus of the project, from visualizing the fictional space of Khasak and mapping it to the real geography, to visualizing the fictional space of Khasak as mentioned in the novel with Thasrak serving as an inspiration.

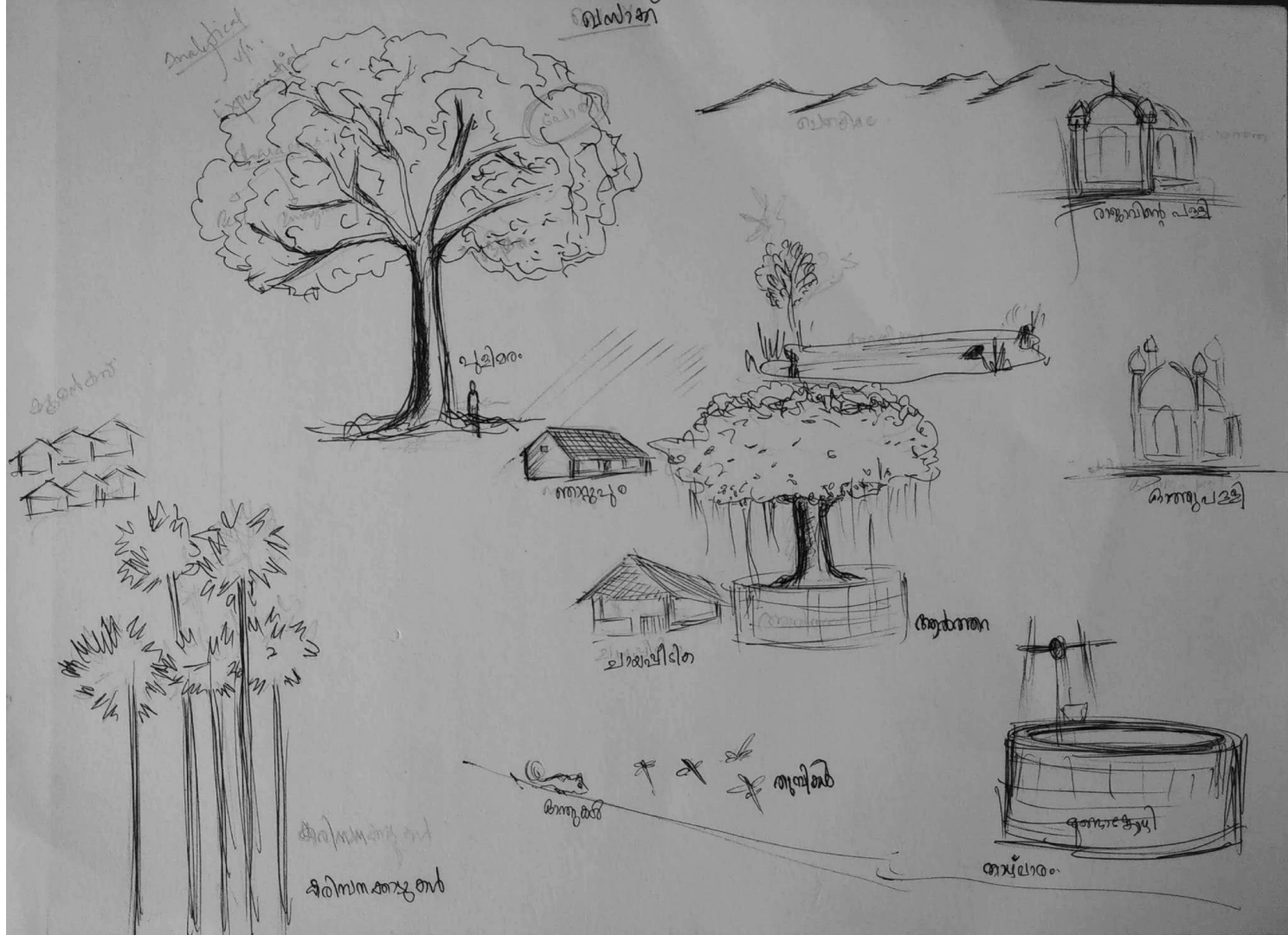
Explorations

Explorations

- **Reading with Mapping Gaze**
- Text Analysis
- Other Explorations

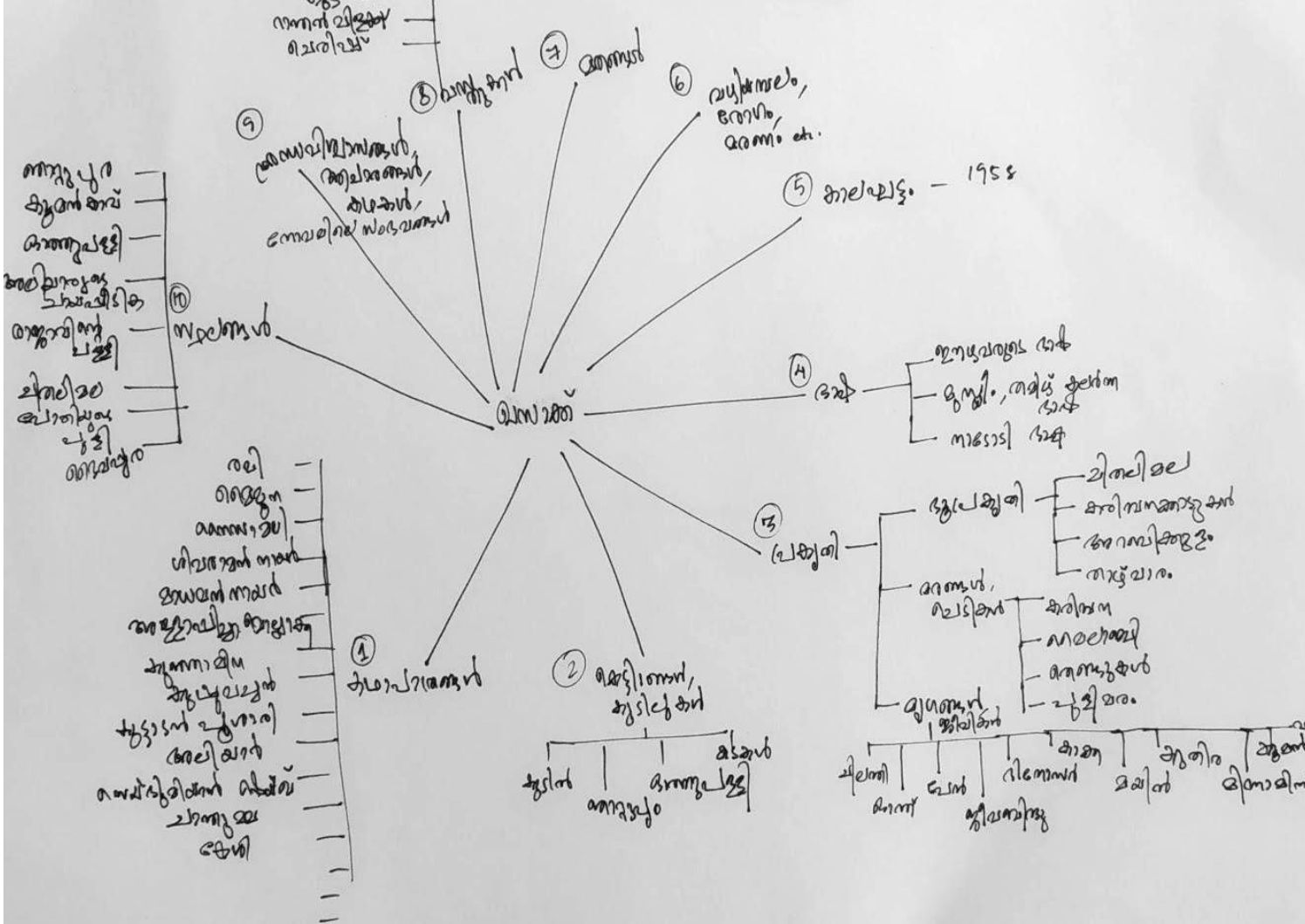
Reading with mapping gaze

Places



Reading with mapping gaze

Different elements that defines Khasak



Reading with mapping gaze

Different elements that defines Khasak

A	B	C	D	E	F	G
Sl. No.	കഥാപാത്രങ്ങൾ	സ്ഥലങ്ങൾ	മൃഗങ്ങൾ, പക്ഷികൾ, മരങ്ങൾ	Elements of മാജിക്കൽ റിയലിസം	വസ്തുക്കൾ	ജാതികൾ
1	രവി	കുമ്പനകാവ്	ഓന്ത്	മലയപോതിയുടെ കഥ	റാന്നൽവിളക്ക്	ഇന്ത്യക്കാർ
2	ശിവരാമൻ നായർ	ഞാറ്റുപുര	തുമ്പി	നാഗത്താമ്പാൻ പണമരത്തിൽ വിശ്രമിക്കുന്ന കഥ	കൂട	മുസ്ലീം
3	മാധവൻ നായർ	ഓത്തുപള്ളി	എട്ടുകാലി	തുമ്പികൾ ആത്മാവിന്റെ സൂക്ഷിപ്പുകാർ	ചെരിപ്പു	നാടോടി
4	അളളാപ്പിച്ചാ മൊല്ലാക്ക	ആൽത്തറ	കുമ്പൻ	ജനനം, മൃത്യു, പുനർജനനം	ഹാജരു പുസ്തകം	നായർ
5	നൈസാമലി	അലിയാരുടെ ചായപ്പിടിക	കാക്ക	നല്ലമ്മയുടെ കഥ	ചുവർചിത്രങ്ങൾ	
6	അലിയാർ	രാജാവിന്റെ പള്ളി	കുതിര	ഓന്ത് പ്രേതത്തെ ഓടിക്കുന്ന കഥ	ലെമോണൈഡ് ബോട്ടിൽ	
7	തിത്തിബിയമ്മ	പോതിയുടെ പുളി	പശു	ഷെയ്ഖ് തങ്ങളുടെ കഥ	കഥകളി കിരീടങ്ങൾ	
8	പൊന്തൂരാവുത്തർ	ചിതലിമല	പേൻ	ഖസാക്കിലെ ദൈവങ്ങൾ		
9	മൈമൂന	അത്താണിപ്പുറം	ജീവബിന്ദുക്കൾ	പാണ്ടൻകുതിരയുടെ പ്രേതം		
10	അത്തറുമുതലാളി	അടക്കുപറമ്പ്	മയിൽ	ഷെയ്ക്കിന്റെ പ്രേതം		
11	അപ്പുക്കുളി	എസ്റ്റേൺസ് പീടിക	മിന്നാമിന്നി	മല്ലിക്കുകളുടെ കഥ		
12	സെയ്യദ്മിയാൻ ഷെയ്ഖ്	ദൈവപ്പുര	വവ്വാൽ	ഖാലിയാരുടെ പ്രവൃത്തികൾ		
13	കുപ്പുവച്ചൻ	രവിയുടെ വീട്	കരിമ്പന	ഖാലിയാരുടെ ജനനം		
14	നാരായണിയമ്മ	പൊളിഞ്ഞ പള്ളികൾ	തെങ്ങുകൾ	ചിലണ്ടികളുടെ കഥ		
15	കല്യാണിക്കുട്ടി	സർവത്തു പീടിക	മൈലാഞ്ചി ചെടി	കബന്ധങ്ങളുടെ നീരാട്ട്		
16	കൂട്ടാടൻ പൂശാരി	ബസ് സ്റ്റോപ്പ്	പുള്ളിമരം	പരിണാമത്തിന്റെ കഥ		
17	ആബിദ	ചവിട്ടടിപ്പാത	കോഴി	പൂശാരിയുടെ ഉറഞ്ഞുവെട്ടൽ		
18	ചുക്രറാവുത്തർ	താമരക്കുളം	ചെമ്പകം	കല്ലുകവൃക്ഷത്തിന്റെ തൊണ്ടുകൾ		
19	ചാത്തമ്മ	തോട്	മുല്ലപ്പൂ	ഖസാക്കിലെ പ്രേതങ്ങൾ		
20	ചാത്തമ്മയുടെ രാവുത്തർ		മീനുകൾ	വീരാളികച്ച കെട്ടിയ ചാത്തൻ കോഴി		
21	തങ്ങളു പക്കീരി			നൈസാമയുടെ യന്ത്രം		
22	കേശി			പേനുകളുടെ ആത്മാവ്		
23	ഗോപാലു പണിക്കർ			ഖസാക്കിലെ ബഹിരാകാശം		
24	മയിൽവാഹനപണ്ടാരം					
25	ലക്ഷ്മി					
26	രാമച്ചാർ					
27	കൊടച്ചി					
28	കുഞ്ഞുമുൻ					
29	ചാത്തുമുത്ത്					
30	ചാത്തുമുത്ത്					

Reading with mapping gaze

Stories, beliefs in Khasak

2. തീരിച്ചുറപ്പ്

Origin of Khasak



തമ്പുരാൻ
പിള്ള

തമ്പുരാൻ
പിള്ള

തമ്പുരാൻ
പിള്ള



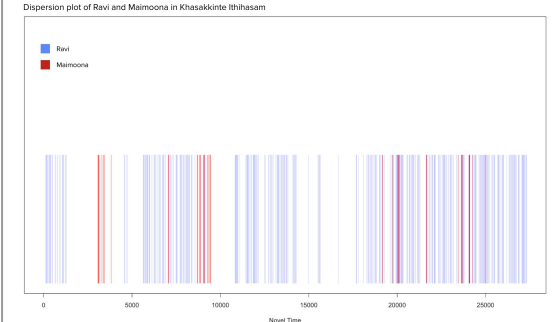
പിന്നെ കുതിരയുടെ
പേര്

കുതിരയുടെ പേര്
വിശ്വനാഥൻ

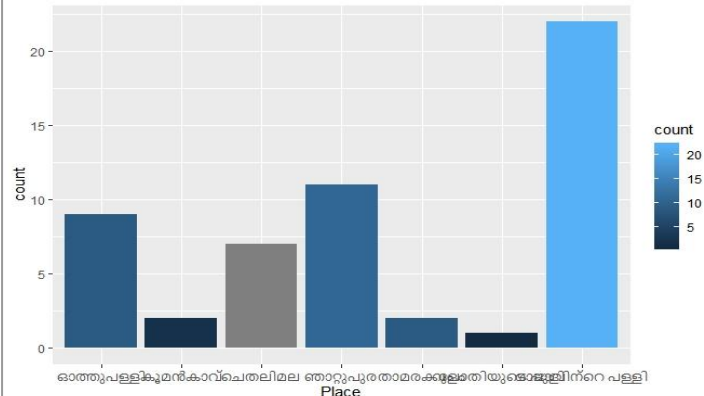
Explorations

- Reading with Mapping Gaze
- **Text Analysis**
- Other Explorations

Text Analysis of the Novel



Dispersion plot of two characters, Ravi and Maimoona, in the novel



Word count of different locations in the novel

Explorations

- Reading with Mapping Gaze
- Text Analysis
- **Other Explorations**

Other Explorations

- Photographs
- 360 photographs
- Blog post about Khasak and Thasrak

Vishnu Kurupath
Jun 8 · 2 min read

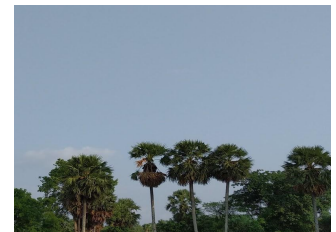
ഖസാക്ക് തേടി



ഖസാക്ക് ഗ്രാമം

ഒൻപതാം ക്ലാസ്സിൽ പഠിക്കുമ്പോൾ അലഹാബാദിലെ ഹോസ്റ്റൽ മുറിയിൽ ഇരുന്നുകൊണ്ടാണ് ഞാൻ ആദ്യമായി ഖസാക്ക് കണ്ടത്. അന്ന് മലയാളം ക്ലാസ്സിൽ രാധാകൃഷ്ണൻ സർ പറഞ്ഞത് എനിക്ക് ഇന്നും ഓർമ്മയുണ്ട്. ഓരോ അഞ്ചു വർഷം കൂടുമ്പോഴും ഖസാക്ക് വായിക്കണം. പുതിയ അർത്ഥങ്ങളും വ്യാഖ്യാനങ്ങളും ജീവിതത്തിൽ അന്വേഷിച്ചിറങ്ങുന്നവർക്ക് അനന്തമായ ഒരു ലോകം തുറന്നുനൽകുന്ന ഒരു കൃതി ആണത്.

Blog post about Khasak written on Medium.

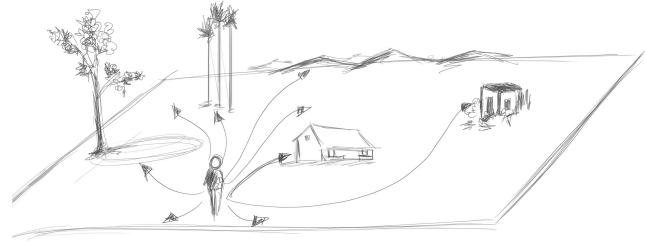


Photographs captured during the visit to understand Thasrak village

Concepts

Concept 1

An interactive map of the fictional world of Khasak



Concept 1

Concept 2

A Bus tour to the magical world of Khasak



Concept 2

Concept 3

An Interactive Spatial Narrative which focuses on the Ecology of Khasak.



Concept 3

Concept 4

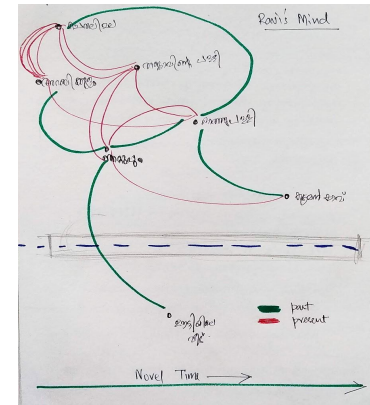
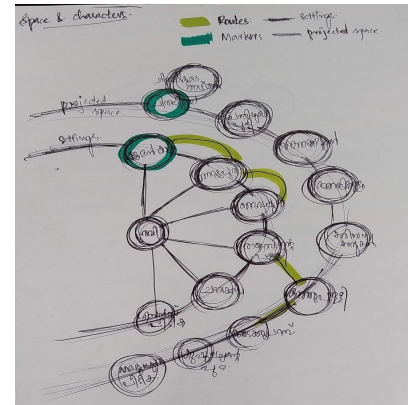
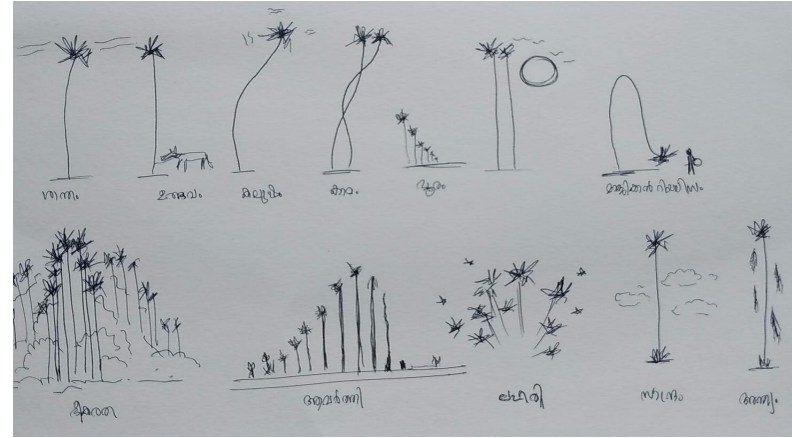
Visualizing Khasak's knowledge



Concept 4

Concept 5

An interactive Data Visualization based on Khasak



Concept 5

Final Concept:

An Interactive Spatial Narrative which focuses on the ecology of Khasak

Changing landscape and environmental concerns at Thasrak



Final Concept

An Interactive Spatial Narrative which focuses on the ecology of Khasak

Medium: 360 degree interactive illustrations

- Majority of the interpretations of the novel is in the form of paintings; creative freedom to represent the novel
- Perception of space in 360 degree images



Design

- Visualizing Khasak
- Creating a narrative
- Designing Interactions
- Designing the Experience

Visualizing Khasak

1. Finalizing locations from the text

Extracting text related to space and ecology of Khasak
Information about important settings as well as animals and plants were extracted from the novel.

Based on these two filters, 10 settings were finalized where most of the animals and plants are present.

Out of these, Njattupura is further split into an outside view, view inside first room and view from the second room, and Oathupalli, is split into an outside view and inside view taking the total number of settings to 13.

Visualizing Khasak

2. Adding elements in the fictional geography

The fictional geography of Khasak was visualized by combining different elements from the real geography of Thasrak and the description about Khasak in the novel, as well as Ithihasathinte Ithihasam.

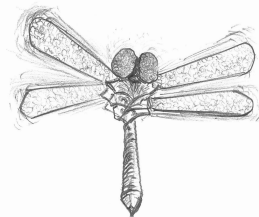
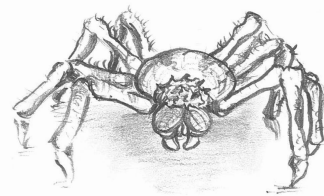
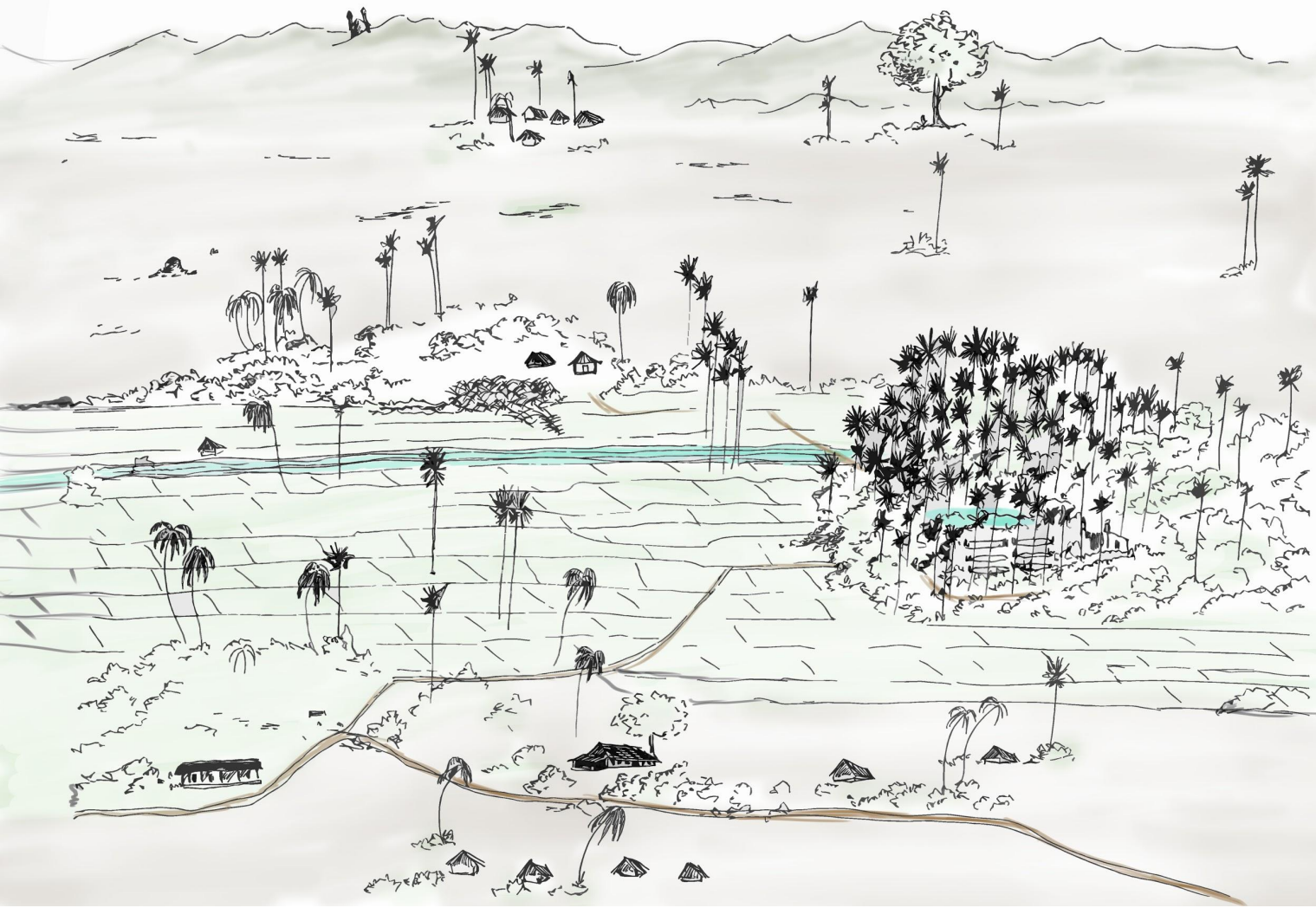
This was done so that the visuals stay connected with the novel as well as the space which inspired the novel.

Important locations in Khasak were sketched out using photos taken at Tharsak and referencing old documentaries about Khasak.

Settings that appeared less in the novel were omitted

A rough 2D map was then drawn using these.

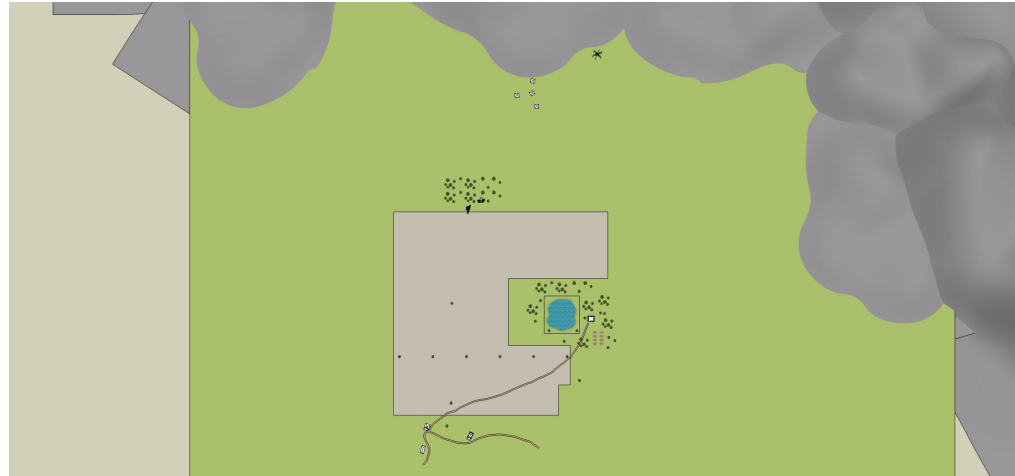
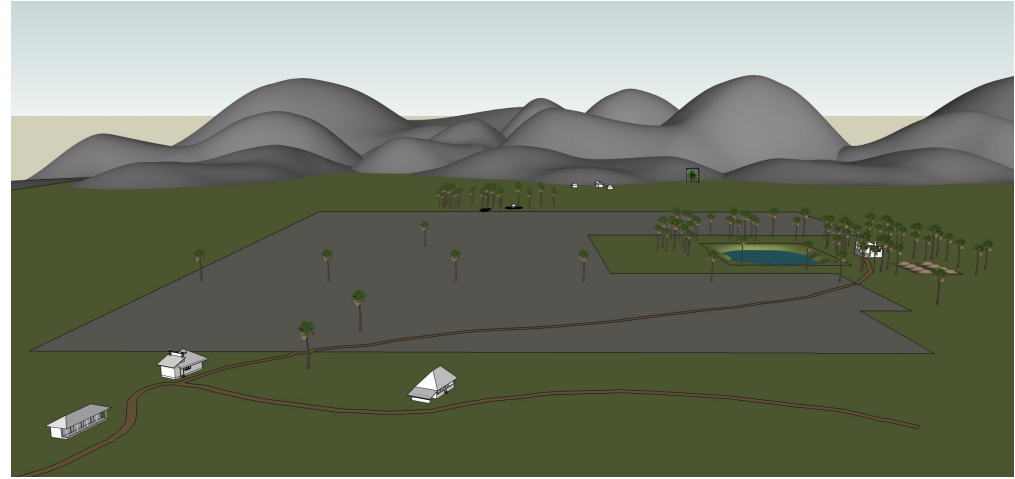
The novel was then read again with the map to gain more clarity.



Visualizing Khasak

3.

Rough 3D Map was created based on the 2D Map

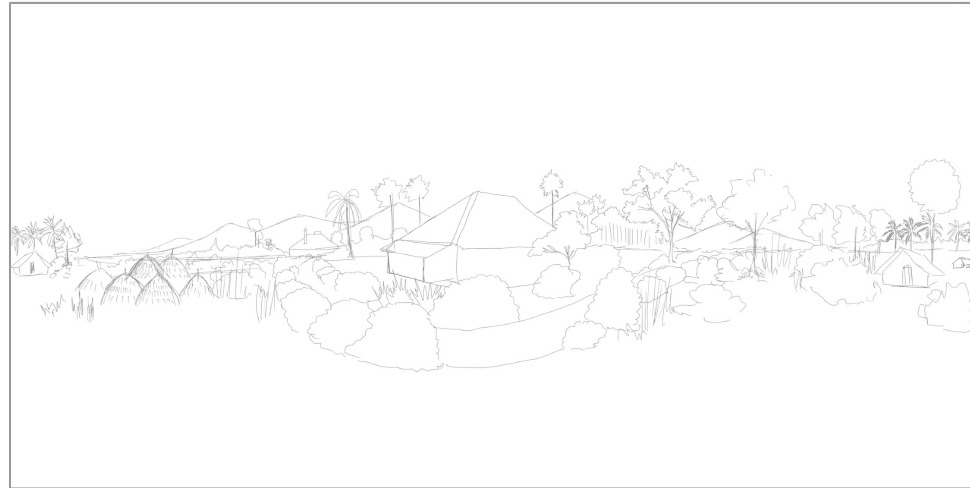


Visualizing Khasak

4.

360 degree images were captured at 13 locations to get the perspective correct

These images were taken as reference for the 360 degree illustrations



Visualizing Khasak

5.

Camera is kept at a height or from the ground for better field of view

This is also because of the plot of the narrative

Being in a dream, user gets a feeling of not completely inside the space, but hanging from a height and observing things



Creating a narrative

1. Looking at existing frameworks

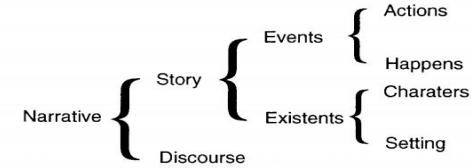
Chatman's components: Chatman divides narrative into two parts: story and discourse.

Gaylean's framework: The taxonomy contains three components; Space created by interaction and narration, Connection of the interface with the narrative, and Viewer's relationship with the narrative.

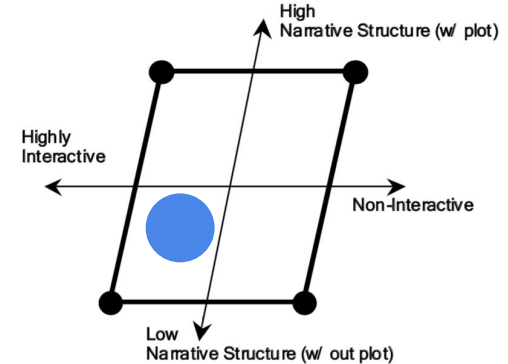
2. Placing the narrative

We have used the 2D space of interactivity and narrative structure defined by Gaylean, to place the interactive narrative experiences.

The interactive spatial narrative aims at letting users explore Khasak to understand the space. The narrative structure was kept low as the narrative focuses on user exploring the space rather than traverse a predefined path or plot. User's interaction with the interface changes the path taken by the user, and not the plot or it's end



Chatman's diagram of narrative elements



Placing the interactive narrative in the Interactive narrative space of experiences, Galyean, T. A. (1995), p.81

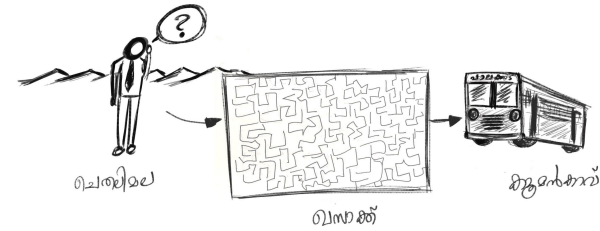
3. Deciding on the plot

- **Plot 1:** An environmentalist coming to Khasak to document the nature of Khasak. The user takes the role of the environmentalist and observe the animals and plants in Khasak to understand their life and stories.
- **Plot 2:** The user lands at *Chethalimala*(where Khasak ends) and wants to find the bus that takes him out of Khasak. He explores the space and interact with the actors to reach *Koomankavu*.
- **Plot 3:** User is the grandson of Kunjamina, who was a student in Ravi's single teacher school. Kunjamina, the grandmother has passed away. He dreams about his grandmother and the stories that she has told him in his childhood, and in the dream he enters Khasak village. He tries to find a dragonflies in Khasak, so that he can talk to his grandmother.

Plot 3 was chosen based on user feedback



Plot 1



Plot 2



Plot 3

Narrative treatment

Text

Text that describes the settings and ecology of Khasak was extracted while reading the novel. Text about settings were used as reference to visualize the space and text about ecology was used in the narrative.

The narration in the novel majorly involves a third person point of view along with conversations between characters. The major part of the narrative style is from the perspective of Ravi, the protagonist.

Audio

Background music is added to each scene based on the theme.

The voice for the audio narration was given by Roopesh, a research scholar at IIT Bombay.

Spatial audio for interactive components were given to bring user's attention towards interactive elements which they may miss while looking around in the scene.

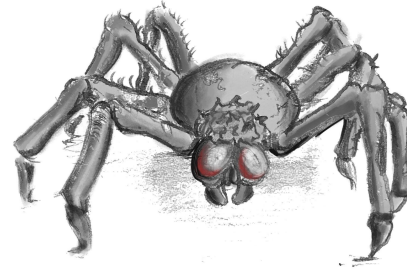
Scene_Number	Scene_Name	Frame	Interactive Element	Text extracted from novel	Point of view	Converted text
1	Njattupura_outside	Front	Njattupura	തേവാരത്തു ശിവരാത്രിനായരുടെ ചെറിയൊരു ഞാറ്റുപുരയിലായിരുന്നു ഏകാദ്ധ്യാപകവിദ്യാലയം	Third person	തേവാരത്തു ശിവരാത്രിനായരുടെ ചെറിയൊരു ഞാറ്റുപുരയിലായിരുന്നു ഏകാദ്ധ്യാപകവിദ്യാലയം
		Right	NA			
		Back	Chameleon	ഓന്തുകൾ മന്യഷ്വരൻ ചോരയീമ്പുന്നവരാണ്. കുടിയില്ലെന്നമെന്നില്ല. നോക്കിനോക്കി കാറ്റിലൂടെ വലിച്ചെടുത്ത കൂരുതി നുണഞ്ഞിറക്കുമ്പോഴാണ് ഓന്തു തലയാട്ടുക.	Third person	ഓന്തുകൾ മന്യഷ്വരൻ ചോരയീമ്പുന്നവരാണ്. കുടിയില്ലെന്നമെന്നില്ല. നോക്കിനോക്കി കാറ്റിലൂടെ വലിച്ചെടുത്ത കൂരുതി നുണഞ്ഞിറക്കുമ്പോഴാണ് ഓന്തു തലയാട്ടുക.
		Left	Oathupalli	വീട്ടിലേയ്ക്കുള്ള നിങ്ങള ചവിട്ടിപ്പാത ഞാറ്റുപുരയും താണ്ടിയാണ് കടന്നത്. പള്ളിയുടെ പടിയിൽ മൊല്ലാക്ക വീണ്ടുമിത്തിരിന്നു.	Third person (But the narration is from Oathupalli)	അള്ളാപ്പിച്ചമൊല്ലാക്ക ഖസാക്കിലെ കുട്ടികൾക്ക് വേദം ഓതി കൊടുത്തൊത്തുപള്ളി. പള്ളിയിൽ നിന്നുള്ള ചവിട്ടിപ്പാത ഞാറ്റുപുരയുടെ മുന്നിലൂടെ തുണ്ണി കടന്നു പോയത്.
		Top	Crows	കാക്കകൾ ഒറ്റൊറ്റാധാർക്കുളളകളെപ്പോലെ പൊയിലിരിക്കും സിംഹിതകമാനത്തിലൊഴുകുന്നിമവിളിച്ചു പോയി.	Third person	ഒറ്റൊറ്റാധാർക്കുളളകളെപ്പോലെ പൊയിലിരിക്കും സിംഹിതകമാനത്തിലൊഴുകുന്നിമവിളിച്ചു പോയി.
		Bottom	NA			

Text from the novel and the text used for the narrative for scene 1.

Narrative Treatment

Visuals

Various options were considered before finalizing the style. Ink paintings were used for the background and pencil sketches with digital retouching were used for the foreground elements.



Visual explorations for the background scenes



Final style: Pencil and digital media was used for foreground elements

Designing interactions

Requirements	User Interactions
Explore the space in 360 degree	Looking around
Focus user's attention towards interactive elements	Spatial audio from the direction at which the interactive element is present
Let users identify interactive elements	Highlight the color of interactive element when user is looking at the element
Let users listen to audio narration associated with interactive elements	Providing an icon which is related to listening. User can gaze for few seconds to select the icon and listen to the narration.
Let users know which interactive elements take them to next scenes	Providing icons for navigating to next scene. Users can gaze for few seconds to select the icon and move towards the next scene.

Final Design

Plot

The narrative starts with user slipping into a dream in which he reaches Khasak and wants to speak with the soul of his Grandmother, through the dragonflies in Khasak. Dragonflies carries human spirit in Khasak and it is assumed that the users remember this from the novel.

Introduction

Begins with an non-interactive introduction video which explains the plot and basic premise to the user

Beginning Scene

User enters the first scene, the one in which user is in front of *Njattupura*, and interacts with the elements in the scene

Navigation

User can navigate to the next scenes only after interacting with all the elements in one scene. The dragonfly will appear only if the user has explored the whole space of Khasak, and interacted with all the elements. .

Interactivity

Users interaction with the interface does not change the plot of the narrative, but the space in which the user finds the dragonfly changes according to the path taken by them

End

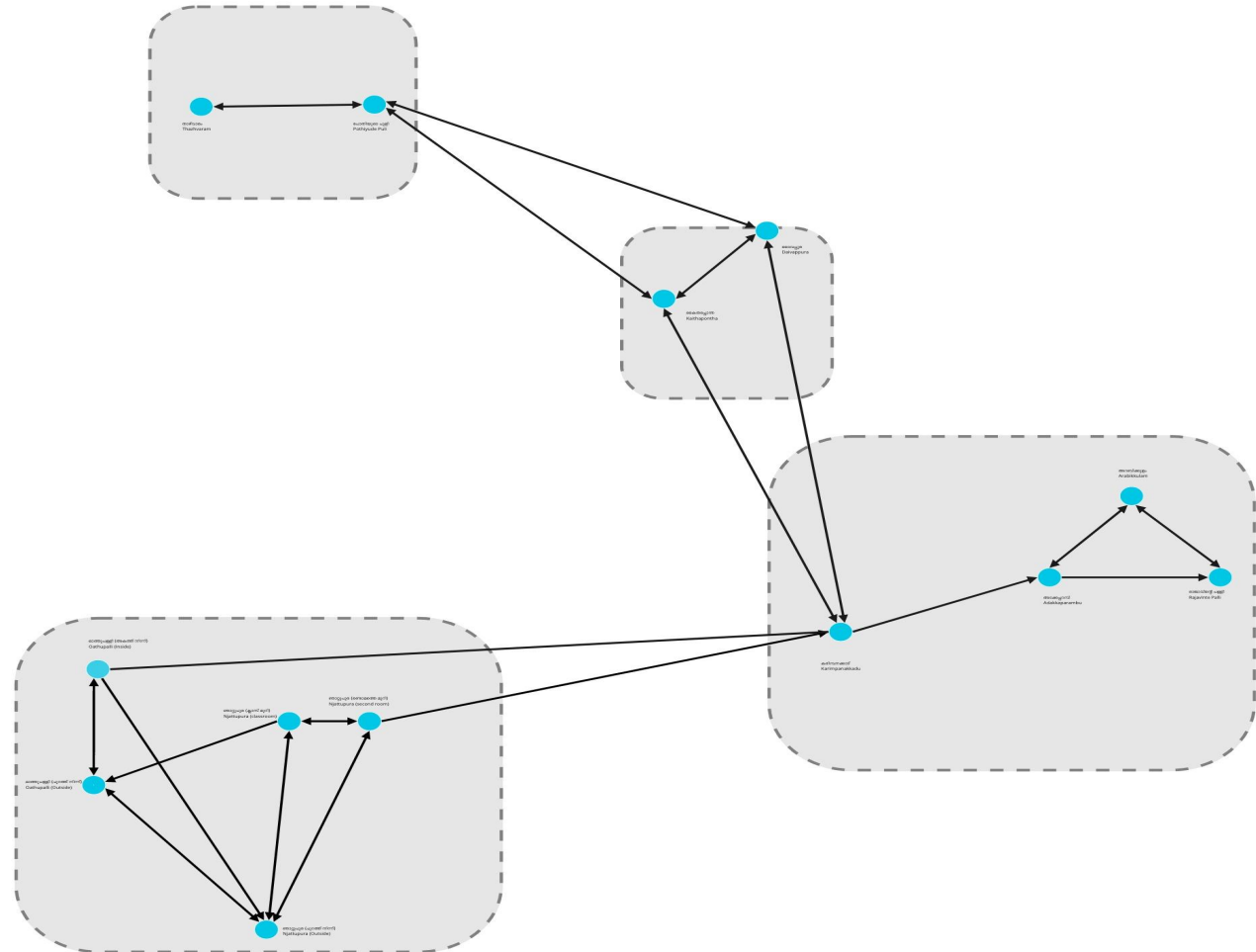
User finds the dragonfly and is asked to close his eyes and then listen to what grandmother has to tell him/her.



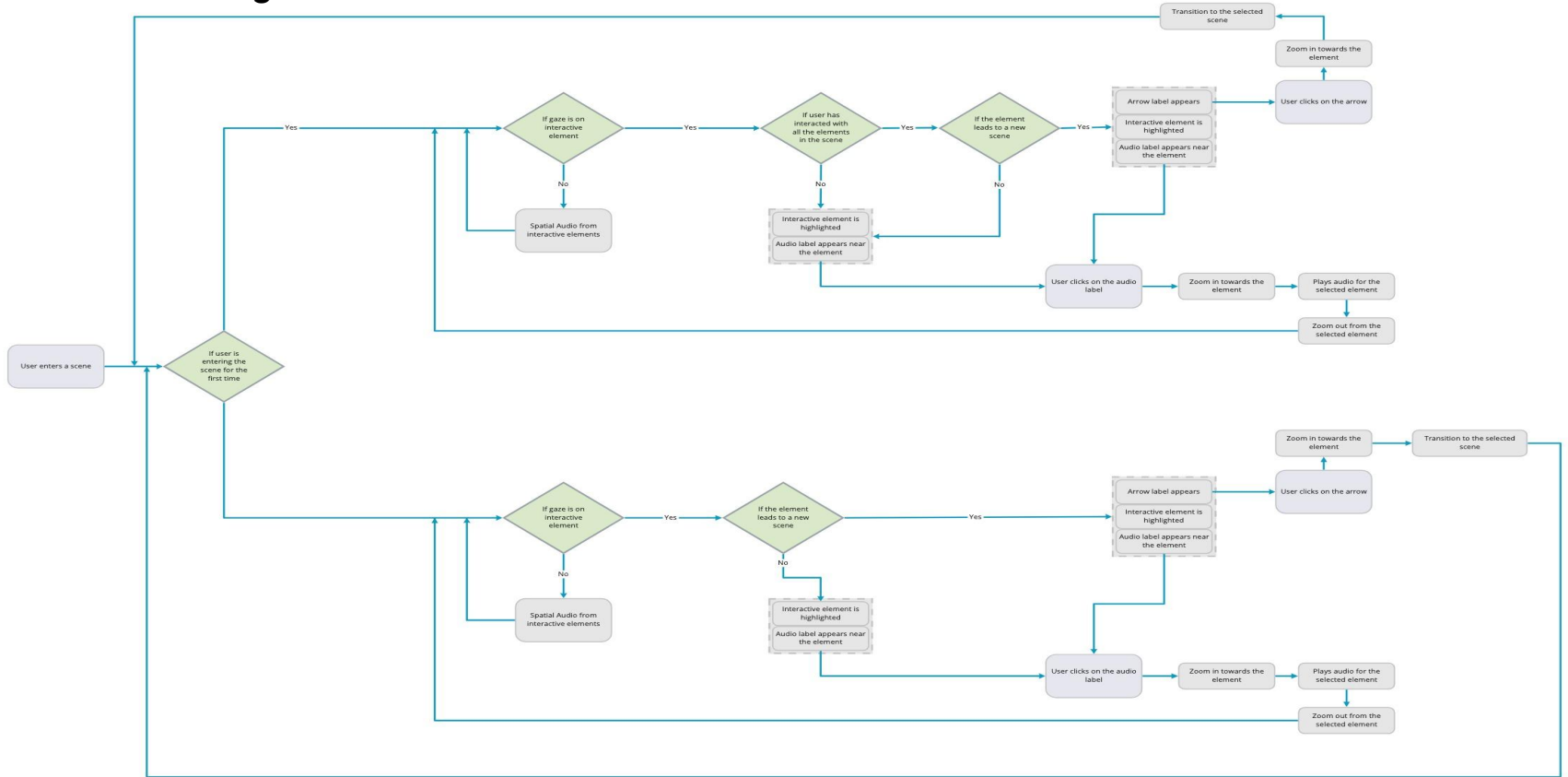
Frames from the video introduction which explains the plot and intentions to the user

Spatial Structure of the Narrative

Spatial structure of the narrative for 13 scenes



User Flow Diagram

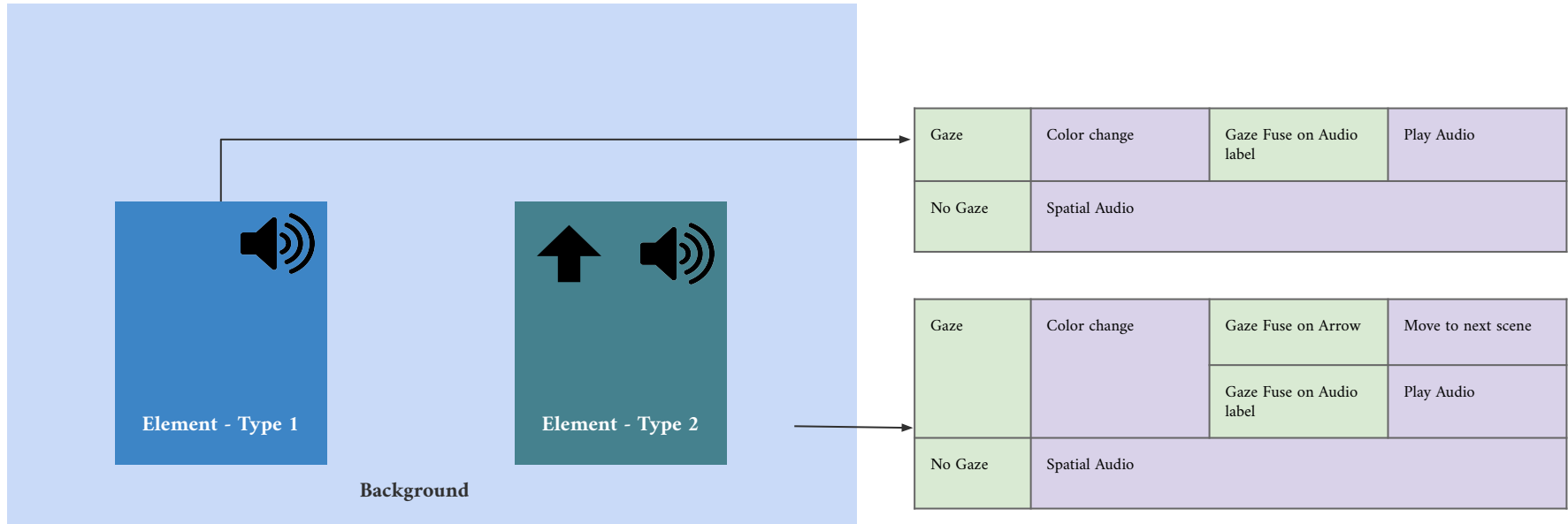


Interactive elements in a scene

Background: Change in head orientation changes the view

Element - Type 1: Interactive elements

Element - Type 2: Interactive elements which lead to other scenes



Designing the Experience

- In virtual experiences; matching user expectations with that of the experience - experiential fidelity
- Two components were designed for achieving experiential fidelity.
 - **A poster:** To prime users towards the visuals of the narrative
 - **A synopsis:** of the narrative experience to intrigue user about the narrative experience

Synopsis:

ഖസാക്കിലൂടെ:
ഖസാക്കിലെ തുമ്പികൾ മരിച്ചവരുടെ സ്മൃതികളാണ്.
തുമ്പികളെത്തേടി ഖസാക്കിലൂടെ ഒരു യാത്ര.

Khasakkilooode:

Dragonflies in Khasak carry human souls. An interactive journey through Khasak to find the dragonflies.



Prototype

- **Prototype 1**

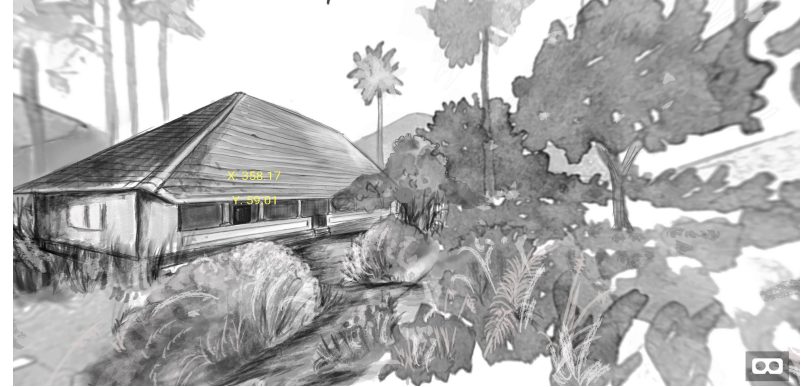
3 Scenes, Complete interactions

Fully functional prototype for three scenes was created with final renders of the backgrounds and interactive elements, background sounds, recorded audio and spatial audio.

- **Prototype 2**

13 scenes, Exploring and understanding the space

Visualizes all the thirteen scenes in the novel was created with a 360 degree media authoring tool Veer VR. The prototype would include basic interactions such as navigating to different scenes and playing audio files associated with elements.



Prototype 1

Evaluation

- Usability
- Narrative Experience
- Open Ended Questions

Heuristic Evaluation

Using: Prototype 1

No of users: 3

Results:

- Zooming into the element for audio was confusing for the users
- Spatial audio was too frequent and was disturbing the experience
- Technical errors
- Transition was not smooth

Evaluation of Narrative Experience

Using: Prototype 1 and 2

No of users: 6

Time for one user: ~ 1 hour

IRIS framework & User experiences in Interactive Digital Narratives

Identified themes which are relevant to the project and created a questionnaire, the **themes** included:

- Understanding of the novel; related to space, new insights, change in perception of the space
- Connecting with the narrative
- Flow, presence, enjoyability, Eudaimonic appreciation

Questionnaire:

17 questions; Likert scale + Open Ended Questions about the experience

Process:

- Users were given poster and synopsis about the narrative.
- Intro video was shown which explains the plot and user intention
- Use of prototype 1: 360 degree virtual reality mode
 - First 13 questions were based on prototype 1
- Use of prototype 2: web mode
 - Last 4 questions were for both prototype 1 and 2

User Demographics

IIT Bombay students

PhD (4), M.Tech (2)

Name	Gender	Age	Time since last reading	No of times you have read the novel
Lekshmy	F	25	3 years	1
Greeshma	F	27	2 years +	2 or 3
Sancho	M	26	5 years	1
Diwakar	M	23	2 years	1
Roopesh	M	42	2 years	5+
Swati	F	27	1 year	3

Results

Question	U01	U02	U03	U04	U05	U06	Average
I thought the system was easy to use.	4	4	3	4	4	5	4.0
I would imagine that most people would learn to use this system very quickly.	4	5	4	4	3	4	4.0
I felt like exploring my environment.	5	5	5	3	4	4	4.3
I felt curious during the experience	5	5	5	4	4	3	4.3
I felt interested in the narrative	5	4	5	2	4	4	4.0
The experience was pleasant	5	4	5	4	3	4	4.2
The experience was exciting	5	3	5	4	3	4	4.0
I felt like I was a part of the environment in the presentation.	4	5	4	3	4	5	4.2
I felt like the objects in the presentation surrounded me.	4	5	4	3	4	4	4.0

I felt I was part of the narrative experience	4	5	4	3	4	4	4.0
The visuals of the narrative fits the theme of the novel	4	5	5	5	3	5	4.5
The voice in the narrative matched with the narration	4	4	5	4	4	4	4.2
The narrative helped me connect with my previous experience of reading the novel	4	4	5	4	4	3	4.0
The narrative helped me understand the space of Khasak better	4	5	5	4	4	4	4.3
The space visualized in the narrative is different from what I had visualized while reading the novel	4	4	4	4	4	4	4.0
The narrative helped me understand how different settings are related to each other in the novel	4	5	5	5	5	5	4.8
I identified new things in the experience which I had missed while reading the novel	5	4	5	4	4	3	4.2

Questionnaire:

Overall response from the users were positive about the experience.

Enjoyment - 2 questions - **(4+/5)**

Curiosity - 3 questions - **(4+/5)**

Narrative Treatment - **(4+/5)**

Presence (Spatial and Personal) - 3 questions**(4+/5)**

Open Ended Questions:

- “ Experience is different from the space I had imagined while reading the novel”
- “ I will have this visual imagery when I read the novel next and I think I will be able to associate things better to the space in the novel”
- “ Experience cannot be compared with the experience while reading a novel”
- “ I feel like reading the whole novel this way”
- “I only remember actions, characters etc,. not the space from the novel”

Conclusion

The fictional village Khasak in which the novel Khasakkinte Ithihasam is set was visualized and an interactive spatial narrative based on the ecology of Khasak was created, to create a new experience of the novel to the reader.

The space visualized combines the space mentioned in the literature as well as the inspirations for the fictional space, a approach which we have used to create a deeper understanding of the space by collecting information from varied sources.

The interactive spatial narrative was designed for 360 degree illustrations as a medium, to be used in as a virtual reality experience as well as on the web. The prototype will be evaluated with users for its usability and the narrative experience of the design.

The evaluation suggests that the experience of the interactive spatial narrative was enjoyable and users liked the narrative.

Future Work

- Translating the work in Malayalam
- Other novels in Malayalam:
Marupiravi and Aliyah about Muziris
Mayyazhipuzhayude Theerangalil about the earlier
French colony of Mahe in Kerala

Thank You!

