Master's Thesis – master Sustainable Development Investigating the worlds of activists for virtual world design

Insights from Indian activists to the game developing industry

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Abstract

This study explores Indian activists' worlds and their efforts at shaping their worlds. This research took an open approach to exploring the worlds and narratives of Indian environmentalists. After gaining insights, the study answered how these insights can be translated and presented in games that entail virtual worldbuilding. This research objective was fulfilled by closely working with a game-developing team. The team is developing a fictional deck-builder game (All Rise) that pivots around the environmental crisis, taking court actions against influential actors, institutions, and organizations.

After investigating Indian environmentalists' worlds, I conclude that the interviewees engage in observation, learning, and discernment to refine their mental models. Their evolving internal worldviews gradually manifest externally, with mental alignment expressed through physical actions. These internal realizations are driven by a sense of belonging, recognition, and validation. The study underlines the importance of supporting and understanding these agents of change.

After working with the All Rise team and doing some background literature review, I emphasize that virtual worldbuilding must be approached sensitively to the cultures, people, and environments it draws inspiration from. I also suggest that specific industries and disciplines remain primarily untapped for climate gaming and contemporary topics, not due to a lack of interest but because of a lack of knowledge and awareness.

I conclude that research should explore diverse environmental lifestyles worldwide, involving sustainability scientists and other disciplines, for a holistic understanding. Additionally, practical and creative media industries, like gaming and entertainment, must depict real-life inspirations humanely and sensitively. They should invest time, effort, and resources to fully understand the cultural and anthropological evolution of the societies from which they draw inspiration.

Keywords: World-making, worldbuilding, designing virtual worlds, realities, game industry, sustainability science, game and media impact

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Moreover, I extend my gratitude to the All Rise team, that very open-heartedly engaged in the discussion workshops. Those conversations truly left me inspired and curious to explore the game industry personally, both as a hobby and career prospectus. Lastly, I want to thank my fellow peers, Alexis Beaudoin and Louis van Haasbergen. Our periodic progress talks on our projects and general life kept me grounded, provided a fresh perspective, and prevented me from getting lost in the process.

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List of Abbreviations

RQ Research Question

SPT Social Practice Theory

SO Site Ontology

GDC Game Developers Conference

GTA Grounded Theory Approach

UI User Interface

NPC non-Player Character

LOTR Lord Of the Rings

1. Introduction

Today's world is grappling with a multitude of sustainability challenges, from climate change to resource depletion, pollution, poverty, and inequalities (Javanmardi et al., 2023). These issues are increasingly acknowledged by governments, businesses, and civil society (Agrawal et al., 2022; Bolton, 2022; Puppim de Oliveira & Qian, 2023), underscoring the urgency of overcoming these hurdles. Despite concerted efforts, we continue to exceed safe planetary boundaries and confront the same sustainability issues (Rockström et al., 2018). Therefore, the need to address these societal challenges and their sustainable governance is more urgent than ever. Through activist movements and efforts that critique policies, actions, and claims made by institutions and organizations, civil society repeatedly underscores the critical nature of these matters (Sloam et al., 2022). These efforts include protests, marches, legal court cases, and peaceful gatherings (Batel et al., 2016).

Activism is a form of civil engagement where citizens organize themselves around a specific cause with the goal of influencing politics, raising spreading awareness, and expressing collective disagreement on policies, etcetera (Corry & Reiner, 2021). These efforts, by uniting like-minded people based on shared values, principles and beliefs (Bowman et al., 2013; Kowasch et al., 2021; Puppim de Oliveira & Qian, 2023), can bring about significant change. For instance, the Fossielvrij movement's protest against ABP's investment in fossil fuels through retirement funds led to ABP, the largest pension fund in the Netherlands, divesting from fossil companies before the case even reached the court (NU.nl/ANP, 2021). Therefore, studying activists' role in society can provide insights into how they catalyze such remarkable change.

One profound way to understand activism is by examining how activists perceive and interact with their worlds. This involves understanding how they actively shape their surroundings to realize their visions, a process called worldmaking (Vervoort et al., 2015). This is driven by both personal views and collectively held beliefs, making the study of their worlds crucial to understanding how they aspire to bring about new realities.

This study explores how activists reproduce the imagined visions they desire, focusing on their perceptions and remixing of their worlds. Environmentalists'/activists' lives often pivot around the culture of environmentalism and environmental actions (Holtz, 2014), intertwining their personal, occupational, and passionate pursuits eco-consciously. Their sustainable lifestyles, work in sustainability, volunteering, and education define them as environmentalists/activists.

Rather than waiting for changes prompted by environmentalists to manifest, a proactive strategy is to approach these agents of change – the environmentalists¹ directly. These actors share personal or collectively held principles, values, and beliefs to reorganize and reshape their surroundings. (de Moor & Marquardt, 2023; Kowasch et al., 2021). They do this to find like-minded people and sometimes to gain momentum for their movements. Understanding their intimate ways of navigating their worlds can inspire the rest of society to create an enduring positive impact in today's crises-filled world. Furthermore, suppose their narratives and methodologies can be innovatively scaled and translated. In that case, we may be able to present their unique environmental worlds, create resonance, and inspire more people to do the same.

One such innovative way is through virtual world design practices. It is practiced in both visual and textual forms, like games (Baldur's Gate), books (LOTR), movies (Dune), etcetera. These allow people to engage with constructed fictional/speculative worlds, offering creative freedom and agency to design worlds that impart new perspectives and ways of thinking, potentially leading to mental shifts. Games, in particular, hold immense potential to achieve radical change due to their ability to reach large populations and encourage experimental and fun-filled imagination (McBay, 2023; Vervoort, 2021)

Combining the understanding of how environmentalists shape their worlds with the intentional use of virtual game design might 1) create a deeper understanding of activist practices and 2) highlight unique ways of showcasing activist work to a broader public. By consciously tapping into the power of games (interactive and engaging), we might spark a heightened social awareness and commitment to sustainability, imagination, and empathy for the world we all share. Sharing diverse (environmental) world-making ways might help people form new ways of thinking and perspectives, and improve their relation to nature (Davelaar, 2021; Ehrenfeld et al., 2004; Meadows, 1999).

Environmentalism unfolds in many settings, ways, and intensities, allowing every effort to be very characteristic of its context (*Beautiful Trouble*, 2024). Learning from non-Western perspectives and worldviews may unlock valuable knowledge and practices from different parts of the world. Therefore, this study aims to delve into the lives of Indian environmentalists, exploring their efforts to develop and maintain their environmentally sustainable lives. I want

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¹ Note: I refer to the research subjects/interviewees as the term environmentalists and activists interchangeably because the label 'activists' is culturally not preferred in India.

to capture and dissect what they choose to retain or discard from their realities and what influences their choices (Saryal, 2022).

1.1. Research Objectives

1.1.1. Research Objective 1

The first objective of this research is to study how Indian activists understand and shape their worlds. Its purpose is to understand how Indian activists envision and actualize their realities through their lives. This will help us better understand how the elements in their worlds interact, affect each other, and catalyze societal transformations.

1.1.2. Research Objective 2

The second research objective is to bridge world-making and virtual worldbuilding. The insights gained from answering RQ1 will inform the game All Rise, which aims to educate players about the activistic efforts and lives of Indian activists by leveraging the design freedom of worldbuilding. All Rise aspires to inspire and shape real-world practices by bringing about new activist narratives to gameplay. This is further explained in section 2.2.3.

1.2. Scientific and Societal Relevance of this research

To achieve enduring societal transformations that will have positive impacts, it is essential to understand how deeper leverage points transpire and interact (Abson et al., 2017; Meadows, 1999). Understanding environmental activism requires exploring their potential implications for triggering paradigm shifts, for example, on political structures, regimes, policy changes, large-scale population influence, etcetera (Chan et al., 2020; Fischer & Riechers, 2019). However, to achieve this, we must explore and understand how society perceives, associates, and copes with environmental burdens to align those lessons to a scientific field.

This research focuses on understanding Indian activists' efforts at shaping their world. Worldmaking lacks concrete frameworks and operationalization in sustainability research. Still, it provides the freedom and flexibility to appreciate the diversity of activist efforts. Moreover, activism is globally recognized as a vital form of civil engagement to seize empowerment and agency, hence playing a critical role in the climate crisis era. Activism efforts are multifaceted, highly complex, and may have an entangled network of drivers and motivations (Davelaar, 2021), necessitating the scientific community to contribute to research that adds depth to understanding of the activists' processes (Anthati et al., 2022; Saryal, 2022).

This research explores how activists construct and influence their perceived realities, shaping different versions of themselves and their worlds. It examines their contributions to future worlds and versions of themselves through a continuous rendition of their realities.

We can usually see the collective efforts taken by environmental activists, for example, through protests (Streeby, 2019); however, activism also takes place by oneself. Its spillovers on the collective efforts should be explored more. I aim to reveal how activists commit to certain beliefs, take deliberate actions, and make conscious choices when it comes to environmental efforts. Therefore, I emphasize the notion that personal transformations can ripple onto a wider population, therefore, achieving broader societal shifts.

This research also contributes to a decolonial understanding of achieving societal transformations (Sultana, 2022; Terry et al., 2024). It does so by involving participants based in India, bringing in dimensions that are culturally, socially, economically, and environmentally characteristic of India (Sultana, 2022). Exploring knowledge systems in India may lead to information that is enlightening to the sustainability field in non-western ways (Woiwode & Woiwode, 2019). Lastly, the methods and unique study subjects imply embracing the diversity of all the other factors that may accompany it, and this includes worldviews and perspectives that may be out of the norm (Terry et al., 2024), especially in the dominant ways of Western research (Anthati et al., 2022;).

The project has a confirmed implicative game case for its findings: All Rise. It has a novel take on climate gaming and aims to aid education and communication of sustainability issues and environmental activism efforts (based on real-life cases) to its players. It is with the ambition of including innovative ways through which sustainability knowledge reaches the mass public and their engagement with it in society. It provides its players with narratives, agency, and sociality by stimulating their emotions, considering today's sustainability challenges and efforts (Nguyen, 2020; Richter et al., 2023).

2. Theory and background information

2.1. Concepts

My approach to theorizing and capturing data was to remain as open as possible. I drew on some cultural and anthropological ideas, but not rely on them to completely operationalize worldmaking.

In this chapter, I briefly explain what worldmaking and worldbuilding mean, describe my research approaches, introduce the implicative game case (All Rise), and present the research questions.

2.1.1. Worldmaking

Worldmaking is an intricate process by which individuals or groups construct their realities through the perception of their surroundings and meaning-making systems (Sarasvathy, 2012). This practice of constructing realities is subjective and highly dependent on the interpretations of the systems they derive meaning from and the frameworks provided by such (Bruner, 1990; Goodman, 1978). These frameworks may involve religion, culture, beliefs, traditional rituals, societal values and norms, political regimes, shared or individual experiences, etcetera (Robinson & Maggs, n.d.).

The concept of worldmaking implies that our understanding of the world is not an objective and universally shared reality (Vervoort et al., 2015). Instead, it emphasizes the subjective nature of our perceptions of the world and that, socially, we tend to align ourselves with others who may share these comprehensions of our surrounding world, adding a dimension of plurality (Vervoort et al., 2015). This social aspect, which may be called 'collective worldmaking,' denotes that a group shares perceptions and agrees upon the characteristics that define their realities. Coexisting in the same realm, their goals and theory of change might align and converge, too, leading to co-shaping their shared realities (Reckwitz, 2002). This social aspect of worldmaking fosters a sense of community and shared experiences among individuals.

However, acknowledging and relating to others' realities does not mean it must lead to realizing the same version of their imagined world (Goodman, 1978; Reckwitz, 2002). Some of these beliefs and perceptions that are collectively held may get varying degrees of emphasis, attention, and development. This way, worldmaking remains immensely diverse on an individual level, but it can and inevitably is practiced collectively (Heinen & Sommer, 2009). Therefore, in simpler terms, worldmaking forms certain beliefs, opinions, inclinations, and

desires through personal experiences. Individuals engage in judging and interpreting their reality, which leads them to embrace certain aspects of it and distance or even wholly discard the undesired parts of it. Thus, constantly rendering reality and practicing worldmaking leads to a rich tapestry of many different versions, each with its own unique characteristics and implications.

For example, a student navigating through different worlds – the university, a home with family, and a student accommodation with housemates make deliberate or influenced choices to be varyingly involved with these three worlds, contributing to developing different versions of the student. For example, an academic version of themselves at the university, a second version guided by their family life and beliefs, and the third one at the student accommodation with potential friends.

Moreover, shared realities emerge when their house members at the student accommodation share the academic world. Alternatively, a deliberate attempt to share a reality explored through a different avenue, such as sports or leisure activities, makes worldmaking a dynamic and ongoing practice that takes place by interpreting and crafting different versions of oneself. It is a complex phenomenon to unpack and may look very different from person to person. It uses so many elements in a person's life, individually and socially, that worldmaking becomes intrinsically rich and remains impressionistic in its composition. This dynamism keep the process of worldmaking engaging and ever-evolving.

I see worldmaking as consisting of two aspects, individual or self-worldmaking and collective worldmaking. Self-worldmaking involves one's behavior, rationality and practices that take place in their own space, independently (Bourdieu, 1977; Foucault, 1977; Garfinkel, 1967 & Giddens, 1984). These thoughts and actions mostly satisfy personal desires with consequences affecting only the individual's life (Reckwitz, 2002). Whereas, collective worldmaking is the social side, where one engages in activities within society or plurally (Theodore R's, 2002). Together, these aspects of worldmaking acknowledge a person's desire for agency in shaping their life while appreciating that humans are social beings who also conduct life outside their personal space (Klitkou et al., 2022).

This research will adopt the use of these two aspects of worldmaking to understand how activist worldmaking practices come about in seclusion and in the collective setting (Klitkou et al., 2022). This is essential because activism (Schulte et al., 2020) and worldmaking are not isolated practices. And humans carry out practices in seclusion and amidst the collective (out in the society or within a group) (Crosby, 2003).

2.1.2. Research Approach and Question 1

Given the complex nature of a person experiencing reality and executing practices, this research asserts that personal meaning-making and subsequent actions are not mutually exclusive. The first part of this research aims to approach worldmaking as this rich, saturated experience that Indian environmental activists engage in. I recognize the discernible nature of the elements of worldmaking, along with the fact that they are not independent. I will treat them as the entangled, intertwined, and connected scope that they are and deliberately give them structure due to their complexity. The research approach here will be agnostic towards how they relate to each other and not assume any causal relationships between them. I am more interested in leaving it as an open space for uncovering the relevant elements that are a part of the worldmaking experience of the Indian environmental activists. Given the openness of this research phase, the following research question (RQ) has been framed:

RQ 1: How do Indian activists experience and engage in shaping the worlds they inhabit?

2.2. Theoretical concepts on worldbuilding and its importance for societal transformation

2.2.1. Designing virtual worlds / Worldbuilding

Worldbuilding defines how we construct fictional worlds (Candy et al., 2019). This practice usually involves the creation of worlds, which may include detailed systems regarding society, history, religion, geography, design, mystery, etcetera (Mignolo, 2019; Urlich Lennon, 2021). All these elements may contribute to the overall storyline and define the game's rules. Worldbuilding goes beyond just designing a fictional world; it involves constructing, sometimes even re-constructing, societies and their implicit systems, infrastructures, and paradigms (Tomin, 2020). Worldbuilding may involve recreating these systems from the past or present and constructing them from the future or pure imagination. This is famously done in works of speculative and science fiction (Roine, 2016) and usually gives a sense of complete understanding and wholeness of the world designed (Leah Zaidi, 2019).

One may argue that to practice worldbuilding is to perform systems thinking. This is true because building a comprehensive world is to know this fictional world inside out (Candy et al., 2019). In Meadows (1999) terms, this would mean that the world builder would know and design specific shallow and more profound leverage points of the system, which, when tipped, may radically change the storylines or gameplay. This may make worldbuilding an

intentional practice where one practices it to generate systematic change through design and intent (Abson et al., 2017).

Considering the All Rise game in the context of societal transformation and worldbuilding, the game is designed to have characteristic information flows through plays on access to information, power structures, incentives and constraints of the implied system, and the ability to self-organize through decisions (Vervoort, 2024). The game also has clear intentions, which are implicit within and explicit outside the game. Within the game, the dominant trajectory is the emergence of environmental neglect and an actor who wishes to change this by attempting to disturb different system elements (Vervoort, 2024; Meadows, 1999). The game is trying to provide a speculative angle to change people's mindsets, worldviews, and goals in today's crises-filled reality, consequently and possibly influencing their worldmaking process.

2.2.2. The broader implication of this research: Thinking of deeper leverage points

Environmental activism can drive transformative change, emphasizing the need for profound societal shifts towards sustainability rather than gradual transitions for a livable future (Klitkou et al., 2022; Steele et al., 2021). Hölscher et al. (2018) distinguished between transitions and transformations. Transitions are gradual changes (social, technological, and institutional) within societal subsystems. In contrast transformations are profound and fundamental changes implied to large-scale societal structures and systems. While transitions can lead to transformations, the latter requires deeply reimagining institutions, paradigms, and relationships (Kumar & Giri, 2020; Fischer & Riechers, 2019).

Donella Meadows's (1999) leverage point framework highlights 12 intervenable leverage points in a system, categorizing them as shallow and deep. Deep points offer higher potential for impactful change across the system (Davelaar, 2021) but also more difficult to influence, making them less famously targeted in today's systems (Abson et al., 2017). Meadows (1999) stresses that while shallow leverage points are more easily altered and therefore targeted, deeper points can drive radical societal transformations. However, these points are under-focused and under-researched due to their demanding and challenging characteristics (Abson et al., 2017).

Vervoort et al. (2015) summarize Goodman's (1978) view that worldmaking is the subjective interpretation of the world and remaking of these interpretations by people (Klitkou et al., 2022). Environmental activists incorporate, adapt, and reimagine their surroundings, and

create new version of their perceived worlds. This way, they practice shaping their worlds and engage with their systems' *design* and *intents* of (Abson et al., 2017; Meadows, 1999). Therefore, engaging with the deep leverage points as Meadows (1999) outlined. Hence, understanding the practice of worldmaking undertaken by environmental activists can shed light on what transpires in these deeper leverage points and how they can be better addressed for societal transformations (Fischer & Riechers, 2019).

Lastly, the project also considers the transformative potential of games (Vervoort, 2024), potentially exposing a very influential leverage point. Vervoort (2024) argues that there is a need for game developers. Therefore, the game industry to understand the worlds, perspectives and realities of change makers of society to further inform game design. People may treat game here as more than a mere recreational tool and more a strategic tool capable of instigating behavioral and/or perceptual change amongst its players. Using games with purpose to stimulate and prompt large masses to propel and inspire them towards environmental action for the better and shift mindsets and perspectives.

To conclude, Figure 2 presents a conceptual framework that highlights the connections that will be studied through this research.

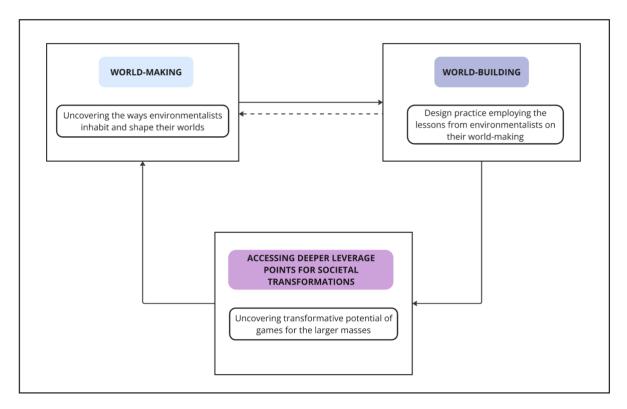


Figure 1. Conceptual framework

2.2.3. Introduction to the Case: All Rise Game

This research project has a confirmed case of implication, namely the All Rise game. Dr. Joost Vervoort and many experts across several disciplines and industries are building a deck-builder game that ties together environmental action and game design (Vervoort, 2024). This involves studying environmental action performed in various ways (legal court cases, protests, marches, etc.) and using what is learned in game design.



Figure 2. Images captured from Vervoort's (2024) blog about the All Rise Game

This team aims to create momentum in the worldbuilding realm, where our fight against the climate crisis is brought to life. The developing of this game is in hopes of spreading awareness and inspiring and birthing new understandings of environmental action undertaken by climate activists. They want to showcase just how complex and entangled activists' realities are. They also hope to develop the game in a way that provides its players with an experience

that emotionally mirrors the tumultuous nature faced by environmental activists (Vervoort, 2024).

The game's development process involves learning from real-life environmental action experiences and multiple sources of completed or ongoing research on such (Vervoort, 2024). One of which will be this research. As explained in this blog by Vervoort (2024), the game consists of multiple chapters with different geographic settings and scopes. The team will particularly imply this research in its first chapter, *The murdered river*. It has a speculative case based in India, which is also the focus of this research (Vervoort, 2024). Due to its distinct case based in India, this research will follow path tailored to this game. This means that the research strategy of this project will, to some extent, be customized and tuned to fulfill the game's needs.

2.2.4. Research Question 2

In the interest of filling this project's scope, it recognized an opportunity to apply the findings from RQ1 to see how it may be helpful to a practical field of the gaming industry.

The gaming industry is one of the largest media sectors globally, with an expansive reach that goes far and wide (Goh et al., 2023). This characteristic makes it a promising avenue for the sustainability field to enact transformative initiatives. Therefore, exploring this research opportunity is timely and highly relevant in today's struggling times.

This opportunity aligns with and complements the ongoing efforts by Dr. Joost Vervoort and his team to advance this trajectory. The potential for leveraging the gaming industry as a platform for sustainability creativities underscores the importance of investigating it for positive change. In doing so, this part of the research will answer the following question.

RQ 2: How can we employ the insights gained from investigating Indian activists' worlds to inform the creation of fictional game worlds?

3. Methodology

3.1. Data material, collection, and analysis

The data collection for this research was non-linear and comprised three avenues: background literature review, interviews, and discussion workshops.

First, I conducted the interviews, after which I held the first discussion workshop with the All Rise team, where I presented the preliminary findings. This discussion workshop marked the beginning of my data analysis. It yielded multiple keywords, guiding questions, pointers, curiosities, and interests that were subjective and case-specific to the game and the team. Concurrently, I also performed some background literature review on worldbuilding. All the data collected from this led to the formation of codes, which led to an in-depth processing and analysis of the interviews. All this collectively forms the results and discussion for RQ1. Finally, I held a second discussion workshop to gather additional data to address the RQ2. I followed the schematic diagram presented in Figure 3 as a research framework to achieve this project's objectives.

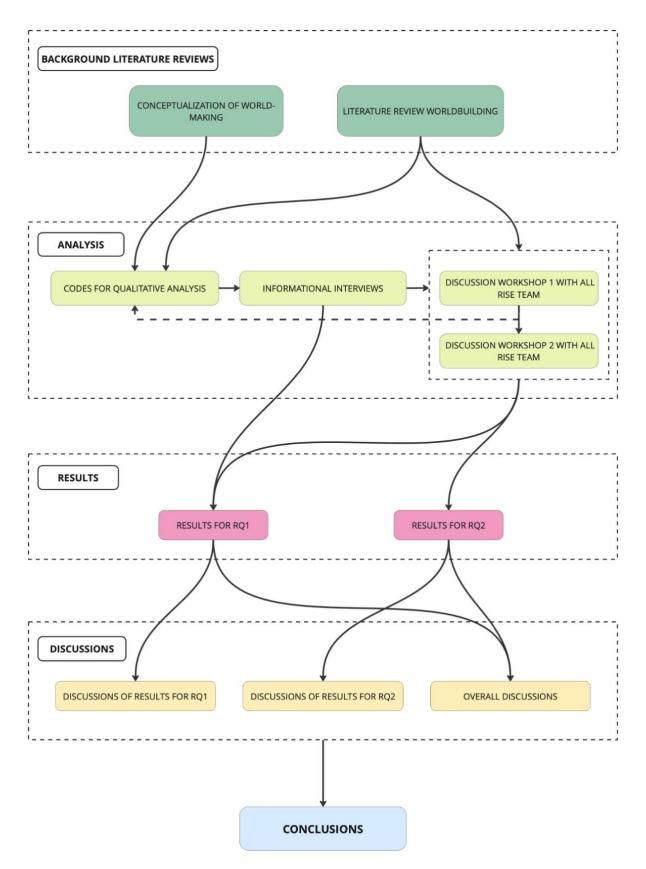


Figure 3. Research Framework

3.1.1. Background Literature review

I found it necessary to do a light background literature on worldbuilding to understand the practice better. As open and creative worldbuilding can be, it is also a practice that requires a lot of iterations, planning, and strategies. Therefore, it is a craft that is vast and holds a wealth of information that I need to familiarize myself with in order to 1) be able to translate RQ1 findings for the All Rise team effectively and 2) form well-formed questions to perform productive data collection for RQ2.

I did this by listening to podcasts and watching GDC² lectures published on YouTube, reading some literature.

3.1.2. Data collection for RQ1

I answered the first research question by collecting empirical data through interviews. Since RQ1 aims to investigate how environmental activists in India perform worldmaking, it implies exploring how it manifests in environmental activism. In this stage, the key is that the data collection method captures as many details as possible that may be related to worldmaking and show how their re-imagined world emerges around them.

To capture the true essence of their lived experiences, the interviewees must be comfortable enough to share first-hand accounts of their day-to-day practices, activism efforts, lived struggles and wins, and personal background stories that are dear and close to their hearts. All this information may hold emotional and personal value. I conducted semi-structured informational interviews to capture the richness of their experiences. This method leaves room for open-ended questions and flexibility for the diverse information types expected here (Adams, 2015; Leavy, 2020). I expected the data to be immensely diverse and contextual per interviewee, which was retained through transparency, increasing the project's credibility.

3.1.3. Data analysis for RQ1

I used a grounded theory approach (GTA) to analyze the data collected from the interviews. The analysis method does not necessarily seek causal relationships between the concepts but maps how Indian environmental activists attempt worldmaking. It allowed room for detailed and possibly novel discoveries, imperative to capture and showcase the answer to the second research question. I used the open-coding software NVivo14 to analyze this data.

² GDC: It is a conference that takes place every year for video game developers to champion the advancement of their craft.

3.1.4. Data collection for RQ2

The RQ2 focuses on translating the findings of the RQ1 into fictional worldbuilding. To appropriately do this for the All Rise game, there will be a second round of data collection. This second round of data collection entailed first presenting the findings of the RQ1 to the game development team. Considering them as experts during this presentation, I facilitated an open dialogue.

I planned two discussion workshops, the first of which was to present my preliminary findings of the RQ1 and ask questions to guide my data analysis for RQ1 further. The first workshop was also structured to have more free-flowing discussions than the second one. The second discussion workshop built upon the first one, giving updated examples of the open coding conducted on the RQ1 data and further asking them specific questions. The team provided their insights, opinions, and methods that they might apply in game design to contextualize the findings. The workshops encouraged the participants to draw from their expertise and contribute to the discussion. These conversations were recorded digitally, generally contributing as data to answer RQ2.

The aim here was not to build game design frameworks but to add a layer of insight into how future research and science may make sense of translating worldmaking research into worldbuilding in innovative ways.

3.1.5. Data analysis for RQ2

The data collected here was also analyzed using a GTA. Open coding allowed room for concepts, methods, and theories to emerge organically through the data, which will be case-specific and tailored to the game.

Table 1 presents a summary of the methods.

Table 1. The key aspects and details of the research methodology.

Research Question 1 Research method

Literature reviews	GDC lectures, Worldbuilding podcasts,
	talks, etcetera
Interviews	Time: +/- 60 mins/interview
Platform	MS Teams
	Number of participants: 10

	Selection criteria: Indian activists
	Collection of participants: Snowball collection through LinkedIn searches
	Interview style: Conversational, leaning heavily towards information interview style
Coding	Open coding through the software NVivo Narrative analysis
Presentation	Present findings of RQ1 to experts
Platform	MS Teams
Workshop	Time: Workshop 1 – 80 mins Workshop 2 – 90 mins
	Selection criteria: The game writers, designers, and developers involved in the All Rise game
	Collection of participants: Through contacts of the supervisor
	Workshop style: conversational and observatory

 $Open\ coding-software\ NVivo 14$

3.2. Operationalizing Worldmaking

Coding

Research Question 2

I asked the participants broad questions about their worlds to receive as open and rich data as possible.

The questions focus on their environmental efforts, activism, how and whether their personal lives revolve around their work, their imagined futures, their ideal futures, etc. I took inspiration from the questions developed by Thompson et al. (in prep) on worldmaking and adapted them to the objectives of this project. Table 2 presents the overarching questions and some directional questions that were used for guidance. Additional questions were added during the interview to inquire further explanations if needed.

Table 2. Overarching and directional questions used for the interviews.

Overarching Questions I asked	Elements I looked for through the answers / Directional questions for interviews
What is your world like?	• How do you perceive the world around you? - specifically in terms of your location (in India) and environmental efforts?
	 What do you like about being an activist in India?
	• What are the strongest feelings and emotions, you think that your beliefs so specific to your context?
	 What do you dislike about being an environmental activist in India?
	• Related to these feelings, in what ways do you think you are unable to express your negative emotions?
	• Are you able to act on them by yourself? In your safe space? And if so, what enables you to do so? If not, what hinders this?
	• What are your beliefs that you think are unique to your environmental efforts?
	• Are they different when you undertake environmental efforts with other people?
	 And how do your efforts change when you are by yourself?
What world(s) are you trying to	Do you think your efforts get the attention they deserve?
create?	• If yes, why do you think they resonate and are celebrated?
	 How do you imagine or see this resonation and celebration?
	• How does this impact your environmental efforts? Both individually and collectively?

- If not, why? What hinders it? Do you maybe think its resonation and celebration are hidden, and you are yet to find out about it?
- If so, how might you attempt to find it?
- What are the factors, in a group setting, that shape your belief system? So, do you choose to let factors like science, religion, culture, and family values, influence beliefs and principles?
- How do you go about staying true to them with other people/out in society?
- How often do you re-evaluate your beliefs? And how does this look for you?

You might not agree with everything about the world you are surrounded by.

- What are these things?
- Why do you think you do not connect to these things?
- How do you purposefully distance yourself from them? Does it always work? Does it affect your motivations and what suffers because of it?

How does your world in the present interact with the world you are trying to realize?

- How do you envision your future world to look like? How much of your present world is represented and held onto in this future world?
- What are the factors facilitating this? external politics, power groups, culture, traditions, etcetera. internal clashes in beliefs, religion, norms, values, experience, backgrounds, etc.
- How do you navigate through disagreements regarding the future in your world now? specifically
 in your groups of environmental activists?

• What factors are the source of these disagreements? external - politics, power groups, culture, traditions, etcetera. internal - clashes in beliefs, religion, norms, values, experience, backgrounds, etcetera.

3.3. Operationalization to uncover aspects of worldbuilding

I posed the questions framed and presented in Table 3 and Table 4 during the discussion workshops.

3.3.1. Questions for the Discussion Workshop 1

Table 3. Questions used for the discussion workshop 1

ASPECT	QUESTIONS
UNDERSTANDING ENVIRONMENTAL VISIONS	1. What do you find the most compelling from the interviewee profiles?
INCORPORATING	1. How can we effectively translate the environmental efforts into engaging story line / game
ENVIRONMENTAL NARRATIVES	mechanics?
	a. What do you need from me to achieve the above successfully?
	2. What visual / narrative elements from their efforts can be the most impactful?
REALISM VERSUS CREATIVITY	1. How can we balance accurate representation of environmental issues with creative
	freedom for compelling storytelling and game design?
	2. What data do you need from me to make their environmental messages accessible and appealing?
AUDIENCE ENGAGEMENT AND	1. What do you need from me to bring you cultural nuance?
EDUCATION	2. How do you balance stereotyping with correct nuance?
	3. What are the ethical considerations to keep in mind while portraying real life struggles?
ETHICAL SENSITIVITY AND	1. What do you need from me to bring you cultural nuance?
CULTURAL NUANCE	2. How do you balance stereotyping with correct nuance?

3. What are the ethical considerations to keep in mind while portraying real life struggles?

3.3.2. Questions for the Discussion Workshop 2

Table 4. Questions used for the discussion workshop 2

EXPERTISE	QUESTIONS
GAME DESIGN AND ART	1. How do you consider locality and nationality when you design characters and game elements?
	2. What are you mindful of when designing characters that embody environmental principles and ideas?
	3. How do you visually represent environmental ideas and themes in the game art?
	a. What information is the most useful for you?
	b. What inspires you to create details that represent an environmentally friendly world?
GAME DEVELOPING	1. If these were the two inspiration cases given to you, how would you go about translating their life into
	game mechanics effectively?
	a. What details are you drawing into the game?
	2. What interactive element would you use for player education on environmentalism?
	3. How might you design a game that will allow players to see the impacts of their in-game actions /
	decisions on the environment?
GAME WRITING	1. How might you write character arcs that not only reflects the journey of an activist but also moves the
	player to feel in a certain way towards the characters?
	a. What information helps you here?

	2. Can you think of certain conflicts that might arise in an environmentally focused story? Can it have
	environmentally friendly solutions?
	3. How do you balance storytelling with information content?
CROSS-DISCIPLINARY	1. What is your success metric?
QUESTIONS	2. How might / are you involving the game-community in the real world in environmental initiatives?
	3. What can be a motivational trigger for players to choose such a game or come back to such games?
	4. How might you go about game testing and collaborative workshops for game developing with these
	interviewees?

3.4. Ethical considerations for this research

This project found it essential to be highly mindful of how the research is approached and conducted. Given that the participants involved in interviews and the discussion workshops may hold differing worldviews and perspectives, it is essential to be sensitive to the language used in the process.

This approach was more prominent in the interview process for the RQ1. I designed these interviews to be informational, aiming to draw out detailed first-hand information about the topics. Consequently, I kept in mind that these interactions could become emotionally charged. Therefore, creating and maintaining a safe space for all emotions and feelings that may arise from them was essential. To do this, I planned brief talks before the interviews to introduce my background and this project. This gave me a chance to connect with them and provide a time when they could 1) ask me to clarify questions about the interview and 2) let me know with certainty that they were willing to share their worlds with me.

Considering that the participants' accounts of experiences may entail sensitive personal information (religion, cultural backgrounds, political regimes, mental and physical well-being, historical injustices, worldviews, etc.), respecting and protecting this knowledge was found extremely important and not contorting any accounts of their realities. I continued the same ethical and methodological considerations to the second round of the data collection process, wherever applicable.

Lastly, I asked all participants and contributors of the raw data in this research to sign consent forms to verify their permission and consensual participation in the interview process (see Appendix A, B, C and D).

4. Environmentalists' Worlds: Results for RQ1

This chapter presents the results for RQ1 in two sections: 4.1. Codes used to capture the worldmaking aspects and 4.2. General Results for RQ1. Section 4.2. comprises ten worlds (subsections) that offer empirical results in the form of in-depth interviewees' narratives. The chapter ends with a discussion of the results of RQ1.

Lastly, to present the worldmaking efforts of the interviewees interestingly and creatively, I have built each interviewee as a character arc, written from subsection 4.2.1. through 4.2.10. This allowed me to ensure the safety of the interviewees' anonymity while giving each of the stories its own space to be exhibited. The reader is guided through each respondent's world, where they get a chance to read about their worldmaking journey through their key life moments, work and personal life, and hopes and dreams for the future.

4.1. Codes to capture worldmaking aspects

The codes developed did not only follow an open coding approach but also took inspiration from the background literature review on worldbuilding. These definitions are essential to comprehend what I captured in the data. Table 5 presents the codes and child codes and briefly defines each.

Table 5. Codes developed inspired by worldbuilding terminology (Worldbuilding Glossary, n.d.).

No.	Code name	Code Definition
1.	Assimilation	Assimilation means the converging (mixing up) and / or
	Agreements within	rejecting original cultural norm and adopting norms and
	their world	beliefs of another culture. Here, culture is regarding
	Disagreements or	ideas, custom and social behavior regarding a different
	conflicts within	world setting (past jobs, studies, regions).
	their world	Agreements within their world relates to any norms,
		values, actions and beliefs that seemed agreeable,
		acceptable and adoptable from their assimilated world
		that they choose to carry on to their current or future
		world.
		Disagreements or conflicts relates to any values, norms,
		actions and beliefs that are unacceptable from their past
		world. They might also be the reasons the interviewees
		moved away from their past work, study or lifestyle in
		general. These might be actively avoided in the present
		and future worlds.
2.	Canon	The persons core doctrine for their world. This may be a
		very private part of their identity and may not be shared
		openly with the world.
3.	Emotions Experienced	Emotions experienced in their world through living life.
		This may include sentiments towards work, people
		around, personal reflection, future developments of their
		and overall world.
4.	Escapism	Small or big moments unintentionally experienced or
		deliberately taken to escape their present world.
		Example, holidays, trips, reading breaks, making art,
		etcetera.
5.	Former life or world	Details regarding their past lives and worlds they were
	details	involved with.

6.	Individual or cultural	Individual or cultural identity relates to the persons self-
	identity	concept which is a distinct trait. This may be a result of
		and based upon one's nationality, ethnicity, class,
		generation, locality, culture, religion, etcetera. In
		simpler terms, this makes up of life details, experience
		and background of a person that they find crucial to
		acknowledge openly to form their own identity.
7.	Key life transition	This is regarding changing worlds. Transitional
	moments	moments that led an interviewee to leave what did not
		resonate and move towards something that the
		interviewees wanted to pursue more in their life. This
		may entail changing careers, career defining moments,
		life experiences, influence of instrumental people in
		their life.
8.	Key work strategies	These are strategies that are key for their approach of
		interviewees work. These can be quite specialized and
		specific to their work, and usually interviewees find
		these crucial for achieving goals, making significant
		impact and make headway.
9.	Kinship and Co-residency	Social relationships forming or organizing group and
	 Discouraging or 	roles because of sharing a world. A kinship pattern is
	harmful factors	formed where there is a familial bond based upon shared
	 Motivating factors 	space, norms, beliefs and goals. For this report, it mostly
		entails sharing the world (personal world but also the
		idea of sharing the entire world, as in Earth and universe)
		with the people who are environmentalists and actively
		dedicate their life for the betterment of it.
		Discouraging or harmful factors captures the negative
		side of the world the interviewees are presently involved
		with. Environmental world is challenging and poses
		many hardships, this child captures the specific hurdles
		and hardships the interviewees face in their work and
		life.

		Motivating factors relates to the things and reasons of
		their world that keep them going and involved in their
		environmental space. These features of their world that
		are source of encouragement to not lose hope and stay
		determined for their life missions.
10.	Life Missions	These relate to the larger journeys that the interviewees
		have embarked upon. The code captures the
		interviewees overall calling in life. In the absence of it a
		universal mission, they may appear are smaller quests.
11.	Magical Thinking	Magical thinking captures how a person articulates their
		belief that people can effectively change the world
		through their thoughts and behaviors.
12.	Technobabble	Technobabble refers to any information and details
		spouted by the person that indicates their expertise /
		expert credential in their field. Neither I nor any reader
		needs to understand this. This is only to show the persons
		authority towards the subject in the interview. This is
		indicative of their knowledge on work, activism
		experience, etcetera and their confidence in being able to
		converse about it.

4.2. Results for RQ1

It is essential to note that the respondents for this research phase did not identify as activists. Instead, they preferred to be addressed by various titles that reflected their professional roles and individuality. In their context, they like to be addressed by titles that reflect their professional roles, such as societal actors, advocates, writers, journalists, and more. This preference stems from the fact that the term 'activist' is not well-received in Indian society and that activist demonstrations, behaviors, or movements do not have a well-established place in civil society.

Some interviewees, such as the Veteran, Crusader, Tactician, and Preserver, demonstrated a deep understanding of the processes, timescales, and skills required in their respective fields and the activists' world. Their strategic prowess, sharpened through years of experience, instilled a profound confidence in their abilities to navigate their worlds, choose appropriate strategies and allies, and identify qualities that align with their doctrines. This critical ability to situate themselves deeper into their worlds was a testament to their skills and knowledge.

On the other hand, other respondents were relatively new to the activist world, like the Ponderer, Appraiser, and Forecaster. Their worlds exhibited a common theme through the assimilation of worlds, where they have left behind certain worlds due to disagreements with them. This was primarily because of their world's demands regarding skills, persona, and work strategies.

Despite their frustrations with the current systems, all the respondents share a common thread of empowerment and motivation. This sense of agency, acquired when their communities and colleagues recognize and appreciate their work, fuels their determination to continue working and inhabiting their worlds for the foreseeable future.

Regarding work, the respondents portrayed practicing alignment and discernment as soft skills. This entailed distancing from people and actions that went against their core doctrines and seeking communities and worlds that resembled their values and beliefs. By 'soft skills,' they all meant the personal and interpersonal skills that help them achieve effective communication, collaboration, decision-making, establishing relationships, and relatability. Moreover, these skills were also presented useful in their approach to working with people (with whom they share their worlds with due to both, necessity and choice) despite their

differences and disagreements. They all understood the bigger goal and attributed such strategies as a requirement to build, gain, and retain momentum.

All the interviewees expressed excitement and relief regarding the freedoms they get due to their chosen occupations. These involved designing campaigns, writing articles and manifestos, conducting presentations and workshops, strategizing for long-term environmental projects, etcetera.

Looking ahead, all the interviewees remain hopeful in their dreams and aspirations. They all indicated that they would like the gravity of the environmental crisis to be more deeply felt and widely reflected in the decision-making processes undertaken by governmental institutions, businesses, and individuals. Related to this, the Crusader, Veteran, and Tactician expressed the need for more young people to join the sustainability movement. Other respondents also expressed the need to generate impactful momentum to mobilize the deeprooted stiff systems and institutions to take significant action. They highlighted this to emphasize that momentum was critical to achieving results for any work related to the sustainability field.

All respondents reported a feeling of collective responsibility and commonly talked about feeling heavy with this responsibility. They indicated that such a responsibility brings a certain level of awareness which they carry with them through every aspect of life. However, this feeling diminished when they all discussed the collective aspect of environmental action, meaning that they did not feel as though they were alone in this fight.

Additionally, it was made clear through their stories that their actions and discernments at work have spillover effects on their personal life. Sometimes adversely and sometimes in a very constructive and fruitful manner. For example, the Crusader must consciously avoid the discussing relevant topics in her household to avoid 'bringing her work home.' However, as for the Ponderer, her creative freedoms at work enabled her to bring down her guards and allow her to reflect on where she truly wants to be regarding her world.

Generally, all the respondents have chosen to embody their beliefs and find ways to manifest them in their day-to-day lives; they revealed this to become tiresome and frustrating when upholding their responsibilities. Therefore, most interviewees give a lot of importance to finding things and hobbies that are 1) disconnected from their goal-oriented mindset and 2) allow them to detach from the taxing nature of their worlds. Lastly, in some instances, the respondents also highlighted that their form of escapism does not per se have to be independent of their work but must provide some relief, a moment of enlightenment, and enjoy their freedom of imagination.

4.2.1. The world of The Ponderer

Introduction

The Ponderer is a writer in the climate ecosystem with a background and experience as a lawyer. Working as a lawyer, the pro bono work regarding human rights law resonated the most with her, however, she found many constraints in that world.

"You don't really have an option to build up or... imagine what you want it to be like because there are very strict rules and that's the space for creativity or for like imagination is very limited"

She moved to a different world, the climate sector, to allow herself the creative imagination and thought freedom that the lawyer world could not provide her. However, she is pleased to have such a background and draws many skills and methods from her past world.

Narrative

The Ponderer, as per her name, is someone who reflects and thinks a lot. She is a dreamer and speculates about her relationship with her surroundings a lot. She shows a very philosophical approach to life and any quests that might come her way. And this approach and way of thinking was evident throughout the interview. I assume that since she has made a career switch, she has been confronted with what it means for her and her future. A catalyzing factor for her is her family. They have cultivated an ethical outlook growing up, showing how the Ponderer answers my questions.

"My family has always been a big factor in all these privileges ... And my family has always been very... authentic in their love. So, it's never about the package. It's about the core... you choose what you want (and)... deliver it with certainty and it's not about how you present (it), but about how you want to be, and they don't speak this way, but it's from the impact of how they support."

Key moments and themes

Throughout the interview, there is a notion of shifting worlds (assimilation) and what is it that truly matters in her life. What are the added things in life, and how should we think about sailing through the future?

Leaving her world of law for the environmental sector is a significant change. However, she realized that despite the fruits the practice of law has brought her, she must stay true to her canon and pursue something brings her a world closer to her heart.

(As a) "...lawyer... I think the whole world is not really great... you're exposed to more instances of the greyness... (there is) a lot of just emotionally difficult

work... (you are) constantly having to make decisions about how you feel about a certain situation, whether to like, switch on your emotions, which off, et cetera"

(you are) "very overstimulated, not always in the most productive way... (it is) just facts and evidence, right, there's not that much leeway to argument."

"The average person there is not like value driven or mission driven right? Because it just there's a certain game to be played and see a certain kind of personality is thriving there... the average aggression level... is... much higher. So, to get them to take you seriously and to respect you, you need to treat people a certain way because hierarchy is really respected... (and) to get things done really quickly you need to assert your authority which is Just not what I wanted to do today and not what I could do very well."

She is a much softer person which made the world shift more natural and comfortable.

"(I have) internal values of like be really polite to someone, be really respectful, and then use that to build a relationship."

"(So, when I made the move) I did feel immediately a big shift in that that resistance or those like the number of barriers I need to put up. They kind of just dropped a lot... (and) value alignment bias also... appeals to me because... I'm a little more idealistic than the average litigator"

She also explained why she chose the climate sector.

"Climate as an issue appealed to me because within it you can fit human, animal and environment in a way that many other social forces don't allow for it... So, coming into this job, which is much more relaxed, the culture is more collaborative, so more people are distributing the same load of work, right, and it... (is a) very creative role because there's a lot of writing and design and things like that. So, people weigh in very differently, and it's a lot more subjective"

Furthermore, this shift has also made her privy to external judgement and opinions about her position in society. The ponderer does not take this as a positive or negative thing but discussed that it is only natural for people to wonder what her social position would be, going from a strict discipline of law to a freer flowing discipline of a writer.

"Law as a career is regarded quite well. And I think that when I would, for example, introduce myself as a lawyer... there might be some. 'oh, wow lawyer!'... But overall, I think the profession is seeing with a lot more Like 'we can't mess with this person' or 'we got to respect this person'. There is some of that aura around that."

"And I think that the trouble is when you're not sitting in this (world)... and you want to move in and out. Then how do you sort of Claim value in a way that makes sense to it? So, I do think that that's more of an issue it's not that I have learned to value myself, but I value the diversity of the experience because I feel like that, I like being an outside of looking in and instead of looking out and I feel like that makes me think a little differently and I find it fun. But to ask for the same kind of value in the same way in which the evaluation process takes place it's a bit different there."

"I think societal conditioning might get to me sometimes because it's more like how does the market see your value?"

Work

She reflects on how the shift in her career has been and what the things she misses in her new world are.

"(It is) a very nascent space in India, and so there's a lot of like freedom to build up towards an output to imagine where there is nothing."

"It's slower growth, which arguably might stagnate at some point because it's just a slower environment of the priorities and it. So, I would say some of those things, I would see there was a sum of the barriers because it's more like barriers to excitement. I would say not like actual discomfort, right? Because this is a very comfortable environment. I would argue a little too comfortable."

"I do think that I would like things to move a little faster. I like to be pushed a bit... I like to have to chase unrealistic deadlines sometimes because I feel like it prompts a different kind of thinking. Different kind of spark in yourself."

"And especially because I made a bit of a big carrier switch and I saw that set at the same time. I'm also like going into spaces which are not traditionally skilled for. So, I'm going to see that a little more than someone who has a more straightforward path... that's just something I'm sort of Becoming OK with."

The Ponderer also reflected on how she uses the skills she built in her past world in her current and future world.

"My time in the legal world definitely (gave) me... a legal lens and policy lens to be able to analyze, no matter where I am next. Any new development or even a like a dystopian book I read or a new legal policy... there's a certain not only an intellectual understanding that I'm left with, but (also) there's like an insider feeling that's there to it. I understand that vocabulary in terms of what they're trying to do."

She looks forward to her new world in a sense of new knowledge and information.

"There's a bunch of different vocabularies that I've been able to adapt to that therefore affords me...I'm able to absorb different things and I think in terms of being able to imagine things."

Personal life

The Ponderer shared quite a lot of details regarding her imaginations in her personal life, both in childhood, as a teen, and as an adult. But she has a unique interest in dystopian imaginations.

"Growing up I was a little more interested in the story of your futures...(but) haven't spent as much time just dreaming of impossibly optimistic future. So that's not something that has interested me as much because I also enjoy crisis as well. It's like, feel like I dwell more on what could go wrong in order to avert it. That's something I enjoy, controlling the chaos."

Given her life changes, she remains optimistic and curious.

"It does feel very exciting to observe different things because I feel like I am a very I enjoy observing. So, every experience of mine is an active observation."

Going forward

Heading into the future, the ponderer seems to explore and sit with a very basic human lens through which she wants to see and experience the world.

"If you do want to dream of a kind of a world that is kind to all. Be sure to look for the most vulnerable as well in every context to look for the missing part of the puzzle in every context. To hold on to futures that might seem a little impossible because the pathway hasn't been designed yet, but to still keep that with you and it's not just from moral philosophy lens, (but) more from an action and kindness lens. That's more so the fact. So, the emotional reason to hold on to that kind of world is strong."

She understands the diversity and subjectivity of experiencing the world and carries this awareness with her no matter where she goes.

"Everything is such a subjective experience, it's like my illusion, right? So, did I even make sense of that and understand that? And to understand the extent of it you need to sort of grapple with what's within because If I'm in a very bad space, I might see the world different. I might contribute to the world... So, to accommodate that... work (is needed) ... to even understand the world and contribute to it and change what you can. You need to make your peace with it maybe."

Reflecting and contextualizing this for her present role for herself and the world around her, she shares that her view has gone from an external to a very core, internal approach.

"It has become a little less of what I can do for the world, which is a little more individualistic. Maybe earlier I want to change the world... Now it's more, who am I in this world and why am I here? And how can I maybe design a little more community? Slow down a bit, but at the same time, live more richly and value centric...And maybe where does the word need me to sit? and not just like what I wanted to do? and sometimes the even the professional choices and relationship choices, everything shifts just a bit (when) you're trying that."

4.2.2. The world of The Reasoner

Narrative

The Reasoner has quite some experience and knowledge of the litigation world. She has read numerous cases and studied the litigation side of things. She has also moved worlds within the litigation from technology to public policy. She also showed extensive knowledge of the reasonings behind court rulings, especially the ones connected to environmental and/or sustainability topics.

"I see myself more as a person who does the back-end work. I like researching and that is something that I see myself doing"

Key moments and themes

The Reasoner explained to me what sparked curiosity about continuing to pursue environmental litigation.

"I decided to start working in the environment policy field because during the break I took, that is the cause that really resonated with me... during (that time) ... I did get a lot of opportunity to read about what's happening, not just in India and the world. It's kind of it kind of won me over that there is real progress happening and currently I'm also studying a... course in Environment Law, where I've seen a lot of successful studies and cases in India that have worked out mainly through litigation."

A key moment for her was when she read about a solar farm development in India and how it ended up displacing mass populations and the suffrage that caused it. Approaching it from the technology and development side, she understood its needs. However, coming from the human rights perspective, she found herself in a position that made her question the role of a developmental mindset and so-called 'technological progress' and her position in this. Especially when it comes to progress for the country.

"So, for the things that impact me is with respect to when rights of people are impacted... and the way it will interact with my personal and professional life is that it will be the same. It'll continue to be intertwined the way it already is."

Furthermore, she draws a lot of encouragement from her main hobby: mountain trekking. She also emphasized that it is something that will remain constant in her life and, therefore, will forever be intertwined with her work.

"It'll continue to motivate me, I would say personally, because trekking is something that I really enjoy, and it is one of my main hobbies that I love to do. Whenever I can get the time to so it will continue to motivate me."

Work

In terms of work, the Reasoner prefers to look at the positive side of things. She indicated that this work comes with facing wins and failures. In her opinion, it is essential that the fire and will in all of us doing this work is persevered even if we face the failures.

"I just look at the positive aspect because there are several cases... but there's a lot of activisms that continues, cases that are still fought.

She also has a reasonable outlook on her work and sees it as a strategic pathway to systematic changes for the good of society, especially when it comes to different parts of the world that have different mechanisms and systems in place.

"Court cases are complied with. So just although laws are not complied with, if there's a court (that) orders you to do something, it is complied with."

Generally, when I asked her about thoughts on the future direction in her field, she was optimistic about it. She also went on to compare it with other countries. This indicated the vast amount of knowledge she possesses regarding the litigation field that is not only in India's internal interest but also external.

"It has pretty good ambitions, I would say when you compare it with China, even I feel like it is doing better than even European countries."

She also commented on the nature of the courts in India, emphasizing that they possess the fighting spirit and that the passion and drive are there to fight the good fights.

"When it comes to plain infrastructure, there is a lot of opposition by a lot of NGOs and activists, and they do fight against it and most more often than not, they do win... so, that is the main outlet through which activists continue to tackle the Indian government rather than battling it out on the streets."

Further, she also reflected on how activism in India is simply different and cannot be compared or inspired by the Western activism techniques. She gave a cultural and political reasoning for it. She also highlighted that progress made in courts has a much higher potential to win over people and their hearts and change their perspectives.

"In India they use the court. We do have a very activist court and rather than the streets which I personally feel like, it is viewed by the general public as a law-and-order situation. There's still not much maturity in the way people look at protests. So, India would end up looking at it as a law-and-order protest rather than anything... And the government will have more intention to fight it"

She also looked at the larger picture of all this. She reflects that it is indeed very good for India to chase progress through legal and technical however, if certain avenues that India has bet

quite majorly on (for example, Green Hydrogen), the country will need a backup plan that they can fall on to.

"If these policies which are intended for a... transition to not work out, we still have coal, and that flexibility is extremely important for India."

Personal life

The reasoner shared some details about her personal life. She shared that writing is a passion of hers, especially on relevant topics and news of the world and searching for similarities and contrasts in written and media works (e.g. speculative fiction).

"I can find myself to writing... on these topics of environmentalism and developmentalism."

She lightly touched upon her recent writing, drawn from the novel Three-body problem by Liu Cixin.

"So, it's a science fiction. It's a trilogy, and it's science fiction. So, I had read that earlier and when the Netflix series came out, I did get a chance to view it... I looked at it and I watched it and I kind of interpreted that... through the lens of environmental ethics. And I did publish it... so that is something that I do. If I get the time. I try to relate... popular culture and whatever's happening... and weave them into how it relates to environmentalism."

Going back to trekking, she elaborated on how it keeps her grounded and in touch with the reality aspect of climate change and environmental issues. She finds it very important to remind herself that real humans are being impacted by these issues in the way they live their lives.

"One other emotional outlet for me in terms of dealing with... especially environment related (things or) ... environmentalism is going on treks... That is something I do regularly. So, that is, I would say that is one of my main motivating factors because you read the news and you just consume it and after some time it fades, but when you go out to the mountains or go out in the nature which I do regularly and frequently you look at what's happening right in front of your eyes."

She also shared her recent experience from one of these treks.

"For me, the most recent was the Himalayan tract that I went to. So, this year there was absolutely no snow(fall) till February, till the last week of January and I saw in front of me how the communities living in that area were really impacted by the lack of snow they were having water shortage issues."

Going forward

In general, she remains optimistic about the future and weighs in that any progress made is one step in the right direction.

"I definitely see things getting better... I mean, this is one of the things that really. Attracted me towards actually working towards this field."

But being the Reasoner, she also weighs in on what needs to be done for significant progress to be made correctly.

"(But) there is a lot of balancing that has to be done."

4.2.3. The world of The Crusader

Introduction

The crusader is an executive director of a digital campaign organization that has been working with the civil society space for about 12 years. She has only ever worked in the non-profit space and does not know how to be a part of the corporate world. She is very comfortable and prides herself on the effort she has put into establishing herself independently and working with organizations in the activist space.

Narrative

Her love for dedicating herself to the civil space and the environment comes from someone very close to her heart, her father. She looked up to him as the 'jugaad³ king' around their house who was always coming up with innovations and fixes to make their life at home a bit more contemporary, environmentally friendly, and practical. She also grew up watching The Jetsons, the popular cartoon depicting a family living in a utopian future. This encouraged her to continue developing herself further into the environmental space, working towards improving society.

Key moments and themes

As she grew up through her teen years and gained experience as a young adult, she continued working with various organizations that were largely with public health related to water, fossil fuels, energy, and menstrual products. She explicitly recalls moments that completely changed her outlook and how she considered her contributions to her world.

"I was in college; I met an activist who ... changed my life. You know, through him and part of my master's work... I visited a landfill and communities living around the landfill, fighting for health and justice... the same evening we met with a group of municipal workers... who used to pick up toxic menstrual waste and talked about how people in their family and their colleagues were dying due to toxicity, and I think that meeting had completely sort of changed me in a lot of ways."

"When I met with these manual scavengers... it really made me angry and it opened my eyes to the lives of people who don't live like me. And that was my first sort of real direct engagement with the idea of social justice. That's when I realized how blind and guarded and privileged my life was until that point, and that was... a complete game changer. And so around the same time I started to

³ Definition of Jugaad: A homemade, unconvential, frugal innovation. It could be a resourceful way of solving a problem. (*JUGAAD Definition and Meaning* | *Collins English Dictionary*, 2024)

sort of observe waste disposal. With a very keen eye, looking at garbage dumps, people and animals around them, what they were consuming, and this got me reading a lot around menstrual health and menstrual waste and the impact on environment and human rights."

The Crusader's encounter with the harsh realities of the world she had chosen to pursue made her reflect on a lot of her life that she had not fully grasped.

"While my dad was coming up with all of these hacks and was very happy with consumption, I lived a very privileged life. I grew up extremely guarded, privileged and I come from an upper caste Hindu household. Which means I grew up cast blind to a large extent... even in school I went to a private school and... we never spoke about cast unless it was like in our notebooks. And I just did not have that kind of visibility of people who don't live like me. And the only visibility I had was the way my family treated domestic help in my house and while I thought initially... it was fine over the years as I grew up, I found like the subtle sort of discrimination that was going on in the House, whether it was separate glasses, separate mugs and things, plates for them to use and all of that sort of as usual sort of slowly started to make sense to me as I was getting older."

While her father was one of her biggest inspirations, she was drawn to and more involved in the human rights side of the environmental space. Which made her realize some further truths regarding her loved ones.

"I think in a lot of ways, also my family not understanding my work, that was a little hard."

While she mentions this, there is a tone of disappointment but a fire of conviction that there is a bigger fight to fight. From then on, her canon, core, and identity formed around her experiences. She realized that the work she deemed essential had a much bigger purpose.

"One of the values that I hold very dearly is integrity. You may not see my way and I may not see yours, but if you are... acting and speaking in accordance to your beliefs, I will respect you more."

The crusader's journey continues, working towards the digital campaign organization and taking on other projects on her own time.

Work

The crusader continues to learn and implement what she knows in her field. She outlines how today's struggling times bring many hurdles and that realizing the bigger picture is essential.

(There is) "real issue fatigue, right? Especially online, especially on social media. There are too many issues. There are too many organizations and too many activists who want their issue front and center."

"Everything's important, everything's urgent."

Drawing from The Jetsons again, she stresses how, in hindsight, growing up watching that show, she expected today's world to look very different.

"when we were young, we expected our world ...look very different, to look very futuristic. And we haven't really gotten there. And that clearly means there are so many hindrances."

"We sometimes have higher expectations to what our world could look like, whereas the progress is pretty slow, and I think that's something that I think I've come to accept."

Following the fatigue issue the common man faces and the progress she would love to see and strives for, she has learned to pace herself and strategically implement her learning into her work.

"So... the attention of our audience is going to depend on that it's going to depend on external circumstances. It depends on what the media's talking about. It depends on what's going on in social media and that's how we've got to capitalize on, you know, for our campaigns."

"See... It's also about who you are targeting, right? Like when you talk about environmental issues, someone who is a daily wage earner, it's not going to give a shit. He wants to put food on the table for his family. He's not going to care about environmental issues around him, right? He's not the audience. So, it's also about who is that audience? Who do you really want to for them to care about this?"

"Investigate... and ... it's all about... sensing and predicting, it's almost like forecasting."

The crusader heavily shared that staying motivated and keeping herself in this world is challenging.

"we really like, put everything like our heart and soul into the work and we don't get paid nearly enough or literally get enough. And that sort of just didn't, and still doesn't, make sense for me to a large extent."

"It's really hard work. It really affects your mental well-being. You have to find ways to take care of yourself and it is a very conscious, intentional thing to do because we just dive so deep and go into this rabbit hole of this work that we're

doing that we often neglect our health and well-being... Of physical and mental I would say."

And the obstacles go beyond personal.

"(It) has been a challenge for us just to sort of have people keep up with us and setting expectations I think is also an issue when you are, when you're either working in a movement or working multi organization sort of cohort or whatever it is, I think setting expectations of roles and responsibilities is usually a challenge. Who does what and whether you like it or not. There are egos, even in this world, there are big egos in this world and managing that is definitely a problem. And you know, there are. There's egos... there's politics. There's all kinds of... gender dynamics, you know, all of that. It still exists in this environmental space as well. And I think that's something that is, that does get difficult to have to manage."

But regardless of the hurdle, she continues to fight hard, and she has some ways to continue dedicating her efforts to the right cause.

"I think it's just making sure to really, like talk about it, find some people who I can speak to and talk about all feeling(s) really helps. Even if it's just to vent and, you know I have some friends who I just go to... just be yelling at them. But they know that... it's not directed towards them... (and) I think it's just hopeful stories around me."

"And also reading about and learning about real impact and change that's happened over the years and knowing that we are creating change, and It is possible is what keep me going."

Personal life

She highlights the struggles of balancing personal/familial conversations and working in a space that has to do with staying relevant with societal topics.

"But when we visit his family, they (talk to me) saying, hey, you're in the space, what do you think about? I'm just like, just leave me alone. I really don't want to talk about this. And sometimes I have come to a point where, like, I used to be really bad (at) doing that, but now I literally leave the room or I say, hey, I don't want to get involved in this conversation and I just flat out tell that to people."

"And so that's hard for me to cut off stuff. So, my external circumstances are making it hard for me... I have very little control over that."

"that is still being stuck in that space being and not able to get away from it and cut off from it, right?"

She has devised some tactics to escape this world, wind down, and ground herself to combat this.

"The first couple of hours, in the morning before I start work... are sacred to me... I live with over 100 plants in my apartment, so I spend my morning like caring for my plants."

"I read a lot of books, so I also read my books in the morning. I read a book in the morning, and I have one in the at night as well. On ideal nights. I would like to go to sleep while reading a book rather than scrolling through Instagram."

With her friends and family, she has established specific rules and preferred topics she likes to discuss.

"in my free time I want to talk about what some celebrity wore or some trashy show... I want to talk about, something that where I don't have to use my brain about it"

"And (with) my partner... (I have) very clear rules. I do not want (to talk about) politics with you. I do not want to talk about issues unless it's like something we really want to... get out of... minds or I'm genuinely curious about what he thinks about it."

"We're very close as a family, we have a lot of other interests outside of politics, so we're able to talk and spend time with each other in conversation talking about other things,"

Being in a positive mindset does not always work, and the crusader sincerely acknowledges the human side of her.

"When I go into this negative-ish mental state, I sort of go into a cocoon and don't talk to people and that's not necessarily a good thing because then it's really hard to come out of it."

"If I'm really frustrated and I don't want to talk to anyone and I just want to be left alone, I will go for a run."

Going forward

The crusader shared her hopes and dreams going forward with her personal and work world.

"I would really like to see more creativity and more young people joining this space. I'm really caring about that. I think I know we are seeing that with the current generation. I would like to see more and more of that"

"I'd really like to see more resources. Put into tech for good. I know that's something that is happening, but I would like to see that tool... and reach." "the way information is being disseminated now. It is really enabling a lot of participation from different groups in society, and I think that's only going to get better and higher"

"citizen generated reports... from the ground is not something we had many years ago. Like... reports of any incident from any part of the world is now on social media. And people get to know about it"

"I would like to see more curiosity."

"We need to talk about our victories and our impact more and more. You know that's the only way that's going to get people to join the movement and for them also to feel hope.

"I would like to see myself as being a mentor for young people."

4.2.4. The world of The Thrifter

Introduction

The Thrifter is a journalist who has been in the field for about 20 years and has worked on the environmental side for 15 years. She has been covering environmental and developmental stories such as agriculture, water, climate change, environment, conservation, etc.

Narrative

The Thrifter mentioned that her occupation was something that she had always wanted to pursue. Furthermore, only her love for nature pushes her into it.

"More than passion. I think it's the love for nature... And you want to do something right about that. So, I think that's, that's where it kind of stems in."

Key moments and themes

The Thrifter remembers the pivotal moment when her occupational world started changing. She recalls how, back in the early 2000s, there was not much environmental reporting.

"I just felt that when I started off reporting on these issues... there was hardly anything. There was no environmental reporting or stories on environment. And I'm talking about 2003, 2004... so I think it's just only after 2004, I think the time when tsunami happened that the environmental disasters started getting coverage in the media."

However, with this surge in environmental reporting, she disappointedly highlights that even though environmental topics, issues, and stories get more attention, they continue to fall short of authenticity and quality.

"And I have seen in the last decade that from zero, environment got like little bit of coverage and then it slowly increase(d) and now it's become a rage. You know everybody wants to cover environment and everyone wants to be an environmental journalist at least in my field from what I can see. And what has happened is there's... too much of oversupply of news... as compared to what it was, and I don't see the quality of news... to be very authentic or fact reported. So, I see from nothing to too much right now. I think that's what I feel it is right now."

Work

The Thrifter has been involved in environmental reporting and journalism for so long that she outlines that it has overwhelmed her with the amount of news, issues, and information being circulated.

"To be very honest, I'm saturated with the news."

"We are creating too much of news about... everything we are talking about... if there's anything, we link it to climate change and I think it's very depressing for me as an individual... to read news that is so negative and so pessimistic about the world around us."

"it's impossible to get away from it. You get fed it"

She continues to be in this world by refusing to get involved in its deliberation unless necessary.

"So, it's gone to an extent where I actually don't consume any news despite being a journalist. You know, unless there are specific stuff that somebody sends me to read."

"I don't read all those new (things). That's where I am right now. Personally... I think it's too much what's happening, not just in India, but I think globally, this too much of nonsense that's out there."

She continues to find topics that resonate the most with her by being quite selective of the matters she chooses to explore and report on.

"I don't do the urban environment stories. I more look at forests and stuff like that and more of rural area."

Personal life

The Thrifter has explicitly refused and forged her work away from the urban reporting space. The reasons for this tie back to her personal entity and lifestyle.

"I am into sustainable living myself as an individual and I think for me that's a core part because if I say that I'm a nature lover and I'm an environmental journalist... what am I doing at an individual level kind of really matters. So... I'm completely into say, sustainable living... I try not to use products that are not biodegradable, that the earth cannot absorb and... more into... minimalism. So, don't consume too much and don't buy too much. I think consumption is also largely a part of the problem."

She goes further into how she has and still strives to lead by example for herself. She has chosen to embody her beliefs, principles, and values in various ways.

"we have built the house and it's kind of eco-friendly where the water that... is generated from the bath water... goes to my backyard to my plants it is... simple things that we have done. And... we have a bioceptic. So, we don't... bleach out (the water). Whatever is produced in the house, it doesn't go... outside the house... the concept is the waste you produce, you process it yourself instead of sending it out and... it goes to my backyard... I have been working on mak(ing) it like a zero waste house."

Furthermore, a big inspiration for the Thrifter is her mother. She consistently turns to her mother for ways of living life that have been forgotten when there were fewer options available to the simple man.

"I asked my mother... how she used to live, you know... she shares some of her ideas like you talked about culture and family, right? So how... she uses shikakai⁴ and how you use rice starch for conditioning your hair, which is really good. You use hibiscus leaves and flowers. You use aloe vera, and you see the same fancy thing in a bottle of shampoo when you buy it outside. So, I'd rather pluck it from my own backyard and use it... it's more like a sustaining thing."

Lastly, connecting back to her work, she also draws a lot of realization and incentive from the rural and indigenous exposure she seeks. Being exposed to the rural communities gives her an insight into the disconnected nature of the lifestyle choices we today live and embody. From this, she proceeds to *thrift* the knowledge and awareness. She continues to build an appreciation for it in practice back at home.

"I don't use these shampoos and fancy stuff and all that. You know, I ditched them long ago and I've gone more to (the) indigenous way of (living), I grow my own herbs and plants and whatever. So, I use that for washing my hair and, you know, simple things like that and... switching back to older systems." "You also learn a learn a lot when you go to rural parts of India and where we talk about sustainable living. I think a lot of people in villages, people who are living in the tribal areas, in the mountains and all those people that are already into sustainable living, they don't use any of these stuff that we urban people use. So, I think that's something that... you just witness what's happening around you. I think that's something that you take from your field experiences as such."

She also reflects on how returning to older ways of knowing and living should not be difficult.

"It's not very difficult... The things that you see outside to (then) just come back and implement it, I don't think it's that difficult. It's not like you're bringing a very dramatic shift in your life. You know, it's just... small changes that you make in terms of lifestyle and what's good for you and what's good for the environment. And since I'm already into it, I think adapting becomes very easy for me."

She deliberates on why India, as a country, has not been able to make significant progress in the way people lead their lives. She reflects on this point in her own context and stays realistic about leading a 100% sustainable life in today's age.

"I think in India ... consumerism is really catching... and the percentage of population which is into sustainable (life) and minimalism... is hardly...

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⁴ Definition of Shikakai: An ayurvedic plant / herb used for curing various hair, scalp and skin disorder. (Gupta, 2022)

anything because if you look at a population... it's almost 70% lives in the rural India, right? Not in urban India. So, if we talk about the sustainability from an urban perspective, I think it's like hardly a fraction of people who follow these kinds of things. But I think that it's catching up a lot. It's just going but just there are also practical concerns. It's not easy to just practise sustainable living. We can... say that, yeah, I am into sustainable living. But to become 100% sustainable, I don't think it is even possible even for me, because there are times when you're trying (not) to use... plastic or you tend to buy something that you know is not a natural product... if we talk about 100% sustainable, I think, we shouldn't be flying. We shouldn't be using our cars... But we can't do that, right?"

"So, I think that itself is a myth. When people say that... you are completely into sustainable living, I think even that's wrong because we cannot be. That's a practical reality."

Going forward

The Thrifter seemed very content and fulfilled the way she intended her life to be and, therefore, does not find the need to reflect and/or re-evaluate it further.

"I'm quite content and I quite consciously... know the kind of life that I'm living. So, I don't think I need to sort of sit in introspect on"

She further elaborated on her hopes for the future.

"I just hope that it doesn't get damaged too much. I think that's all that I hope for... I want people to be... more conscious of their actions on each and every action that you do, how it impacts the environment?... if there is more awareness about that, I think people will also look at the kind of lifestyle shifts (that are needed)."

"I think you know there should be more consciousness. I think this whole consumerist attitude that's there in India right now, buying too many things and throwing, dumping too many things and creating too much of waste, I just hope that it changes over a period of time. I'm just hoping for that."

She also imparted her view on how the sustainability space might develop, where sustainable lifestyle becomes the new normal.

"I think because sustainability is a fad word now, which is also good because I've been talking to a lot of scientists... (who converse) about how a lot of research is going on in terms of developing washing powders that are sustainable, developing products that are sustainable. I think the whole world is going towards it and it's just time that it will become a norm."

Her magical thinking lies in knowing that sustainability developments are on the rise, which will have a ripple effect; however, she makes sure that she stays realistic about it.

"It's like by default you pick something, and it is something that's not going to harm the environment. So, I think that's where a lot of research is going on"

"It's going to take a very, very long time. It's not going to happen anytime soon."

4.2.5. The world of The Veteran

Introduction

The Veteran, as per the name, has almost 20+ years of experience in the activism and advocacy realm. He has been involved on both national and international levels in the development sector, climate justice, social sector, adaptation and personal damage groups, and activism against the fossil fuel industry. He also is active in the agricultural side of climate justice in India.

Narrative

His passion for environmental work began when he worked closely with a research institute in indigenous communities in India. He was exposed to the practical biodiversity aspect of these forest villages, and ever since, he has never looked back. He speaks out on issues that are important and relevant and on issues that are dear to his heart.

"in many cases I also speak out as a climate activist... (but also) Issues that are dear to me and where I find the need to challenge the system, I do that often."

There was a certain wisdom and certainty in how he spoke, which was very indicative of his proficiency with the world he had been involved in for so long.

"life is not black and white. It has hundreds and thousands of shades of grey ... (And) everything comes with a package. Never imagine that you are going to get something very neat and clear. That's exactly what you wanted. It has its own strings and situations and conditions attached."

His work and life are quite strongly intertwined. That is to say, the work philosophy he presented was drawn from his personal life, which continues to be quite governed by his work ideologies.

"(a certain type of) maturity and understanding has to be there when you are fighting a much bigger fight... those little things... that connects to the world that you would like to see... It's not about living a life of misery. No, I don't believe in that. It's about living a life which... is not exploitative, which is not, you know, which is frugal, but which is not, you know, kind of promoting any kind of opulence or extravagance, but you need what you need to live a decent life, and you need to decide those parameters"

Key moments and themes

The Veteran spoke of activism and advocacy from a very collective perspective. He embodies the belief that 'we are all in this together.' Furthermore, he was quite articulate about their doctrine for their work, the goals, and the theory of change.

"it's about the Feeling that you get that you are able to bring about positive change in people's lives and this has become a lot more important... we are very clear about it... it's a just and equitable world and a world where human rights are respected, and people get justice... where all human beings are equal and they get their equitable share of resources. Their rights are respected and promoted. And where there is no discrimination or injustice to anyone."

He touches upon what is needed to be involved in the activist world; these factors are also their driving force. Especially in a collection, whether it is in person or figurative form.

"So, we raise our voice against that without any fear. So, this is something that we have been doing as part of those collective efforts."

He also touched upon the emotional hurdles faced in this world. He emphasizes that activist work is not nearly as valued as it should be.

"I think ... (its) very frustrating for us and (the way) all activists are seen in, in a poor light, as if they are working against the interest of country. That's not a healthy sign of a democracy and something that we don't like at all"

Work

The Veteran highlighted how he personally works. He is a critical observer of all, regardless of political figures, political standing, expert, novice, friend, or foe. Furthermore, you also get the sense that he is aware of the perks his long-lived experience brings him and the responsibility it brings.

"So, I have been closely watching the policy architecture of India and have been responding, reacting and also engaging and working closely with the Indian negotiators during negotiations... I have been very objective in recognizing some of the good steps taken by the current or previous governments, but at the same time challenging and raising issues in public through media on what's wrong with us... for me to be objective is not difficult. I don't get swayed by any particular opinion if there are certain things that are happening right, I (will) say that. So, I think it's my analytical ability and credibility that enables me to speak truth to power, and that's what I do all the time."

"I think having worked in this area for a much longer time... (has) probably... established (me) the credibility of being objective."

He explains that to collect momentum, you might have to come to terms with your allies having different goals, ambitions, and methods. However, the big picture is what matters.

"Many of the allies who we work with... we don't agree to everything, but we still work together knowing that we have a shared set of principles, a common desire to bring about change...Our theory of change may differ, and sometimes our behaviors, our style of work may differ, but we need to learn to ignore some of those things."

"When you're fighting for a bigger cause, so you need to go and grow beyond your own egos and your preferences."

Personal life

The Veteran shared a bit about his personal life and how he embodies his principles in daily life practices.

"My family, my kids are very, very conscious of how they use electricity... even... when (a) heat wave is happening... there's a conversation (whether) tonight we'll be using air conditioning or not. It's not given. It's a conversation, and we prefer air coolers over air conditioning which consumes less electricity, so you know those little things... that connects to the world that you would like to see"

He connects and relates to the religion of Sikhism, and more than being religious, he stresses that he is spiritual in nature. He heavily focuses on drawing from the virtues, determination, and righteous learnings that his religion must provide.

"Our identity is more of a spiritual soldier, so I draw the spirit of that fighting spirit from my religion. But at the same time, following the path of spirituality... not using our physical or mental power for our own gains, but more how we can devote that and dedicate those to the society. (my belief) gives me a lot of strength to go through."

Going forward

The Veteran has some dreams and hopes for the future; however, he contextualizes them in today's world with a realistic outlook.

"we see that the uptake of our policy demands is not as swift as we would like it to be, and we understand that because it's the geopolitics and the political economy that we are living in and especially the influence of fossil fuel industry over our politicians and how they are not letting them to take the right decision."

He clearly distinguishes what may be holding their full potential uncharted.

"I still feel that our enemy, the fossil fuel industry, is far more united, far clearer in what they want, whereas civil society we are only beginning to have that shared analysis that We should not be fighting symptoms, but the cause... And that's where we should be looking at system change and only recently, we have started demanding at a much broader level."

To survive this fight, he departed me with some wise words that have never sounded truer.

"To accept that it's never going to be easy should be the starting point, then recognizing that we are up against big powers should be another starting point. And when you accept that reality, that it's going to take time... (and) it's about really being conscious, and we know the world that we are moving towards and the world that we want to create"

As for himself he made a very grounded statement.

"I am here. I'm up for a longer long haul and not for a short stint. Then your strategy is very different. Then you also celebrate even tiny events. The efforts to find and create harmony is something that I'm looking towards I would say I'm on a journey."

4.2.6. The world of The Appraiser

Introduction

The Appraiser gets her name from her role as a climate reporter and journalist, where she focuses on climate misinformation. Currently, her role involves tracing the evolution of information through digital and manual streams and networks. The Appraiser draws a lot of enthusiasm from her life experiences, where she has crossed paths with other humans, making unique efforts to promote the environmental cause. She prioritizes adapting knowledge and information for the communities and populations it serves. She also focuses on cross-collaboration and adding creative angles to her work as she thinks it diversifies and makes it more accessible.

Narrative

The Appraiser is an engineer by education; therefore, she carries a wealth of technical and scientific skills and insider expertise. Her education and training allow her to leverage her scientific understanding and skills. She carries them over in a qualitative way to the social and societal aspects of her work.

"(my) current role... (is) where I work on climate change misinformation. So wherein I have religious and political elements also included, and to understand how technology has been both an enabler and a disabler. In conversations on climate change and how, as storytellers, we can leverage different kinds of tools... So, what websites to go to seek authentic data and how do we verify that data. And sometimes you have access... (reports like the) IPCC report... (which) is a really long document... for one to understand... So I think now it's come to a point where... I'm at least in the process of understanding the before and the after and the could be's of the impact of climate change... I also have a learning towards how technology can be an enabler."

Now, she focuses on using her current job, background, and skills in the climate space.

"I think right now I'm having that kind of a learning where I'm able to bring science to activism, to climate activism, to climate reporting."

Key moments and themes

She has continued to work where she grew up. Therefore, she has multiple memories of her city being a different space. She reflected briefly on how the urban changes in the city have altered its environment for the worse.

"I've grown up in..., which is supposed to be, or it started off as a... garden city and... I have great memories of growing up in parks and being able to play through the day and not come back home fatigued.... (but now) forget about... tanning and... (because of) visual dirt accumulation and really weird things...

we're not able to enjoy the outsides... as much as (we would like to) romanticize (it)."

She remembers instances of development in her city of occupation, and she indicated that her first experience with activism and social movements against such developments started then. Due to the nature of her work, she got to explore and experience exposure to the reasons and motivations of others who fought this fight.

"I remember in about 2019, there was this... steel fly over that was being built... which was going to save a couple of minutes of commute. And in that experience of reporting from ground, I saw that climate change not only effects... a lot of older people who came to the protest site (with) a lot of childhood memories associated with the road... (but also) for children who were far more younger... the reasons were how will I when I grow up and remember this road? and what about the future generations? I don't need this road, so everyone's reasons are very different... (compared to the) people who are working in sustainability or... urban designing"

Such moments through her occupation have provided her a critical lens through which she can now question: who does this knowledge, information, or change serve? How do they perceive and experience it? And how might the reception of it be affected by its framing?

"I think we should stop looking at things from isolation and really see it creatively and without diluting the concept itself. How do we make it more marketable, make it more reachable, make it more collaborative at large, also cross collaborative"

Work

The Appraiser's work demands her to work with various groups of people. Therefore, it forces her to be sure of the information she is correcting and understand the people she is correcting it for. This means she needs to verse herself in how her target groups understand the topics, relate to them, and use them in practice.

"I try to bring authentic voices of people and really go to an extent where my data is not clouded or my information is not clouded by my laziness of going that extra mile and finding really on-ground data... that is one thing that I tried to put to practice and whenever I'm able to give space to any person whose voice should be heard, I think I do try and go through their lens of really pitching those stories and meeting them and waiting for their time and so on and so forth."

One of her crucial work strategies is consistently evaluating if her collective setting benefits her and if she can fruitfully collaborate with them.

"(when) the group that you're talking to is not as actively involved, so I think the challenge here is to is to not get stuck in one particular group, but to be able to... expand your circles by collaborating, by reaching out to different people. By really seeing your work in more than one form"

Such an approach helps her increase the quality of her work by casting a wider net to gain stimulus from and using a cross-disciplinary approach to her advantage. This also means she must constantly adjust her contributions and methods to the group she works with.

"I think we have to diversify problems... at the end of the day, we're dealing with human beings, and everybody has different reasons of why they do something and why they don't do something... I think we'll have to find mid paths as opposed to just throwing any kind of concept, whether on paper or... in practice on to people, especially while mobilizing community, because that is a whole point, right?"

She is steadfast in impacting as many people as possible without compromising the quality of her work.

"It's not about... (changing) the life of one person. If I want to change the life of 1000 people or more than that, I need to hear them out and find a midway and find the most explanatory way of (reaching) them."

To conclude, she highlights what approaches motivate her to keep going and shares some wisdom from experience.

"So, optimism is great, but I think a feat in being pragmatic, being realistic, being practical, and also have the resources, like the money, the power, the data, the intentions, which is I think (is) the first armor in any battle, if your intentions are right, I'm sure things will fall in place and that's what has happened... in my situation, in my life... (when) I've met well intended people a lot of great things have happened... whereas meeting people who are very superficial in nature hasn't necessarily translated into impactful work."

Personal life

Throughout her life, the Appraiser has experienced nature in many different ways. She has crossed paths with many people who have shown her that more significant intentions and goals matter.

"I find a lot of profoundness in nature and how it treats me."

Her canon and identity are formed from her work experiences and interactions with people who share similar doctrines.

"I think as long as your larger goal is clear, I think the routes to make that larger goal can be worked out with different permutations and combinations, so there's no one way of doing this... and there will be different ways of doing this."

She reflected internally, questioning what motivates her to do such work. She highlighted vital factors guiding environmentally activistic work to achieve observable impact.

"I think the best thing that you can give to any movement is your time, is your passion, is your energy... If you can really do that passionately, I think the change will be seen and even in the most smallest of the smallest activity that

one takes part of, even if one person, if you're able to change the life of one person, if you're able to talk the story of one person, if you're able to empower another person, I think we are moving the needle in some way."

Going forward

Going forward, the Appraiser chooses specific mental models that provide her with the fundamental values.

"(we must approach nature with) curiosity and with so much love and warmth... that's what our planet deserves. It deserves people who will look at it more pragmatically, with a lot of warmth and kindness in their hearts as opposed to just using it and throwing it"

She reminds herself of a famous quote by Mahatma Gandhi.

"That the planet has enough for everyone's need, but not enough for everyone's greed."

4.2.7. The world of The Preserver

Introduction

The Preserver is an environmental lawyer who has been active in the space since her education days. She continued to carry on her work in the environmental side of education, volunteer work and occupation.

"I've been on environmental activism... since university... I've been with the eco clubs in the university... I'm (also) doing legal campaigns, clean ups and all of that. That's how it started in university... And then I also went to do a lot of volunteering works... I think I've been around in this space for like 3-4 years now."

Narrative

She pointed that it's a lot of external encouragement that keeps her continuing and growing in this space. She draws a lot of motivation from this community that seems to only make progress for future.

"in litigation or environmental law litigation or, you know, in terms of codes or illegal processes, everybody knows it's a lengthy process when you're getting into litigation, but... I see the hope in the fact that people, even knowing that it's going to take them five years, 10 years, they keep filing cases. You know, it doesn't stop them."

As a young person in the field of environmental law and litigation she sees that the discipline and practice shows potential and promise to grow a lot and this is another motivating factor that she shows interest two contribute towards.

"with environmental law, the thing is it changes every day, it's evolving. So I guess that sort of makes me interested to be continuing to be in the space because it's not."

She also pointed that while the basic principles of law and practice remains developed and constricted the evolving space under environmental law and practice gives her a lot of room to not only imagine how she would want the field to make progress make but also lead by example by trying out different strategies.

"It's not the same anymore, I mean the base... will remain the same, but then the amount of developments that keep coming, keep evolving and because that space is evolving space, I have more sort of space to actually operate in, instead of being already written down and already you know what's happening in other space, so I guess that's what continuous to keep me in the space because it keeps evolving. It's not becoming stagnant. I don't think it is becoming stagnant anytime soon"

Key moments and themes

The preserver recollects a very specific memory from her childhood that serves as one of the major reminders of why she got involved with environmental litigation and law.

"There was a factory near my school... and when I was in school there was I think there was a gas leak from that company and we had to evacuate the school and so from then on I've sort of been focused on (this field)."

Going forward she also recollects the power of the dictation and what how it contributed to the official judgment of the gas leak accident this proved to be a very transitional moment in her life that continued to influence her decisions for her career.

"I mean later, litigation did prove that there's been a lot of mismanagement with that factory and all of that. So I think that's one tipping point because we had to evacuate the school in the middle of the day, sort of stuck with me."

The preserver recollects memories of her childhood home, surroundings and relationship those surroundings and reflects over time how her childhood region continued to evolve develop and become more urbanized with time and developments.

"I also saw the place becoming more urbanized overtime so when I grew up. It was a lot of trees. It was a lot of animals, there would be Peacocks and a lot of cats, forest cats, which now are actually endangered"

This observation of hers led to her analyzing what the urbanization developments meant for meant for the nature around how the mobilization of people was affected how the connection to nature was affected and also how the animal life was diminished over time.

"I also saw a lot of space that just became urbanized over time and while my home still continues to remain green and everything, but they don't have enough space to accommodate these issues. So they've been cut off. So there's a lot of space between the urban structure and the forests and the homes that there's no movement possible. And so I've seen that sort of go down from when I was growing up, I guess that also make me wonder why it's happening and that's sort of why I also why I've grown up to be like that."

"Plus, in the farms as well, we do a lot of agriculture, my family, my parents do that... but when you get into agriculture, I guess you could... See (in a way) when you walk on the sand and you start feeling the sand... (or) When you talk to the trees and the plants, you're so intrinsically connected. Sometimes when things that happen that are not good. It feels like it. It hurts like your family, right? yeah. I think it's just intrinsically, how I was brought up to being connected with nature, I guess that's what made me go into this space."

Generally, they served as one of the critical life transition moments where she not only first-hand experienced how man-made developments affected her and her community's connection with nature but also what direction mankind was going towards.

Work

In terms of her work, she has, over time, realized that it is often regarded as quite an isolation from other disciplines, but she hopes that the future developments made in her discipline and in her field of work continue to grow toward an interdisciplinary direction.

"What I've also realized sometimes within who environmental law is that it's read highly in silos, which means that the amount of interdisciplinary way that it needs to be read in is not there"

She also recognized a significant pitfall regarding her work, which was that there were no binding regulations. She thinks to be involved in environmental law and litigation is to also be involved in a space that proves to harm one's mental state.

"Some spaces are really toxic because these are all voluntary spaces. You obviously have guidelines around, behaviors are guided and all of that, but you don't really have an enforcement mechanism to ensure that that actually is in practice, right? So it gets really, really toxic sometimes and you don't have a way out. You can either abstain that space or moving out is the only option that you end up having."

She continues to reflect on how her occupation and workspaces are perceived from the outside, which entails a lot of admiration. However, the bigger picture is often ignored.

"with youth spaces working on environmental processes in general in a social step... there's so much glorification that is (happening)... Where people just talk about the good stuff and do not talk about the fact that, for example, it is so difficult for you to get results that you are in a global south countries."

She shares a significant strategy widely used in this space where the community is driven not by good intentions but greed, egos, and envious attitudes. The Preserver touched upon how she has to be continuously on her toes and practice critical analysis of the projects and the people she gets involved with.

"then there's also a lot of gatekeeping that happens with these spaces, which are inherently problematic because it's meant to be a more inclusive space, and that's what people are there for. But then they gatekeep so much information."

Personal life

The preserver touched upon how one must continuously remind themselves of the reasons they got involved with the environmental space and that this world comes with its own set of challenges.

"So, sometimes you have to be able to catch that on early stage and be like no this is... even if it brings me fame, even if it brings me money, even if it does. I don't want it because that's not the reason I came into this."

Going forward

Regarding her future, the Preserver forecasts that the environmental space will always be something she will keep in touch with; however, for now, her hopes and dreams are to chase

the interdisciplinary developments and explore what she could bring to her field in that pathway.

"But it's been two years and I'm going to start a masters, which is looking at transnational law in justice. But I'm still interested in environmental law, but what has changed over these two years is because of the amount of volunteering that I've done on environmental law or even the work that I've done on environment law. It's sort of shown me that just studying environmental law only in that context is not helpful. I want to be able to do it in an interdisciplinary way."

Furthermore, she shared a unique way of looking at these changing worlds where she thinks it's time for her to vacate her current space in her world for someone else who might want to enter this community and occupation at large.

"I wanted people to have my space to be able to operate, because sometimes I also feel like being in that space also means that somebody is unable to come in because that one spot is already taken and I didn't want to be in that space keeping it. So I guess that's also the main reason why I wanted to stop doing it."

4.2.8. The world of The Forecaster

Introduction

The Forecaster is a future strategist by occupation; she helps groups and actors in society practice imagining futures so they feel equipped to face them. Her work pivots around building capacity within society to navigate and anticipate the future. This involves playing with scenarios and pathways. She is not trained in this field but has a background in international relations and filmmaking, which equipped her with ethnographical skills that allow her to focus on critical details that highlight the storytelling aspect of her work.

"(I) focus on futures, and the idea has been to use storytelling, long term thinking, thinking about uncertainties in different ways and to sort of embed that thinking within our work, with our partners. So, the idea is to make them sort of feel equipped to think about the future and to feel familiar with what's coming? Also, in a way and to navigate that kind of change, but also build that capacity to anticipate what else?"

Narrative

The Forecaster sees herself as a catalyst that empowers her in her work.

"it's a place that gives me momentum and purpose when I wake up, for example, I'm eager to do this work, even though it's hard"

Her passion for her work stems from constantly being reminded of the equity issues. She redirects her feelings, emotions, and lessons to constructively make an impact.

"When I see things on that level of injustice at a very systemic level, you can't distance yourself. I almost think that I need to engage, and I need to feel angry."

Key moments and themes

A critical moment for the Forecaster was when she realized that the ruling system of today's society and the world was not that old. This continues to shock her in her work because of how unyielding and airtight these systems have become in achieving any change for sustainability in the future.

"a lot of the systems we have been operating in and I've been assuming have been like permanent or the right way to do things the economic system or the democratic system, or these idea of nation states they feel so rigid, but they're only like 400 years old. I have to keep reminding myself that, the whole idea of planning (is) looking a lot beyond... Could these fixed ideas of the last 400 years would really serve us?"

By saying the above, she questions if the systems we operate in are the ones we should choose to stick to for the long run.

Work

She has worked with various target groups and communities and highlights the main lessons she has drawn from her work.

"When you hear from people's experiences and personal stories, it gets very reaffirming and empowering that this work is actually (done) at that personal level, very connecting and like people are interested and people want to keenly do this. And you can then almost see the spark from the lowest level to the exponential change that you are imagining... So that brings the sense of agency"

She further outlines that this only boosts her to continue her work and push its boundaries. She also acknowledges that the idea of the future is scary and mysterious, which can have adverse effects.

"That really helps to create a sense of trust and a sense of seeing ourselves in this work as well, because futures can be very alienating."

There are certain things she must keep reminding herself of for her work.

"You think of identity and climate experience, it's quite closely tied and class as well at some levels. But you know certain identities are facing it more. So, you have to also like, think about those experiences and those layered levels" "I have been very, very keenly interested and this comes from a personal belief around who gets to imagine is the most critical part of change and I think... it's on my personal belief around the people who haven't been able to imagine, who have been marginalized from telling the story of development that they want and that they'd like for themselves. Their future generations. And I think that's the most critical lever."

Personal life

A lot of her passion for work spills onto some of the personal beliefs and work she does. She outlined that she wishes we achieve a radical shift, perhaps something like dissolving nation-states, which would significantly impact the world's economic systems. She uses these future imaginations to explore and answer, 'what ifs.'

"There's a lot of ways these learnings can be exchanged without national structures being in place... I'm of that belief system and I'm in that future."

She also shared on a personal note that she is faced with the beliefs and guiding principles related to her work in her personal life.

"My partner is a venture capitalist and... (putting) the relationship and all the side... I struggle to... not question the purpose of (his) work? Or like, what (his) work is leading to? And... I keep sort of pushing (him), don't you want to examine this?... one of his companies is about sustainable fashion... I'm like, Are you sure? Are you examining the conditions of the workers and things like that? Are you engaging in these conversations, and I don't find myself turning off a lot."

Going forward

For the future, the Forecaster shared her thoughts in context to her setting and the better evolvements and shifts she observes. She shares what she and her organization are focusing on and its reality.

"Especially in a context of India, to imagine beyond this government or beyond these ideas of democracy. Like what else is there in a longer future?... we've been creating a lot of scenarios for civil society and they've been able to tangibly start to think of examples and pathways to work throughout the short, medium and long. So that's been good... it's a sense of agency for them as well."

"And I think, personally, what I've also been observing is just this idea of, investing in and looking at long term futures, so futures literacy a lot at the school level as well. And that's been interesting. And they've been looking at it as a level of, how can our future generations of leaders be empowered to be part of climate action conversation"

4.2.9. The world of The Tactician

Introduction

The Tactician looks at policy developments for sustainability in the international arena and studies how they affect and apply to India's national and local policy development. He works with activists and advocates who do not only groundwork but also policy-lead actors who work in higher institutes and organizations. He has a background in environmental sciences, which has provided him with a good amount of background knowledge for his chosen world.

Narrative

Even though the Tactician studied environmental sciences, he admitted to having limited knowledge about it in practice and local contexts. So, he deliberately and strategically explored the world to better understand what is needed for the world to develop and grow and where he needs to situate himself to do impactful work. Through this journey, he discovered a significant lack of awareness and knowledge about climate change in the local settings.

"If you go... local... they don't know what climate change is. So, I have to learn it in their own words, what is climate change for them and how it is being taken forward from there in any policy."

Once he found the inconsistencies in practice, he chased them to uncover more. This is traced all the way up to higher institutions and organizations that govern the implementation of policies.

"I found there is a very big gap and for me to work right now with the government was very challenging and hard."

He meticulously studied the people's motivations, intentions, and interests, which led him to identify gaps he could strategically fill by adapting his work strategies and goals.

"There is vast interest from a lot of people and groups in society to make a change... (but) there is a lack of understanding of the interconnectedness of the sustainability field, procedural knowledge and those in power are majorly disconnected from local stories and experiences"

Key moments and themes

The Tactician shared some personal moments that have shaped him in a certain way. The earliest experience is that of losing a friend of his brother to a flash flood. This pushed him to explore the physical and societal manifestation of climate change.

Secondly, he dedicated a significant amount of time to travel across the country to study the field in which policies are applied (farmers, land conservation, etc.) and how climate change manifests.

"(To) learn more about climate change and then I travelled all around India for in one year, more than one year. I went to Western ghats for some time went to southern part of Andhra Pradesh. Stayed for some time in Kerala then came back... (this was) just to understand... to learn what exactly... climate change is."

This motivated him to initiate correspondence with national actors regarding the policy gaps, which resulted in his being validated in his observations.

"I wrote a letter to Prime Minister and Division of Environment raising a issue that is called: Action for climate empowerment... and then they recognised (this) and they wrote back to me and (said) OK yeah, we... acknowledge that this is not there and we'll try to solve this"

He also received recognition from other actors like him in his international work. The approaches and methods employed by the Tactician were used as inspiration by foreign group representatives.

"I was... in Nairobi and then this guy... (and) they were (trying to put up an) intervention which was appraised by countries like Mexico, European Government... (and) they were taking the suggestion from our intervention... (because) it was so good and so technically provided... (he further said) let's have a bilateral... with one or two people and we want your intervention specifically... and you can take my e-mail and then share your intervention.

Such experiences and achievements led to him gaining local recognition in India, where he could use his credibility for future work.

Work

In terms of his work, he stressed that he must acquaint himself with diverse knowledge and information because the sustainability arena is still evolving.

"I try to utilize most of my time to learn and to contribute... this is the best way... I try to... learn (for) one or two hours (to inform myself on) what is... happening related to this (field). I can't focus on everything. I can't be expert out everything right and the climate change field... it's very vague when you talk about climate change, there are lot of issues. So, I tried to be very more precise strategically on things."

He needs to contextualize his learning and the policy implications to continue doing international and local work. This is to prepare himself better, to stay confident in his goals and strategy, and to reason with actors.

"I need to learn what is... happening in the Indian context, why are people not talking? Which part of the Indian state is not taking any action and what is being affected by that? So, then I can bring a statement... that I can prepare. I can propose a hypothesis that OK, you haven't taken this initiative and now this city has been facing (these) challenges"

A lot of his work has pivoted around younger populations and youth groups. He outlines a major hurdle he is constantly faced with in this work.

"(There is a) gap of understanding youth right now... they do a lot of advocacies all around in different states. They are everywhere right now... but the challenge is... that we definitely need advocacy... but we also need to do policy-based advocacy. Right now, we don't have... proper mechanisms (for that)" "I'm definitely trying to work on this, there is a campaign. Last year we started and then we are still working on those things and then this National Youth counsel season is also one of the initiatives where we wanted to build youth with the capacity on policies also as to how they can bring the changes without being. As a so-called activist, they can bring these things... (and put them in the) right words."

Personal life

The Tactician outlined that he has had to come to some harsh terms that some people in his life will never fully understand his work and the reasons that push him.

"I was so shocked with that feeling and... (it) because all these issues I can't talk to my family, and I can't talk to (some) people... but I know that there are people who will not be able to understand... (like) my father... my mother. They have no understanding of climate change. They will (never) understand, they have their own issues. They have their own understanding (of the world). They have grown up studying... certain things and now I can't ask them to change."

This leads to internalized conflicts for him

"there is a big fight internally with yourself with all this happening outside and then there are all these mental challenges"

In his work, he evaluates people and their doctrines by observing what seems critical: an immediate comfort or seeing tomorrow and leading a better life. Factors like basic social security securities (food, water, and economic) are something he accredits for governmental institutions; however, he finds materialistic gains insignificant.

"(I need) people to understand that tomorrow... is more important to have for a better and a healthy life. Definitely you should have few certain things for which you have a government, for which you have policymaker but for me this is how I see the world and I wish people can understand certain things."

Going forward

He hopes to gain momentum in whatever work he does and wants to find people who will be the future pillars of society. He looks for future leaders, impact makers, and gems in society who can continue doing similar work for future generations. "I started alone... now I have more than a thousand of people... I believe in next few years those thousand people can generate next 1000 people." "And then we know that there could be one person who can bring the change if we talk about any leader, Abraham Lincoln, Mahatma Gandhi... I just need those people who can be somewhere in the coming next years, to be leaders and people who follow those people."

He also presented some expectations for these future generations that look forward to joining this momentum.

"The Indian youth need to develop themselves right now on policy-based advocacy so that they can talk about things strategically. They can (converse) about things, they can do bilateral, they can bring the issues that this are happening. But they can also provide statements on solution side."

4.2.10. The world of The Learner

Introduction

The Learner is a young 18-year-old activist turned advocate from one of the smallest agricultural districts in India. He has a personal connection to nature and is, therefore, quite aware of the effects of climate change. He works in his local context and with international organizations focusing on human rights and climate change topics.

"At (some) point... I started differentiating myself from activist to an advocate, because the work was more towards advocacy policy brief and inclusion of voices in decision making processes. So I kind of thought, and also started seeing different perspectives in the society about the world activist. I started identifying myself as an advocate who is passionate about children's rights, who is passionate about environment and surroundings... And that was much better identity for me myself, seeing the context in the local politics and other backgrounds."

Narrative

The Learner's overall goal is to bring social awareness and build community knowledge on the effects of climate change and how they can be practically targeted to increase the resilience of the affected communities and people. He draws a lot from his personal connections and experiences related to climate change and agriculture.

"(I want to) ... raise awareness among young people on what is climate change? and how is it affecting us? And it is not... that scientific terminologist (approach) because here climate change affects us in a very different way, because we are based out of agriculture so change in rain pattern is something... we can relate to. We can relate to change in groundwater depletion, there are like other ways on the production productivity level. it's more on to the agriculture part."

Key moments and themes

He started his work in activism and advocacy when he was relatively young. He participated in various initiatives and discourses where he could expand his understanding and knowledge of climate change and its effects.

"I started working as an activist when I identified as one... back in 2017, so I have been taking different initiatives... And I was taking part in Cleanliness Drive. But when people ask me what was a very significant time or that turning point? I consider 2017 where I started my own initiative"

In 2019, he was exposed to the human rights aspect of sustainability issues, and that went on to transitionally change his effort, where he started his own initiatives, discourses, and conversations for the community in which he was involved.

"From 2019 onwards, (the) human right angle was included into the climate discourse which we and I personally as well was building. And then in 2021 I started an initiative called Knowledge for nature. So basically this initiative was aiming to create awareness, building knowledge, building a discourse among the schools. And fortunately, we reached around 130 schools 4500+ children and young people talking about the cause, which drive us."

Later, he recollects that he got an opportunity to be involved on a bigger platform that looked at a broader perspective of climate change effects and sustainability topics through international organizations. During his experience working on these on such platforms, he has had some relatively unique experiences.

"But later when I joined United Nation Committee on the Rights of Child as an advisor, (and) things changed."

He recognizes that one of the most transitional aspects of activism is when he was exposed to the fame and glorified view of it from the outside world. He very generously shared one of such memories.

"I have been asked to ask (a) celebrity some question(s) and I am thinking that what should I ask? because I cannot resonate with that celebrity, that film star? I don't know how her life has been. I don't know how she thinks about a lot of different perspectives which I think of? She has not seen my village, right? She hasn't seen my life. What should I ask her?"

He recognizes that one of the most transitional aspects of activism is when he was exposed to the fame and glorified view of it from the outside world. He very generously shared one of such memories.

"I openly criticize. Are we only making things so that we say that we did something or are we really making an impact? But at the end of it this is how world works. This is how the system works. So I don't have much hope for it. But yeah, being on my part, on board, and my professional life, I love working on these topics which really matter me. And for now, for me, climate change and human rights is not only a personal thing, but it also a professional topic."

He presented himself as deeply and personally affected by the external perception of the activist world, which forced him to realize certain things.

Work

He continues to shape his work strategies, which are more geared towards targeting young people and the young population. He continues reminding himself of the valid reason for getting involved in activism and advocacy efforts.

"(I want) ... better engagement mechanism(s). (Where) there would be a channel where we, young people, could look forward to, to be changemakers, to put their potential inside."

He also realizes that because of his extensive experience, he can share knowledge and pass on his perspectives to newcomers and younger people in this field; however, it comes with significant hurdles.

"Lot of people who don't know about this world. When I tell the young people, the ones I have worked with, and the ones I have taken sessions with and capacity building in the other regards. Now they know about this world, now they are taking action... So being an activist we go up beyond a level of thinking and we get caught off the anxiety where like we want to work but we don't have ideas and we get so stressed, that is one part of being an activist. I think the second part is that getting into fantasy."

He also reflected on and connected his work to the constant issues of fame. He stressed that he very explicitly distanced himself from them.

"Nowadays a lot of activists live in the fantasy of glamour. I'm also one of those. I'm not denying it. But in my case, what I feel about it is that I personally don't like it. I don't like to be (go) to the mainstream of things. I like to talk about the problems. I really want to come up with solutions and I have my own way."

In a collective, he appreciates that India and groups representing the world are bound to have diverse religious beliefs and understandings. Therefore, he focuses on boiling down his evaluation of target groups to their way of relating to things, intentions, and perspectives to eventually achieve the larger goal.

"(I think in) activism... our religion is something (that) is teaching us, and because that relates to people... like when I say, and that in Hindu scripture it has said that prakharaksham right, the nature protects right people will believe it right because they resonate (with it) because it is something which is very supreme to them."

He stresses that the key point is to have balance and to compromise healthily so that the larger picture and imagination are not lost.

"Someone... who practises Islam. Someone practise Sikhism, someone, Hinduism, then other segments as well. So, I think in a group we try to like make a like a balance of things that what are the values which we cannot compromise with... What are the things which really matters to us?"

Personal life

He is named the Learner because he acknowledges that he is still young and has much to learn. Therefore, in his personal time and initiatives, he's constantly looking for new knowledge, new people, new ways of thinking, and new aspects of life.

"The most important is to question because I feel that activism is all about learning. So, the things... I was not knowing, like climate change, and yet a lot

of people don't know what is climate change or like, how does it happen? how my carbon footprint is increasing climate change? why are we not talking about water vapor? why are we not talking about other gases in atmosphere? why only carbon? So lot of people don't know about it and even me myself."

Personally, he also expressed how he feels when he is reminded of his efforts and work.

"So of course there is a note of satisfaction for me of doing something (that matters)."

The negative aspects of being involved in the activism and advocacy rooms also personally affected him. He connected back to the issues of fame and glorification being infiltrated in media and news channels of practice.

"I have friends in media that want to print an article on me. But I really don't want to do that... I know people who pay for it, who give money to get an article about themselves in media. That is the fantasy of activism... There was someone who came to my house to interview me and asked me for money to publish it."

Going forward

Going forward, he says that there's still a lot of work to do and a lot of perspectives and worldviews to bring in to make good, intended progress

"So there are a lot of people from different backgrounds and that bring in lot of perspectives to how the activism journey has been evolving for different people across sections of society... Now I question everything then try to learn, understand that why it is exactly happening, not just blaming people, but also finding a reason that what is the reason behind something"

He also shares a doctrine that he keeps with him for the future as well where he is open to reevaluating and adopting new knowledge systems, mental models, and ways to look at the world

"If you will prove me wrong about my belief, I'll believe in your thought. And if somebody else, the third person came and says no, her belief is also wrong, and I have the logic and he prove and satisfies my logic... I believe in that. So I think that is one thing which keeps me driving like learning reevaluating new thought processes that do I have a logic to believe in... I think generalizing these things are not going to work because it depends on case to case and situation to situation."

4.3. Discussion of RQ1

RQ1 explored how Indian activists' used their meaning-making systems to make sense of their worlds and realities. I believe the interviewees have developed a higher understanding and skill of fundamentally evaluating their worlds and systems. Their contextual worlds, India and its slow sustainability-related developments, have led them to inspect their worlds very profoundly. This has resulted in them realizing that the systems they grew up in do not serve them in the fundamental way they are supposed to. Therefore, they all demonstrate this urge to uproot these systems and turn a new radical leaf for future generations. They showed signs that they would rather re-design systems that are not perfect but built for future resilience and imagination than stay silent and victim to existing malicious systems, even if this means walking on shaky grounds in the initial stages.

Secondly, they recognize that they may not possess the skills and tools to navigate their circumstances effectively, fueling their motivation to continue to grow as individuals and as a collective. This realization leads to a proactive channeling of their emotions and curiosities towards acquiring these skills, tools, contacts, and perhaps even perspectives.

Thirdly, the conversations had during the interviews revealed that there are no such things as insignificant wins. All respondents, in one way or another, agreed that celebrating even the most minor wins is necessary. They found it reaffirming to support and celebrate the community's/world's wins whenever possible. This suggests that collective appreciation makes them feel validated and valued, endorsing their choices to leave/stay involved with their worlds.

Fourthly, a significant theme emerged: the interviewees constantly evaluated their choices and possible future steps in their worlds. The respondents also generally shared the notion and understanding that every decision comes with consequences, and no result is simple; therefore, it has its own set of positives and negatives. This understanding comes from their experiences in the critical transitional moments when confronted with the consequences of their choices. Therefore, critically examining who benefits and who loses well before those actions occur is very important. This examination exhibited by the interviewees showed me that while they appreciate the progress in their worlds, there is a growing focus on those who suffer – the marginalized, smaller communities, etcetera.

Fifthly, religion, culture, political differences, caste, class, etcetera, did not seem to be a solid dividing or defining factor for them. They were all quite syncretic in their beliefs and principles. The common theme across all of them was to take the morals, principles, and beliefs decent enough not to cause significant harm and provide a life of integrity. Suppose an aspect

of a particular worldview does not seem to resonate with them. In that case, they generally choose to take what resonates and leave what does not—living through *discernment*.

Lastly, I also perceived a prevailing belief that no cause is small or insignificant. As long as it contributes to combating the environmental crisis, you and the efforts are welcomed and accepted with open arms.

4.3.1. Contextualizing results for the self and collective aspects of worldmaking

Undertaking the research approach for RQ1 enabled me to understand the interviewees psychologically. This further helped me make sense of their behaviors and actions in their respective worlds. Also, approaching world-making with a dual lens of individual and collective proved critical.

It highlighted that humans are social creatures and express themselves in their work and personal lives in multiple ways. Some even have private versions of themselves that they do not share with the world. With their unique perspective and experiences, the interviewees actively shape their personal and social worlds. They exhibit this by receiving feedback (through their work, collaboration, and critical transition life moments) and processing it to change further and evolve personally accordingly. This feedback is constantly being provided either externally or through internal reflection.

For internal reflection and re-evaluation, the interviewees hold on to the feelings of enlightenment and shock to stay grounded in their world. Generally, they used *redirection* to channel their emotions into doing constructive work (personally and collectively). They use these memories as reminders to fuel their reasons for why their work is essential. They also use them to push themselves to find gaps in awareness and knowledge.

I saw a consistent pattern of critical evaluation practices concerning the structures and regimes the interviewees are part of, such as political parties, religious structures, legal frameworks, etc. The respondents are not mere participants but keen observers of these systems. They contribute significantly by evaluating and identifying the gaps and loopholes urgently needing development and progress. This critical evaluation, a positive attribute of the activist world, underscores the potential progress and improvement they can and want to bring to the systems. The relatively young sustainability system gives the respondents a sense of agency in designing it. This is crucial, as the system must serve not only the present but also the future generations. Therefore, it is intended to reflect resilience and flexibility.

On the other hand, designing a newer system also presents a hurdle, mainly because the current governing actors, institutions, and processes cannot foster radical progress. Therefore,

making the overarching process of changing the systems internally is a slow one to achieve. Psychological factors linked to bureaucracy, egos, distrust, and anxiety further slowed the progress. For instance, in the Tactician world, the bureaucratic structure often led to a need for more agility in decision-making. At the same time, egos and distrust among team members portrayed in the Preservers world hindered effective collaboration.

The concept of the *collective* resonated with the interviewees figuratively. This means they recognize that other humans are consciously working for the environmental crisis. This shared understanding creates a metaphorical collective site where environmentalists mentally unite. In this shared mental site, spatial factors like distance, national borders, and intercontinentality or personal identity factors like faith, background, occupation, and doctrines are insignificant. Instead, what matters is the cause and internal motivations and intentions that drive them to do activist work. Whether involved in international environmental governance or local initiatives, they are all part of the same fight.

Furthermore, their physical workplaces in real life and the work they contributed to metaphorical collective portrayed signs of being dynamic (ever-changing), integrative (inclusive), and providing agency to activists.

The interviewees also recognized the imbalances within India's values and action system. The interviewees acknowledged that the wider public they share their worlds with relates themselves to certain beliefs, norms, and principles that are holistic in their view of the world. So, ideologies of regeneration, rebirth, nature stewardship, and providing agency to nature are prevalent in the wider Indian societies, governing institutions, and organizations. However, they also mentioned this as a hypocritical point because these infrastructures generally do not reflect their beliefs but present developmental, capitalistic, and luxury-seeking ideologies. Therefore, the interviewees face the challenge of aligning their values with the broader societal norms in which they operate. This also poses further hurdles in imagining new, well-functioning systems that could be radical and better for societies.

Related to this, they also face the challenge of getting others to see their perspectives, especially when the powerful societal infrastructure endorses values and actions that are not beneficial to the world. This means when the top-down structures are not designed to uplift the activist efforts, they find it exceptionally difficult to gather momentum and rise against the grain of the system.

4.3.2. Actualizing their individual and collective beliefs

RQ1 also explored how these activists shape their worlds both individually and collectively. The findings suggest two sides to this: internal and external.

They achieve external actualization of their beliefs by *embracing* that they have had relatively good lifestyles and lives. This implied that they have had access to both physiological safety and security needs met. This may be a different truth for all the respondents. However, they generally indicated that they can be environmentalists and help others because they have had their basic needs met, such as food, education, clothes, water, shelter, opportunities, family, and friends.

The next trend of actualizing beliefs is individual and collective, which relates to the *sense of belonging*. For this, some have found worlds through life experiences where they experienced profound relations to teachers, a collective, inspirations, and nature. However, some have realized that certain aspects of their worlds, e.g., mismatch of values at employment, working groups, volunteer efforts, or even family, do not serve them in the sense of belonging. They could attribute this to shifting worlds, a deliberate attempt they make to shape their lives more towards their needs.

In terms of internal actualization of beliefs, I understand this to happen when there is a sense of acknowledgment, recognition, and acceptance of their value and work by the community/collective of other environmentalists.

4.3.3. How do the elements in their worlds interact and affect each other?

There are two ways in which the elements of their world interact. The components interact internally in their mental realities and externally, manifesting in their physical realities.

My conversations with the interviewees suggest that they all know the figurative space they are a part of (environmental/sustainability space). I attributed this to forming a larger figurative community to which they attain their lives. An unseen constant uniting all those alike in their intentions, ambitions, and consciousness of the environmental crisis.

Furthermore, progressively, elements such as beliefs showed to be constantly evolving, which leads me to believe and deduce that a shift in mental realities would eventually shift one's physical ones. For example, in the world of the Ponderer, once she realized that her world of law was not serving her internal beliefs and wants, she consciously chose to manifest this shift in her physical one, too, by changing her occupation and, therefore, her locality. Thus, external physical realities would be how they act on their mental models and discernments.

This could involve what work they choose to do and get involved with, whom they choose to stay in contact with, how they live, etc.

However, both internal and external realities have multiple levels. For example, people's personalities, morals, and chosen and built doctrines affect internal imagined realities that may or may not stay private to them (their ideal worlds). However, another internal reality also exists in metaphorical collectives they perceive to be a part of, like social movements or groups that only exist in their principles and values manifested in physical interventions or meetings.

As for external realities, they can manifest themselves, like how they live at home, how their homes are designed to be environmentally friendly, what foods and clothes they consume, what modes of transport they choose, etc. Another level of this is the collective aspect, which directly relates to which initiatives they get involved with, their passion projects, volunteer groups, etc.

Lastly, in my opinion, answering how these realities interact and affect each other would entirely depend on what they consider their principal realities to be. This means some realities may be secondary; some may be chief and permanently held onto. This also comes down to evaluating and choosing the compromisable and uncompromising realities. Therefore, there is no way to answer this through this research.

5. Virtual world designing for games: Results for RQ2

This chapter builds on the worldbuilding aspect of this research for RQ2. It does so in 3 sections. Section 5.1. presents the findings of the background literature review and generally discusses its implication for All Rise. Section 5.2. present results for the two discussion workshops. Lastly, the chapter ends with a discussion of the results of RQ2 in section 5.3.

5.1. Background Literature review on how game world designing takes place

5.1.1. General aspects of worldbuilding

In the lecture by Kate Edwards, a geographer's guide to building game worlds (GDC, 2016), she outlines how to design a game that feels real, avoids cultural appropriateness, stays relevant throughout the game, and provides a sense of entertainment, fun, and inquisition (Wolf, 2017).

She highlighted the importance of developers prioritizing realization over realism in their games. To achieve this, two main goals must be worked towards: 1) narrative goals – the plot/story you want to convey through your game. And 2) experience goals – looking at what experience you want to achieve in the narrative. By this, she means that it is essential to fully understand and become aware of those whose world you are creating, work out their perspectives and ways of thinking, and methods of discovery and reasoning. She emphasizes that breaking down the imagined world you want to create leads to concrete details that will drive the function of narrative in the game. (GDC, 2016)

By understanding the abovementioned components of the imagined narrative, you might be able to go to the next step of how to provide this experience (Di Filippo, 2017). This relates to any experiences you might need to feel or see to understand the world (Wolf, 2017). Experience goals do not develop the narrative or the plot. It is simply the encounter of incidents that leave an impressionable impact on the player.

Kate Edwards outlined the following 5 elements as the basic recipe for realizing the world. Table 6 presents them along with their descriptions.

Table 6. Basic elements of worldbuilding and their definitions (GDC, 2016)

Number	Element	Definition
1	Familiarity	An indication of something familiar to us from our natural
		world. For example - maps, physical geography, etc.

2	Complex Systems	An appreciation and presentation of the complexity that the world exhibits. For example - societal developments through artifacts
3	Cultural Evidence	A sense of pre-existing inhabitants through time. This shows evidence of societal history and development. For example – this could be the relationships with nature, animals, communities within the game, etc.
4	Logical Consistency	How the world and system work. This includes the logical rules that must exist and apply to space, time, and all world elements.
5	Typology	This regards the sense of connectedness amongst the attributes of the world. Conveys a sense of a much broader universe.

Going further, Edwards also presents and explains three core steps to worldbuilding. 1) Contextualization (objective vs fictional), 2) determining complexity (degree of realization), and 3) creating with intent (world layers). These three steps differ when worlds are created for games (GDC, 2016).

As part of contextualization, adjusting and playing with the natural and fictional attributes of the game takes place. Real worlds have a primary emphasis on replication and authenticity. In contrast, for fictional worlds, the focus lies on imagination and peculiarity. Real worlds aim to deliver realism and a genuine experience, whereas fictional worlds push you to discover the unknown and provide escapism.

The degree of complexity relates to the level of detail needed to provide and/or create to realize an intended experience through gameplay. This entails deconstructing (components of) our natural world, questioning it, and reconstructing it in the game (GDC, 2016). For example, you may question the economic system of the natural world to understand its place and importance. Further, I ask questions like: Why is it the way it is? What drives it to be the way it is? Can it exist by itself? What other components does it lead to? Is everything comprising it necessary? To what extent can you strip it down until it is deemed useless?

When reconstructing, worldbuilding involves building layers such as geophysical, demographics, climate and atmosphere, etc. These layers also include cultural identities and systems, which become essential to focus on if the game is based on real-world inspiration like All Rise. The playfulness and creativity of fictional worldbuilding may be defined by a thin

line between cultural insensitivities and appropriateness. If not addressed with proper contextualization, worldbuilding components such as history, faith, and geopolitics may be met with a lot of criticism and problematization. This may further affect the game's reach, which means it may not be allowed to get published in certain parts of the world or regions if its real-world adaption is deemed offensive, against their values, beliefs, and norms.

5.1.2. The cultural dimension of building worlds

In the exploration of adding more nuance to the above explanation in the podcast episode: adapting authentic world cultures with Basheer Ghouse (Forbes & Havlidis, 2023), the speakers discuss how the use of authentic world cultures can be adapted sensitively and adequately to enhance your game in an exciting and fun way. There are two ways of adapting authentic world cultures, closely and loosely. If not done correctly, it can lead to stereotypical and racist representations of cultures. Furthermore, the media representation of the cultures is significant because it is how people perceive the cultures and are informed (Di Filippo, 2017; Forbes & Havlidis, 2023). Therefore, any instance of recreating existing issues and instances may perpetuate the representations of cultures. A practice of not studying your inspiration well may not only cost the game its quality, but a creator may do a disservice to their name, intentions, and the aim of the game. This generally leads to unsophisticated work and output. Unnuanced work and one-dimensional output only extract the surface-level information from a culture; however, to adequately adapt to cultures, one must take things from cultures that add to their world in some logical, contextual, and proper way.

They discuss various avenues in game development through which one must remain sensitive to cultures (Di Filippo, 2017). To me, a major one is art, mainly because art has continually been developed in an interpretive and subjective (Forbes & Havlidis, 2023). They emphasize that it becomes significant when its game art takes from problematic inspirations such as specific movements or political power, which is complicated and stereotypical. For example, Islamic Orientalism. This means drawing inspiration from art based on problematic and stereotypical depictions will also make your depiction a problem (Forbes & Havlidis, 2023).

This means you must make sure the origin of your inspiration is clear to you. An unexpected example was given of goblins with an antisemitic history for their depictions. Additionally, to depict something with a problematic origin, you must change it to make the depiction different. This will lead to originality and creativity (Innocenti & Pescatore, 2017; Forbes & Havlidis, 2023). However, I think there is such a thing as being hyperaware and

hypersensitive to such issues. Such sensitivities and wanting to avoid them at all costs may also lead to staying clear of exploring and researching cultures. This, in turn, may lead to assumptions. Therefore, when an attempt is made to change certain features of a culture that one may depict or deem racist, it has a higher chance of leading to missed attempts. This may make your output very simplistic and does not do the culture and the world you are depicting justice.

A second significant avenue is game writing. You can use an externalized or an internalized approach to cultural depiction (Di Filippo, 2017; Forbes & Havlidis, 2023). Forbes and Ghouse explain that a culture usually has a nuanced view of itself, so if you externally depict a culture, it may lead to generalization. An internal depiction of cultures leads to a very varied view of it. In scientific methodology, it is the same type of insight you might get from conducting ethnographical research. This leads to a close understanding of how people relate to each other within a culture, for example, communities within the same religion but different castes. To give a present-day Western example, the dynamics of how the Dutch perceive the Belgians are based on differences in languages, dialects, passions towards football team rankings, etc.

Whether it's religion or sports performances, both touch the feelings, reputation, and emotions of respective communities. Therefore, an internal approach keeps you from hacking your way around the worldbuilding. Instead of loosely relating things, you become immersed in the reasons and history of why they are related the way they are. (Innocenti & Pescatore, 2017)

Furthermore, significant differences can exist in the smallest regions (Forbes & Havlidis, 2023). Some may belong to one country by nationality but relate more strongly to different countries and cultures by beliefs, values, religion, etc. This adds depth and detail to the typology of the world.

Must you adapt your world to the cultures? Or the cultures of the world you are building? Ghouse highlights that it is crucial to understand how specific attributes of your world would affect the culture you are depicting. It may have a negligible effect and keep most of the culture intact. For example, how someone relates to nature can be very different if they come from various parts of the same world. In this instance, Aang, the last Airbender, has a very distinct and wholistic relationship with his surroundings; it is highlighted more in his being a vegetarian and his nature of co-existing with Appa and Momo. This is because he comes from the air bender community, which may be attributed to a stewardship relationship with nature. He is part of the same overall magical world as Katara and Zuko. Still he has his

own cultural way of relating to and understanding the components of the world. This, in turn, affects his values and way of life.

So, what should you look for when researching a real-world culture? From a multitude of things, one stands out the most. That is, checking how culture is presented and *who* presents it (Forbes & Havlidis, 2023). This is to explore and discover the biases that exist in the portrayal of real-life cultures. It is imperative to chase more original and accurate translations that do not strip the religious, symbolic, or linguistic aspects of the depicted culture. Therefore, ask what time a book, art, etc was made? Or written? Because that may hint at the political entendre and messaging of the overall story.

5.1.3. The importance of characters in building worlds

The speakers discuss how to create characters in the podcast episode: what to care about when creating characters with Milan Gilat (Forbes & Havlidis, 2023). Characters are the drivers of the story, one of the most developmental components of story-driven games. Suppose the characters are not adequately designed for the larger world they are meant to serve. In that case, the game may fall drastically short of achieving its goals.

Characters in games are careers of skills or the lack thereof to emphasize what they excel at or fall short of in meeting their world's demands. This builds nuances for the characters regarding emotional attachment/resentment companionship to other characters involved in gameplay and the player (Wolf, 2017). This means that the player plays a story to achieve a specific type of entertainment, and without humanlike experiences through emotions, achieving the expected kind of entertainment is very difficult (Innocenti & Pescatore, 2017; Forbes & Havlidis, 2023).

Assigning skills and attributes that make characters dependable creates a specific connection, relatability, and compelling, highlighting its importance in the more significant gameplay.

5.2. Expert insights for RQ2

5.2.1. Insights from Discussion Workshop 1

Understanding the environmental visions

In terms of understanding the environmentalists' perspective, information on the very individualistic characters that define their lives and journeys was revealed to be the most important thing. For example, all the diverse histories, their varied backgrounds, their faith,

etc. The game writer showed explicit interest in the details of the interviewees' lives, exhibiting humanistic features such as the paths not taken, their abandonment of certain beliefs, and what makes them pursue a syncretic way of living. Furthermore, the game writer also showed interest in observing how these environmentalists 1) embody the emotions related to work and how they channel them? And 2) what the process of redirection looks like for each person. For example, redirecting the energy from anger and frustration towards constructive action (the world of the Crusader).

Regarding painting the narrative, India shows many signs of footprints left behind by the old caste and religious systems. This was another central point of interest for the game writer, i.e., to understand how Indian society has developed its own perceptions and changed its worldviews internally. When talking about perceptions of the environmentalists, questions like how do different people perceive their own country's political regimes, what are their opinions about the environmental work that is and is not being done in the country? How do they perceive their legal system? And is there a feeling of fulfillment or dissatisfaction in the urgency and progress made in their nation? Demonstrated to be of interest.

To develop character and characteristic development within the game, the game writer revealed that to effectively convey the personas and personalities of the characters to the players, she tends to search for features that identify features that indicate their subjective worldviews. She examines how cynical thoughts transpire through dialogue or actions, considers the limitations in their perspective of the world, and identifies the aspects of the worlds they view as successes and failures.

In presenting narratives, the team discussed that UI and art can contribute towards hinting at a character's background. For example, sure looks that would illustrate their religion (turbans for Sikhs or specific clothing items depicting classical dancers).

In terms of game and story writing, the writer would focus on evoking certain realizations amongst players of the inconsistencies in real life. For example, in the Crusader's world, her father becomes an innovation king because he recognizes the systematic and institutional failures in caring for families. Therefore, he is forced to take matters into his own hands. Such writing and storytelling techniques can have a spillover effect on the game mechanics as well. For instance, if enough people start taking home innovation initiatives, there might be enough momentum to start a bottom-up movement leading to a sustainability community.

Furthermore, the team also discussed how they could expand on such mechanics and add complexity to the system that is being painted. For example, pressure, obstacles, and

obstruction are added on by governmental or organizational groups to stop the community from being empowered. The opposite can also be achieved where top-down actors and institutions encourage the development of community-based knowledge sharing; civil communities continue to inform each other on how to adapt and adapt to worsening societal and environmental conditions. Therefore, it strengthens societal connections. These mechanics can and would be culturally contextual. The mechanics governing the spread of awareness (in the game) would be sideways.

Incorporating environmental narratives

Regarding incorporating environmental narrative, the first point was that the team would explicitly avoid translating narratives and stories directly. This means that they would prevent translating an interviewee's narrative as it is for a character of the game. This goes back to the point of direct adaption of real-life cultures and people, which does not contribute to the creative and original process of the game. Instead, the team would, for instance, study how an interviewee experiences privilege or the lack thereof, what instances caused this realization, and how their emotional energy gets impacted going forward. Therefore, dissecting and discovering how a person is confronted with immunities or vulnerabilities in their world has shown to be a better approach to capturing and incorporating narratives internally.

Regarding game mechanics related to activistic movements, the game developer and producer showed explicit interest in critical decision-making moments. For example, how does a collective decide their activist movement/cause has gained enough momentum to take specific actions (e.g., court cases)? They also discussed another point related to character building and narrative design: finding out what shapes a person's narrative. This does not only happen through internal systems such as familial values and mental models but also through external influence. These could be art (Figure 4), books, hobbies, movies, podcasts, educational systems, etc., that shape someone's outlook on their world. An example is the Crusader from her reading escapism or the Reasoner's hobby of mountain trekking.



Figure 4. Art made by the Thrifter.



Figure 5. The Thrifter's painting desk.

More visual interests were highlighted in the art and UI of the game. For example, how do the interviewees' working (Figure 6), or hobby desks look (Figure 5), what is the view outside their windows (Figure 7), what do their bookshelves (Figure 8) look like and how do they organize them, how have their gardens or indoor gardens developed over time, etc. These

inputs hold some insight into how one sees oneself, and they highlight one's personal avenues of escapism (looking out a window).

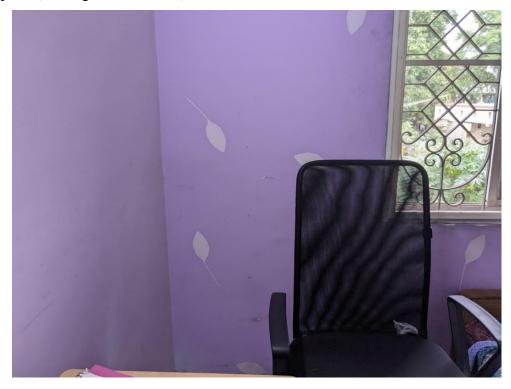


Figure 6. The Thrifter's working desk.

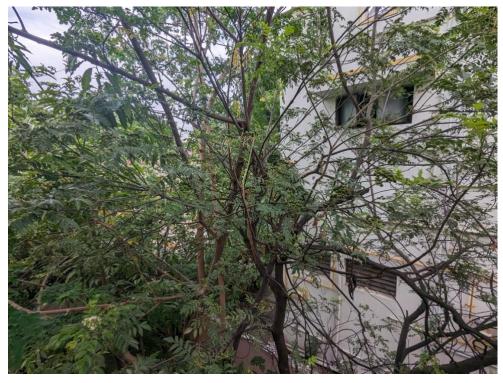


Figure 7. The view from the Thrifter's windows.



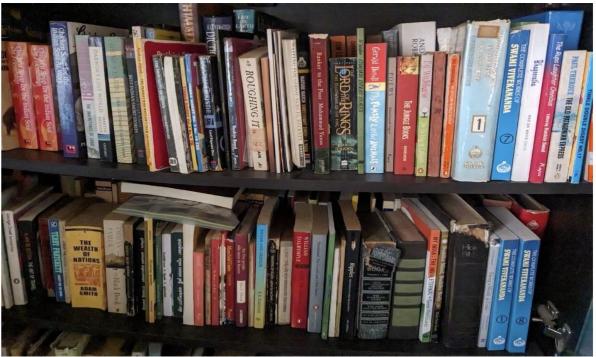


Figure 8. Pictures of bookshelves of the Ponderer (top) and the Thrifter (bottom).

The impact director pitched a methodological approach for incorporating environmental narratives to initiate the playtesting phase with the people who are the inspiration for the game. So, directly reaching out to these interviewees and additional environmental activists and actors whose narratives this game tries to capture and portray. The team discussed that this deliberate collaboration step will provide them with direct feedback on what the game art, design, cards, mechanics, and writing remind the environmentalists of.

Furthermore, the game's relatability, accuracy, appropriateness, and quality can be adjusted, increasing the game's credibility. During the discussion of this step, the developer and producer also pitched to hold workshops to cultivate additional card mechanics and design. Therefore, this increases collaboration and gives the participants a sense of empowerment.

Overall, the team admitted that they do not fully grasp how environmental action and movements materialize regarding timing, pacing, wins, losses, conflict resolution, and gathering momentum. A deeper understanding of this, especially contextually for India, would guide the game design and mechanics in a big way.

Lastly, the impact director also pointed out that it would be valuable for me to participate in the playtesting. This is to get feedback from someone who serves as a repository of such research.

Realism and creativity

The team revealed what makes a game compelling. The members emphasized that overly serious tones and educational and didactic approaches have proven to fail when building a game that touches on relevant and urgent topics. For All Rise, the team wants to create a player experience through moments of joy, fun, company, and compelling mechanics. To help this, the game writer outlined that tapping into approaches of fictional worldbuilding helps immensely to lighten up the heavy topics the game touches upon. It also provides the team with the creative freedom to explore unrealistic things through art and design, such as the river on fire and funky colors. The speculative aspect of fictional design helps decompress the players' minds. It helps them forget about the severe inspirations the game represents.

Furthermore, the realism approach was discussed as more of a hurdle for the game if it wanted to touch upon the (Indian) political contextualization of the game. This would directly impact the reach of the game in different markets in the world. Therefore, to avoid real-life conflicts with the game's publishing, it's again best to fictionalize political or religious systems that would otherwise be problematic. Thus, to portray complex concepts like innovation and sustainability, the game's design, art, and writing must simultaneously be holographic of multiple messages.

Realism and authenticity also posed hurdles in portraying the game's environmentalists. The narratives, purpose, and mechanics should be authentic in feel but not in literal presentation. This means designing characters and their narratives to be realistic would compromise on the fun and compelling thinking of the game. It should not feel like the team has directly adapted a group of activists' lives into a game but is more drawn from their

experiences, creatively rearranged things, and made additions to bring forth certain realizations for players.

The fictional design was substantially favored because it helped the team showcase these interviewees' extraordinary, diverse, prosperous lives and continue to live inventively. It helps them to paint them as superheroes of today's world.

5.2.2. Insights from Discussion Workshop 2

Game design and art

To start, the UI & art director and artist emphasized that empirical data can be instrumental in the creative process of game development. It helps them escape the feelings of being an imposter in designing a game of a foreign culture. The team members mentioned that since they all come from different nationalities, cultural backgrounds, and amounts of exposure (to foreign worlds), having someone (such as me) present authentic empirical findings helps them free their minds of any assumptions and interpretations.

Furthermore, the type of data this research captured and presented was highlighted to be authentic and unique because one cannot access such data readily, such as through a Google search. They stressed that even if one has traveled to places like India, the lens of subjective interpretation can rarely be escaped.

When I presented the ways the environmentalists engaged in real-life escapism, it proved to be an excellent reinforcing reminder for the team that it is essential to create dream worlds in games that can also offer a sense of escapism to the players. Therefore, this practice performed by the interviewees in their natural worlds inspires the team to adopt such practices into their game-developing practice. This is a very intentional practice that connects to decompression from section 5.2.1. disassociation was framed as an essential experience goal of the game through visuals, writing, and mechanics.

For game design and art, the team members also highlighted that it is essential for them to know what the interviewees recognized in themselves as distinct traits. For example, the Veteran considers himself as a spiritual soldier. Getting first-hand accounts of how they seem to be seated in their worlds and environments helps the artists draw out notions visually.

Although the data collection in this research did not focus on capturing India's environmental data, this topic emerged during the workshop. Since the game centers on ecological crises, it would be valuable for the team to understand how these crises manifest in people's daily lives. For example, what do heat waves or flash floods look like, and what physical effects do they have on their surroundings? How do the people in India dress to adapt

to the heat waves, and how do they cope with worsening weather conditions? Therefore, understanding environmental narratives proved very important to represent every aspect of the game, from clothing to the color hues chosen. The team added that collaborations with actors from India who are actively involved in environmentally friendly initiatives help them achieve the above goals. For example, working with a sustainable fashion designer based in India.

Game developing

In designing game mechanics, the team showed particular interest in ideas like internal/external conversations and building internal/external communities. This includes ideas where one can represent a character's dream world or mental world, allowing them to have internalized battles and conversations with themselves and the people in their worlds. These interactions enable the players to explore pathways, deep questions, mystery, and emotions without directly influencing the game's storyline. Similarly, the concept can be used to influence the game's storyline. To achieve an objective of the game, the player must strategically think about how they might approach forming a community (by using the game's mechanics).

The external aspect of it relates to drawing on the same principles but outside of the game: building game communities inspired by All Rise. For example, developing compelling game mechanics that almost push you to start conversations about the game on digital platforms like X (former Twitter), YouTube, or game websites. This might lead to the forming of real-life or online communities inspired by All Rise's objective. However, such features should not be forced on or irksome to the players. The option must exist if one should choose to get involved more.

The team discussed that it might be helpful to have game mechanics and developing techniques readily available for those game developers who want to learn more about building similar genre games. Therefore, recording the steps taken during the research and back-end work might be necessary for the future of similar games.

The team also briefly touched upon the game's expansion, which can, in turn, reflect on the complexity of the designed worlds. Suppose All Rise was to expand its development to further chapters based in different parts of the world. In that case, they may want to include game mechanics that reflect the interconnectedness of all the chapters and storylines, for example, as done in Dragon Age. Therefore, choices made in Chapter 1: Murder of the River may come back to help or haunt you in Chapter 3.

Game writing

The game writer expressed specific writing goals that she wants to achieve through the game. Firstly, in terms of character arcs and journeys, she touched on the fact that it needs to be holographic, meaning that narrative writing needs to focus a lot more on designing a complex system that can tell different stories to different people. It cannot and should not fall into the trap of focusing on individual stories of game characters and interviewees.

Secondly, the designed world must underline that activism is collective and personal. The game should convey that environmental action can be achieved in numerous, flexible ways, and such action can exist in the most basic worlds or narratives.

Thirdly, the writing also needs to reflect real feelings of urgency, anxiety, despair, powerlessness, and ennui, which are felt daily by activists and non-activistic people alike. However, this should be achieved in a fun way that does not make the game depressing. Because the game is radical, propagandistic, and imaginative, it must be felt subtly but powerfully. Therefore, narrative and game writing must dive deeper into the psychology of change, activism, and collective action.

The game writer also touched upon how she may produce feelings of relatability to the characters amongst players. For example, showing that a character's hobby is reading and putting in references to real books (Lord of the Rings, Harry Potter, etc.) builds an emotional connection between players and fictional characters.

She also showed the importance of understanding the practicalities of time, impact, and action related to activism efforts for her and the team. This applies not only to the time cycles of social phenomena, like how social movements are birthed and die but also to studying the natural cycles governing nature, such as cycles involved in forming fossil fuels and depositions of natural elements through natural sinks, etc. To achieve this, she stressed again that magical realism and the fictionalization approach would greatly help because she can take something realistic, retain its cyclical nature, and creatively add imaginary elements.

To conclude, the game writer also stressed that hopefully, with time, the game will lighten up on the textual output and develop more on the visuals and mechanics to take on the roles of narrative design. This will keep the game way more interesting, approachable, and playable.

Cross-disciplinary questions

For cross-disciplinary questions, I asked the team what their success metrics for this game would be, how they expect the game community around such games will build, what the

motivational triggers or attractive factors would be for someone to play All Rise, and their thoughts on game testing and future collaborations of the game.

The team again spoke of wanting to break free from the traditional gameplay of player, action, and consequence and bring in the complex nature of humans, communities, and the environment. To provide not only the players of the game but also the components of the game agency, empowerment, and voice is their focus. For example, giving NPC agency, purpose, and natural elements like trees, waterbodies, and forests a voice and perspective would push the boundaries of what the game industry can achieve.

As for building communities, motivational triggers, and attractions, the team mentioned features like a codex, footnotes, citations, and credits. These elements can provide further information on real-life inspirations, contributors to the game, real-life social movements, initiatives, and organizations. This allows the players to engage more deeply with the game's content and get involved with causes and initiatives that resonate with their values. Another innovative step would be organizing game jams⁵ where like-minded people from the game-developing industry can develop similar games.

The team spoke about the severe demand of the game industry, where the players want games that mirror the contemporary aspects of society. Building game mechanics, cards, and art through workshops and collaborations with activists helps increase the credibility and validity of the game. It increases the team's confidence and comfort in doing contemporary work honestly without the fear of running into issues related to stereotyping and appropriating.

On a concluding note, the game's success will be measured in various ways. First, the game does not serve the sole purpose of education and insight but more as a springboard from which it opens a new world of activism and collective actions. Second, a significant success of the game will be if it produces enough revenue that can be used to fight real-life environmental court cases. And third, birthing conversations and real action amongst the gaming community and industry that is visible and can be traced back to the game.

5.3. Discussing the game design process based on the interviews

5.3.1. Implications of the literature review and discussion workshops for All Rise In this section, I discuss the critical lessons and insights from Chapter 4. They all touch on the practices and goals employed by game-developing teams.

⁵ Definition of game jams: An event where various experts in the game developing industry get together and make small games in a limited amount of time (Pellechi, 2023).

For All Rise, this research conducted quite in-depth interviews to draw out the details of the activists' lives, worlds, thinking, etc., hoping to achieve the narrative goals the game wants to capture. Furthermore, the game writing, designing, UI, and art will achieve the experience goals. This will convey a sense of the game's world in terms of its location, cultural society, character design, artifacts included in the art, etc. (Baldacci, 2017)

In the first chapter of All Rise, the murdered river falls somewhere in the middle, where it is a real-world adaptation of a fictional world. It aims to draw inspiration from real environmental court cases and, primarily through this research, by studying the narratives and worldmaking efforts of real environmentalists based in India. Therefore, it also draws upon developments in the cultural society in India in terms of how the society has and is developing in the sustainability field (Innocenti & Pescatore, 2017). All Rise is also fictional because it does not focus on replicating and presenting accurate court case details or its study subjects (interviewees). It aspires to draw out the details and creatively mix them so that it births ingenuity amongst players. Moreover, it also represents a river being murdered and set on fire, which logically could not happen in the real world.

In depicting and creating sub-cultures for All Rise, I believe the point of using multiple cultures must be addressed, especially in the case of All Rise. For example, the Portuguese colonization of Goa in India has influenced the local language (Konkani), cuisine, the emergence of Christianity, architecture, agricultural practices, etc (Roy, 2023). Similarly, Kochi in Kerela shows influences of Jewish culture, Pondicherry in Tamil Nadu - French, Mumbai in Maharashtra - Parsi, and Kolkata in West Bengal – Chinese (Goswami & Malik, 2019; Kabir, 2022; The Editors of Encyclopaedia Britannica, 2024; TNM, 2016). Therefore, if the game is to further develop, it may enhance its worldbuilding and provide a lot of cultural and historical depth to the game. However, if they choose to do this, they must do it with care and sensitivity. It may become problematic if the team wrongly depicts many co-existing cultures. For example, if the blend and co-existing of Hindus and Muslims is not well understood from the real world in India, then it may become problematic.

If the team decides to keep the game's expansion local to India, depicting people from different parts of the country becomes a critical point. Discovering and exploring how the locals depict and adapt their history, culture, and provinces/regions in real life and media is crucial. So, for example, socio-cultural and economic conditions may differ if you compare some provinces from the north to the south. This point is stressed by Forbes (Forbes & Havlidis, 2023). When she highlights that the past is fictional, it is impossible to know how things were in the past world. But you experience and inform yourself how people in the present, in the

same setting, reimagine their past. Capturing these nuances and judiciously developing them to be portrayed in the game will directly impact its reach and appreciation by the players.

Lastly, the game expands by adding chapters with different international geographic focus (for example, South Africa, Australia, New Zealand, etc). The worldbuilding for All Rise has the potential to be unique and profound by bringing in concepts like globalization, interregional relations, political power play, etc.

In terms of expansion and reach of the game, game-developing teams need to be informed of the politics involved in defining nation-states. By this, I mean that if All Rise ever chose to focus on the ecosystems of the Himalayas and include characters from northern India – Jammu and Kashmir- and label them Indian, this would have repercussions for publishing the game in China. This is because the government of China officially includes northern Indian and Himalayan regions as their own (BBC, 2020). Such an issue may force the game team to develop a different version of the game that is acceptable and upholds Chinese standards. This adversely affects the reach of the game and increases resource use.

To represent contemporary cultures and topics of modern society, as in the case of All Rise, the game revolves around the rebellious but joyous side of environmental activism. Taking corporations and governments to court over the ecological crisis is quite a severe plot to develop. However, to achieve this playfully, especially as it is a deck builder game, it must happen through writing and designing the characters, who are carriers of the game's messages.

The character narratives and design have so much potential for a game like All Rise. To me, it is an open stage to show the brave and valiant world of activism and emphasize the human nature of those involved. Being part of something that is for the bigger purpose of the world, these characters can carry flaws that we see daily in members of our families, friends, colleagues, and friends, and we love them, nonetheless. A feature mentioned by Forbes & Havlidis (2023) is the flaw of the honor code a character can possess. Take Ned Stark from Game of Thrones as an example, or in real life, the activists' part of the Just Stop Oil movement that threw tomato soup on artwork. They believe their intentions are for a better, fossil fuel-free future. Still, their actions might do more damage than good, especially regarding the reputation of other sustainability movements. However, in Ned Stark's example, we form a particular type of connection to the character, which makes our emotional experience of losing him even more painful and sad. Therefore, evoking the correct emotions through the proper examples is significant.

To conclude, I find it notable that contemporary topics, subjects, and debates can entail formations of polarizing sides and very subjective opinions and movements. Considering

games as a creative output and, therefore, art, I think this is bound to happen. However, forming such sides and evoking emotions must be carefully thought out so we, as a society, do not progress backward but come out of it with constructive lessons, changed worldviews, and perspectives for the better.

5.3.2. Lessons for the game industry from the environmentalists

The development of these points indicates that a process with a lot of potential to create good, impactful games is adopting an internal game-development strategy. Especially if the game involves the adaption of human behavior, human psychology, human communities, and their evolvement.

For All Rise, after having examined interviewees' mental systems and their real worlds, I stress that the game must eventually result in a humane understanding and acknowledgment of their experiences, journeys, and lives. Moreover, the team must go the extra mile to exhibit this understanding through their field expertise.

To me, the objective and the discussion workshops highlighted that the team has a central focus on making the interviewees feel seen, heard, and listened to. The team also stressed that it would be a disservice to indicate that they, as the onlookers, can relate to them, which they probably will never be able to. Still, the creative process and result of the game must resonate with them through feelings of empowerment, recognition, and respect. And I think this cast of minds must be more widely prevalent in game development.

Therefore, the game industry stands to learn from the environmentalist how to look beyond the details. The interviewees showed explicit interest in the stories of those whose voices are marginalized and considered insignificant. They approach this with the correct intentions, an open mind, and a willingness to learn. Eventually, they will broaden their horizons, worldviews, and perspectives and unlearn habits that 1) have been engraved in them by the governing systems and 2) do not serve them presently and for the future. These learning and unlearning tendencies can be seen as inspirations for the game industry. The industry can adapt and adopt the habits and mental models used to achieve their goals in their practices. Therefore, genuinely dissecting the values and principles put in place by the more significant industry, observing and discerning what aspects of those do not serve the future, and respectively unlearning those is a precious practice to attain. Furthermore, exploring this vast world that is the melting pot of internal and external worlds can serve as the mysterious well of enlightenments that hope to be uncovered.

6. Overall Discussion

This section discusses the implications of this research in section 6.1. moreover, in section 6.2. It also reflects on the limitations and advantages of choosing an untraditional methodology and what could have been different to improve the quality of this research. Lastly, in 6.3, I present the implications and possibilities for further study.

6.1. Discussing the implication of the report

Considering the overarching societal impact of the findings of this report, referring to Abson et al. (2017) and Meadows (1999), I see that significant industries like games, entertainment, and media at large have a lot to learn from the way environmentalists approach making of their lives and vice versa. In this section, I want to go beyond my research's scientific and practical impacts.

Firstly, societal awareness. With the power and reach of industries like games and entertainment, insights and lessons on how one can shape one's life thinking and simply lead better lives can be maximized. Here, I emphasize that these lessons can go beyond environmental action and beliefs by providing the players/consumers of these games and media with mechanisms and mental models to reflect on their own perspectives, worldviews, and overall worlds they inhabit.

Secondly, this research highlights a community that might be untapped for environmental progress in gaming industries, such as online communities that are kept mainly together and guided by the overall creative and narrative ambitions of certain games, such as Doom. Therefore, by initiating the process of the formation of such communities that have a passion for not only gaming but also environmental effort, games like All Rise can create more robust networks and platforms that target the community for future collaborations and innovative collective imaginations to come together.

Thirdly, the long-term impact of writing, developing, and designing games like All Rise may have on making a cultural shift for sustainability and resilience. By this, I mean that harnessing the reach and power of such industries and developing games that intrinsically are radical propagandistic and have a messaging that is for environmental and sustainability advancements can not only be used to foster internal and external shifts amongst the inhabitants of various societies and communities but this goes a step beyond where if multiple collectors and societies and communities and individuals attain a mental shift and how they relate to

nature and the world around them such shifts might manifest in broader realities through more enormous structures such as political regimes corporations and international governing bodies.

All in all, we can leverage games not only to validate, empower and encourage activists to continue making impact but also harness the creative freedom (through craft and expression) of the game and media industries to mobilize society in a decentralized manner. Both, activism and worldbuilding (in games) involve re-imagination and dreaming and combining them together could be an ingenious way to gain momentum. Therefore, using these two for anticipatory governance for sustainability (Vervoort et al., 2022) strategically unites their strengths to fight a larger battle together.

To conclude, the points mentioned above show that search transdisciplinary developments can be used to harness the power of the imagination of individuals and collectives to restructure societies that serve their inhabitants' approved organizations and collectors that do not act in favor of their inhabitants' rethink or relationship not only to nature but also the cohabitants of our worlds and find ways in which we can reconnect to each other on an intrinsic human level.

6.2. Benefits and drawbacks of the methodological approach

6.2.1. Discussing the research approach for RQ1

The research approach for RQ1 use in-depth exploratory interviews to uncover participants' methods to shape their lives and worlds they inhabit. I avoided constrictive theoretical frameworks to encourage open detailed responses from the respondents. However, the interview scheme presented in Table 2 proved to be challenging, as general questions were often too vague to receive detailed answers. The sub-questions were almost always used to start discussions, helping participants articulate their thoughts. This indicates that participants needed guidance to start imagining and finding the correct explanations to articulate their thoughts.

The codes, however, was effective in capturing the nuances and sentiments of each participant's life in worldbuilding terms. This aspect of the approach ensured that the All Rise team comprehended the depth and richness of the participants' exercise.

6.2.2. Discussing research approach for RQ2

For RQ2, I facilitated in discussions with the All Rise team of 5-6 members. The teams small size meant each member was a singular expert in their field for this game (writer, artist, UI

director, developer, etc.); making the results in section 5.2.1. and 5.2.2. subjective to their *individual practice*. However, the small group size allowed for in-depth and fruitful conversations during the discussion. This allowed me to 1) capture even participants' ideas and inputs, 2) clarify doubt and additional questions, and 3) revisit some ideas for further expansions of the topics.

The workshop results indicate that such exercises can be productive if bigger studios and teams adopted this approach for their projects. It may allow them to detach from their emersed practices, zoom out, and deliberate on the ongoing process. For the All Rise team it provided a moment for them to 1) introspect their expert practice from the game, 2) discuss their positionality in developing such a game, and 3) think of the game and its future developments.

6.2.3. Discussing the iterative research design of this report

Throughout the research, I also employed an iterative approach where I analyzed the data and presented the results by building a cross-disciplinary design. The codes are inspired by mechanics and terminologies used in the game developing world, and the worlds of the interviewees are presented so that any game writer, narrative designer, or game developer can choose and immerse themselves in any of the worlds (Baldacci, 2017). I did this so I could 1) retain the richness of the data captures and 2) give each interviewee their rightful place without stripping a lot from their worlds (Innocenti & Pescatore, 2017).

Lastly, because the discussion workshop 1 was conducted while I was collecting data for RQ1, the discussions with the All Rise team led me to recognize the gaps in my interviewee scheme for RQ1. Successively, I sent follow-up emails to the interviewees for a second round of data collection, which was more personal, visual, and further tailored towards the experts' needs for the game (see Appendix E for the follow-up questions) (Baldacci, 2017). This yielded only two responses (see Appendix F) but gave me an insight into what the second round of data collection for such research might look like.

6.2.4. Overall limitations of this research

Conducting this research was an enriching experience as I explored a new way of conducting scientific research. While minimizing theoretical scientific research I gathered an overwhelming amount of information captured from RQ1 and RQ2. The lack of a selective procedure for RQ1 interviewees attracted respondents from diverse fields of environmentalism. This resulted in diverse but hard-to-contextualize data. This open selection posed challenges due to India's inherent diversity. A narrower focus, such as Indian environmental lawyers,

could have provided specialized insights but limited the All Rise team's understanding of the activist system.

The analysis for RQ1 required detailed exploration made it difficult to scale down the project without compromising its quality. This extensive scope of the research, while potentially too broad indicates the scalability which is discussed in section 6.3. The interpretation of the results for RQ1 lacks a theoretical depth. A literature review on applying cultural and anthropological theories in the Indian context could have enhanced the structural elements of data collection. Additionally, focusing on sub-cultures, regions or religious collectives might have provided different insights but also imposed limitation regarding cohort availability and willingness to participate.

6.3. Implications for further research and practice

6.3.1. Further research avenues

The results and discussions underscore the urgent need for more scientific research to understand modern-day societal developments for sustainability, particularly in their representation in other fields (e.g., games). Future research should explore the significant contextual factors (political, religious, economic, etc.,) and their impact on the present-day cultures of environmentalists, activists, lawyers, NGOs, social movement groups, etc. I recommend immersive methods like ethnography, qualitative psychological research, and observation-based research to capture both internal and external expressions of the study subjects, including cultural consumption (music, art, games, fashion, etc.) (del Río, 1996; Dubourg & Baumard, 2022; Rössel et al., 2017).

Such research could provide valuable insights into figurative and real-life collectives formed in response to the environmental crisis, offering perceptible results for both scientific and general communities. These approaches would reveal unique practices and mental models that transpire in different ofthe world and highlight hidden parts Indigenous/marginalized/bottom-up community knowledge that remains untapped. Advancing these research avenues could inspire cross-disciplinary and transdisciplinary collaborations, enriching various fields understanding the complex nature of humans, their existence, and sense-making systems (Kiatkoski Kim et al., 2022; Mattor et al., 2014).

6.3.2. Implications for creative practices

For creative practices such as game development, writing, art, etc., it might prove beneficial to strategical involving experts from the disciplines to inform their desired output (e.g., history, religion, economics). especially when aiming to represent societal and human elements specific to regions, cultures, communities, etc. This approach ensures a comprehensive and nuanced outcomes.

Cross-disciplinary collaboration for production companies and studios is an essential step towards a sustainable future in the game industry, particularly in portraying the culture of activism. Therefore, the research avenues I suggested in section 6.3.1. could help develop typologies guiding game industry in creation of higher-quality games.

7. Conclusion

This study's aim was two-fold, 1) to uncover how environmental activism transpires amongst Indian environmentalists' worlds and 2) how we can apply the insights from the Indian environmentalists to create games. Therefore, the research questions read as follows: RQ1) How do Indian environmentalists experience and engage in shaping the worlds they inhabit? RQ2) How can we employ the insights gained from investigating Indian environmentalists' worlds to inform the creation of fictional game worlds?

In answering RQ1, I discovered that the respondents experience their worlds with patience and inquisitiveness. They open their worlds to be able to explore and welcome new perspectives, adventures, and encounters that could enrich their minds and lives. They engage with their worlds discerningly, examining many individual and collective values, beliefs, and actions before deciding to participate in those worlds. Their engagement also highly depends on their feeling acknowledged and valued for input. They also manifest a sense of belonging and value by developing their consciousness of the larger community, which is – tied to intentions and awareness of the environmental crisis and surrounding themselves with their kind of people.

In answering RQ2, I discovered that designing with intention and profoundly exploring the contextual factors of the implication is crucial to the creative practice. Although RQ1 of this research did not research the specific methods employed by the environmentalist, the general insight discussed in section 4.1 holds some inventiveness for the game development world. The considered analysis of how the passage of time affects the evolvement of cultures, individual psychology, and collective psyche holds a lot of potential for creative practices and industries that aim to find inspiration in the environmental government world.

To conclude, I think there is a significant opportunity for the media and entertainment industries to harness the power of worldbuilding and paint narratives to generate feelings of resonance and empowerment. This approach can validate activist work and inspire more people to join the sustainability movement. Policymakers, activists (groups), societal actors, and change makers should pursue collaborations with those engaged in creative practices (game developments, artists, writers, etc) to explore innovative ways to amplify causes.

8. References

- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. https://doi.org/10.1007/s13280-016-0800-y
- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., Von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. https://doi.org/10.1007/s13280-016-0800-y
- Adams, W. C. (2015). Conducting Semi-Structured Interviews. In *Handbook of Practical Program Evaluation* (pp. 492–505). https://doi.org/10.1002/9781119171386.ch19
- Agrawal, A., Brandhorst, S., Jain, M., Liao, C., Pradhan, N., & Solomon, D. (2022). From environmental governance to governance for sustainability. *One Earth*, *5*(6), 615–621. https://doi.org/10.1016/j.oneear.2022.05.014
- Anand, C. (2022, December 12). The Essential Guide to Worldbuilding [from Book Editors].

 *PaperTrue. https://www.papertrue.com/blog/worldbuilding/
- Anthati, B., Cheema, G. P. S., Yadav, K., & Amrale, S. (2022). Sustainability through Spirituality:

 Exploring the Influence of the Ancient Indian Concept of Interconnectedness. *South Asian Journal of Management*, 29(5), 46–68.

 https://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=163393846&site=ehost-live
- Baldacci, C. (2017). "Visible World": The Atlas as a Visual Form of Knowledge and Narrative Paradigm in Contemporary Art. In M. Boni (Ed.), *World Building* (pp. 77–90). Amsterdam University Press. https://doi.org/10.2307/j.ctt1zkjz0m.7

- Batel, S., Castro, P., Devine-Wright, P., & Howarth, C. (2016). Developing a critical agenda to understand pro-environmental actions: Contributions from Social Representations and Social Practices Theories. *WIREs Climate Change*, 7(5), 727–745. https://doi.org/10.1002/wcc.417
- BBC. (2020, June 16). *India-China dispute: The border row explained in 400 words*. https://www.bbc.com/news/world-asia-53062484
- Beautiful Trouble. (2024, June 19). Beautiful Trouble. https://beautifultrouble.org
- Bijnen, K. (n.d.). Literature Today, Utrecht University.
- Bolton, M. (2022). A system leverage points approach to governance for sustainable development. Sustainability Science, 17(6), 2427–2457. https://doi.org/10.1007/s11625-022-01188-x
- Bourdieu, P. (1977). *Outline of a Theory of Practice* (R. Nice, Trans.). Cambridge University Press. https://doi.org/10.1017/CBO9780511812507
- Bowman, G., MacKay, R. B., Masrani, S., & McKiernan, P. (2013). Storytelling and the scenario process: Understanding success and failure. *Technological Forecasting and Social Change*, 80(4), 735–748. https://doi.org/10.1016/j.techfore.2012.04.009
- Breuleux, Y., De Coninck, B., & Therrien, S. (2019). The World Building Framework for Immersive

 Storytelling Projects. SHS Web of Conferences, 64, 00003.

 https://doi.org/10.1051/shsconf/20196400003
- Bruner, J. (1990). Acts of Meaning. Harvard University Press.
- Candy, S., Potter, C., Abdulla, D., Ansari, A., Antonelli, P., Auer, T., Auger, J., Baerten, N., Borland, R., Boykett, T., Burdick, A., Canli, E., Chen, K.-H., Delgado, D., Draudt, A., Dunagan, J., Fry, T., Gaffney, N., Hadley, J. J., & Zaidi, L. (2019). *Design and Futures*.
- Chan, K. M. A., Boyd, D. R., Gould, R. K., Jetzkowitz, J., Liu, J., Muraca, B., Naidoo, R., Olmsted, P., Satterfield, T., Selomane, O., Singh, G. G., Sumaila, R., Ngo, H. T., Boedhihartono, A. K., Agard, J., Aguiar, A. P. D. de, Armenteras, D., Balint, L., Barrington-Leigh, C., ... Brondízio,

- E. S. (2020). Levers and leverage points for pathways to sustainability. *People and Nature*, 2(3), 693–717. https://doi.org/10.1002/pan3.10124
- Corry, O., & Reiner, D. (2021). Protests and Policies: How Radical Social Movement Activists

 Engage with Climate Policy Dilemmas. *Sociology*, 55(1), 197–217.

 https://doi.org/10.1177/0038038520943107
- Crosby, J. (2003). [Review of Review of The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change, by T. Schatzki]. https://ndpr.nd.edu/reviews/the-site-of-the-social-a-philosophical-account-of-the-constitution-of-social-life-and-change/
- Davelaar, D. (2021). Transformation for sustainability: A deep leverage points approach.

 Sustainability Science, 16(3), 727–747. https://doi.org/10.1007/s11625-020-00872-0
- de Moor, J., & Marquardt, J. (2023). Deciding whether it's too late: How climate activists coordinate alternative futures in a postapocalyptic present. *Geoforum*, 138, 103666. https://doi.org/10.1016/j.geoforum.2022.103666
- del Río, P. (1996). Building Identities in a Mass-Communication World: A Commentary on Steven Miles's "The Cultural Capital of Consumption." *Culture & Psychology*, 2(2), 159–172. https://doi.org/10.1177/1354067X9600200202
- Di Filippo, L. (2017). MMORPG as Locally Realized Worlds of Action. In M. Boni (Ed.), *World Building* (pp. 231–250). Amsterdam University Press. https://doi.org/10.2307/j.ctt1zkjz0m.16
- Dubourg, E., & Baumard, N. (2022). Why imaginary worlds? The psychological foundations and cultural evolution of fictions with imaginary worlds. *Behavioral and Brain Sciences*, *45*, e276. https://doi.org/10.1017/S0140525X21000923
- Ehrenfeld, J. R., Roscoe, G., & Tierney, B. (2004). Searching for Sustainability. 5(8).
- Ekman, S., & Taylor, A. (n.d.). *Notes Toward a Critical Approach to Worlds and World-Building*.

 3.

- Fischer, J., & Riechers, M. (2019). A leverage points perspective on sustainability. *People and Nature*, *I*(1), 115–120. https://doi.org/10.1002/pan3.13
- Fisher, D. R., & Nasrin, S. (2021). Climate activism and its effects. *WIREs Climate Change*, 12(1), e683. https://doi.org/10.1002/wcc.683
- Forbes, J., & Havlidis, D. (2022, May). World Anvil Worldbuilding Podcast—Episode 21 part 1 & 2: What to care about when creating character with Matan Gilat. Spotify. https://open.spotify.com/episode/3DM1XDZrJVwwJ8ioOaKpzK
- Forbes, J., & Havlidis, D. (2023, August). World Anvil Worldbuilding Podcast—Epidsode 35, part

 1 & 2—Adapting real world cultures with Basheer Ghouse. Spotify.

 https://open.spotify.com/episode/4p8HvgOIAJzVXnQPpRhkyT
- Foucault, M. (1977). DISCIPLINE AND PUNISH.
- Garfinkel, H. (1967). Studies in Ethnomethodology. Prentice-Hall.
- GDC (Director). (2016, September 23). A Geographer's Guide to Building Game Worlds [Video recording]. https://www.youtube.com/watch?v=EVGonAUUQ8c
- Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*. University of California Press.
- Goh, E., Al-Tabbaa, O., & Khan, Z. (2023). Unravelling the complexity of the Video Game Industry:

 An integrative framework and future research directions. *Telematics and Informatics Reports*,

 12, 100100. https://doi.org/10.1016/j.teler.2023.100100
- Goodman, N. (1978). Ways of Worldmaking. Hackett Publishing.
- Goswami, S., & Malik, U. (2019). Urban Ethnic Space: A Discourse on Chinese Community in Kolkata, West Bengal. 10(1), 25–31.
- Gupta, D. S. (2022, January 18). Shikakai—Uses, Benefits, Side Effects & Precautions—

 PharmEasy. PharmEasy Blog. https://pharmeasy.in/blog/ayurveda-uses-benefits-side-effects-precautions-of-shikakai/

- Hölscher, K., Wittmayer, J. M., & Loorbach, D. (2018). Transition versus transformation: What's the difference? *Environmental Innovation and Societal Transitions*, 27, 1–3. https://doi.org/10.1016/j.eist.2017.10.007
- Holtz, G. (2014). Generating Social Practices. *Journal of Artificial Societies and Social Simulation*, 17(1), 17.
- Innocenti, V., & Pescatore, G. (2017). Narrative Ecosystems: A Multidisciplinary Approach to Media Worlds. In M. Boni (Ed.), *World Building* (pp. 164–184). Amsterdam University Press. https://doi.org/10.2307/j.ctt1zkjz0m.12
- Javanmardi, E., Liu, S., & Xie, N. (2023). Exploring the Challenges to Sustainable Development from the Perspective of Grey Systems Theory. *Systems*, 11(2), Article 2. https://doi.org/10.3390/systems11020070
- John. (2020, April 11). World-Building: The 10 Key Elements. The Art of Narrative. https://artofnarrative.com/2020/04/11/world-building-the-10-key-elements/
- *JSTOR: Page not found.* (n.d.). Retrieved July 12, 2024, from https://www.jstor.org/sici?sici=0034-6543%28199821%2968%3A1%3C35%3AITATOR%3E2.0.CO%3B2-G&origin=crossref
- JUGAAD definition and meaning / Collins English Dictionary. (2024, July 8).

 https://www.collinsdictionary.com/dictionary/english/jugaad
- Kabir, A. J. (2022, February 14). Creolisation in Pondicherry: The Superfluous Necessity. *ZIST*. https://www.zist.co/2022/02/14/creolisation-in-pondicherry-the-superfluous-necessity/
- Kiatkoski Kim, M., Douglas, M. M., Pannell, D., Setterfield, S. A., Hill, R., Laborde, S., Perrott, L., Álvarez-Romero, J. G., Beesley, L., Canham, C., & Brecknell, A. (2022). When to Use Transdisciplinary Approaches for Environmental Research. *Frontiers in Environmental Science*, 10. https://doi.org/10.3389/fenvs.2022.840569
- Klitkou, A., Bolwig, S., Huber, A., Ingeborgrud, L., Pluciński, P., Rohracher, H., Schartinger, D., Thiene, M., & Żuk, P. (2022). The interconnected dynamics of social practices and their

- implications for transformative change: A review. *Sustainable Production and Consumption*, 31, 603–614. https://doi.org/10.1016/j.spc.2022.03.027
- Kowasch, M., Cruz, J. P., Reis, P., Gericke, N., & Kicker, K. (2021). Climate Youth Activism Initiatives: Motivations and Aims, and the Potential to Integrate Climate Activism into ESD and Transformative Learning. *Sustainability*, *13*(21), Article 21. https://doi.org/10.3390/su132111581
- Kumar, S., & Giri, T. K. (2020). Interconnectedness between spirituality and sustainable development goals: Evidence from an Indian perspective. *International Journal of Indian Culture and Business Management*. https://www.inderscienceonline.com/doi/10.1504/IJICBM.2020.105553
- laurahurlburt. (2015, July 30). The Nine Elements of Worldbuilding. *M.E. Kinkade*. https://mekinkade.com/2015/07/30/the-nine-elements-of-worldbuilding/
- Leah Zaidi. (2019). Worldbuilding in Science Fiction, Foresight and Design. *Journal of Futures Studies*, 23(4). https://doi.org/10.6531/JFS.201906_23(4).0003
- Loscher, G., Splitter, V., & Seidl, D. (2019). Theodore Schatzki's practice theory and its implications for organization studies. In *Management, Organizations and Contemporary Social Theory*. Routledge.
- McBay, A. (2023, June 26). What great games and powerful social movements have in common.

 Medium. https://anticiplay.medium.com/what-great-games-and-powerful-social-movements-have-in-common-e8d7aec16b12
- Mar, R. A. (2004). The neuropsychology of narrative: Story comprehension, story production and their interrelation. *Neuropsychologia*, 42(10), 1414–1434. https://doi.org/10.1016/j.neuropsychologia.2003.12.016
- Mattor, K., Betsill, M., Huayhuaca, C., Huber-Stearns, H., Jedd, T., Sternlieb, F., Bixler, P., Luizza, M., & Cheng, A. S. (2014). Transdisciplinary research on environmental governance: A view

- from the inside. *Environmental Science & Policy*, 42, 90–100. https://doi.org/10.1016/j.envsci.2014.06.002
- Mignolo, A. (2019, August 19). Learning Through Worldmaking: The Design Way. *The Design of Things*. https://medium.com/the-design-of-things/learning-through-worldmaking-the-design-way-b0ed38cefc12
- NU.nl/ANP, D. (2021, October 26). *Grootste pensioenfonds van Nederland stopt met beleggen in fossiele energie*. NU. https://www.nu.nl/economie/6164256/grootste-pensioenfonds-van-nederland-stopt-met-beleggen-in-fossiele-energie.html
- Nguyen, C. T. (2020). Games as Social Transformation. In C. T. Nguyen (Ed.), *Games: Agency As Art* (p. 0). Oxford University Press. https://doi.org/10.1093/oso/9780190052089.003.0008
- Pellechi, G. (2023, October 10). You don't need to do game jams. *Medium*. https://medium.com/@GregoryPellechi/you-dont-need-to-do-game-jams-b9f071ccce83
- Pickering, M. (2008). *Research Methods for Cultural Studies*. Edinburgh University Press. https://doi.org/10.1515/9780748631193
- Puppim de Oliveira, J. A., & Qian, H. (2023). Perspectives in global environmental governance.

 Global Public Policy and Governance, 3(1), 5–11. https://doi.org/10.1007/s43508-023-00063-
- Richter, I., Gabe-Thomas, E., Queirós, A. M., Sheppard, S. R. J., & Pahl, S. (2023). Advancing the potential impact of future scenarios by integrating psychological principles. *Environmental Science & Policy*, *140*, 68–79. https://doi.org/10.1016/j.envsci.2022.11.015
- Robinson, J. B., & Maggs, D. (n.d.). Sustainability and the twilight of the modern world.
- Rockström, J., Bai, X., & deVries, B. (2018). Global sustainability: The challenge ahead. *Global Sustainability*, 1, e6. https://doi.org/10.1017/sus.2018.8

- Roine, H.-R. (2016). *Imaginative, Immersive and Interactive Engagements. The Rhetoric of Worldbuilding in Contemporary Speculative Fiction*. Tampere University Press. https://trepo.tuni.fi/handle/10024/99583
- Rössel, J., Schenk, P., & Weingartner, S. (2017). *Cultural Consumption* (pp. 1–14). https://doi.org/10.1002/9781118900772.etrds0432
- Roy, S. (2023, June 16). *Portuguese Influence on Goa*. Drishti IAS. https://www.drishtiias.com/blog/portuguese-ifluence-on-goa
- Sarasvathy, S. (2012). Worldmaking. In A. C. Corbett & J. A. Katz (Eds.), *Entrepreneurial Action* (Vol. 14, pp. 1–24). Emerald Group Publishing Limited. https://doi.org/10.1108/S1074-7540(2012)0000014004
- Saryal, R. (2022). Beyond environmental science: Climate action in Hindu religion and Sant Mat tradition. *International Social Science Journal*, 72(244), 423–435. https://doi.org/10.1111/issj.12331
- Schatzki, T. R. (2005). Peripheral Vision: The Sites of Organizations. *Organization Studies*, 26(3), 465–484. https://doi.org/10.1177/0170840605050876
- Schulte, M., Bamberg, S., Rees, J., & Rollin, P. (2020). Social identity as a key concept for connecting transformative societal change with individual environmental activism. *Journal of Environmental Psychology*, 72, 101525. https://doi.org/10.1016/j.jenvp.2020.101525
- Sloam, J., Pickard, S., & Henn, M. (2022). 'Young People and Environmental Activism: The Transformation of Democratic Politics.' *Journal of Youth Studies*, 25(6), 683–691. https://doi.org/10.1080/13676261.2022.2056678
- Steele, W., Hillier, J., MacCallum, D., Byrne, J., & Houston, D. (2021). Realising Transformative Potential. In W. Steele, J. Hillier, D. MacCallum, J. Byrne, & D. Houston (Eds.), *Quiet Activism: Climate Action at the Local Scale* (pp. 85–103). Springer International Publishing. https://doi.org/10.1007/978-3-030-78727-1_5

- Streeby, S. (2017). *Imagining the Future of Climate Change: World-Making through Science Fiction and Activism*. University of California Press. https://doi.org/10.1525/9780520967557
- Sultana, F. (2022). The unbearable heaviness of climate coloniality. *Political Geography*, 99, 102638. https://doi.org/10.1016/j.polgeo.2022.102638
- Terry, N., Castro, A., Chibwe, B., Karuri-Sebina, G., Savu, C., & Pereira, L. (2024). Inviting a decolonial praxis for future imaginaries of nature: Introducing the Entangled Time Tree. *Environmental Science & Policy*, *151*, 103615. https://doi.org/10.1016/j.envsci.2023.103615
- The Editors of Encyclopaedia Britannica. (2024, June 13). Parsi / Religion, History, & Facts / Britannica. https://www.britannica.com/topic/Parsi
- Theodore R., S. (2002). The Site of the Social: A Philosophical Account of the Constitution of Social

 Life and Change. Penn State University Press.

 https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=91595&site=ehost-live
- Thompson, K. A., Vervoort, J. M., Chambers, J. M., Chang, A. Y., & Hajer, M. (in prep.). *Utopia as method, utopia as practice: Investigating and developing real and virtual worlds*.
- TNM. (2016, September 3). The Forgotten Jews of Fort Kochi: How an enterprising community integrated itself into Kerala. The News Minute. https://www.thenewsminute.com/kerala/forgotten-jews-fort-kochi-how-enterprising-community-integrated-itself-kerala-49289
- Tomin, B. (2020). Worlds in the Making: World Building, Hope, and Collaborative Uncertainty. *Journal of the American Association for the Advancement of Curriculum Studies (JAAACS)*,

 14(1), Article 1. https://doi.org/10.14288/jaaacs.v14i1.192633
- Toward a Theory of Social Practices: A Development in Culturalist Theorizing—Andreas Reckwitz, 2002. (n.d.). Retrieved July 12, 2024, from https://journals.sagepub.com/doi/10.1177/13684310222225432

- Urlich Lennon, G. (2021). *Making the Imaginary: Worldbuilders, and the Art of Ontogenous Play*. https://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-194801
- van Notten, P. W. F., Rotmans, J., van Asselt, M. B. A., & Rothman, D. S. (2003). An updated scenario typology. *Futures*, *35*(5), 423–443. https://doi.org/10.1016/S0016-3287(02)00090-3
- Vervoort, J. (2024, May 6). All Rise—An inappropriately joyous game about fighting for the planet.

 *Medium.** https://anticiplay.medium.com/all-rise-an-inappropriately-joyous-game-about-fighting-for-the-planet-1447ee3ca6b2
- Vervoort, J. (2024, June 5). Change makers don't understand games; game makers don't understand change. *Medium*. https://anticiplay.medium.com/change-makers-dont-understand-games-game-makers-don-t-understand-change-65834a420747
- Vervoort, J. (2021, April 27). Games and sustainability transformations: A new paradigm. *Medium*.

 https://anticiplay.medium.com/games-and-sustainability-transformations-a-new-paradigm-1183965cab52
- Vervoort, J. M., Bendor, R., Kelliher, A., Strik, O., & Helfgott, A. E. R. (2015). Scenarios and the art of worldmaking. *Futures*, 74, 62–70. https://doi.org/10.1016/j.futures.2015.08.009
- Vervoort, J. M., Kok, K., van Lammeren, R., & Veldkamp, T. (2010). Stepping into futures: Exploring the potential of interactive media for participatory scenarios on social-ecological systems. *Futures*, 42(6), 604–616. https://doi.org/10.1016/j.futures.2010.04.031
- Vervoort, J., Mangnus, A., McGreevy, S., Ota, K., Thompson, K., Rupprecht, C., Tamura, N., Moossdorff, C., Spiegelberg, M., & Kobayashi, M. (2022). Unlocking the potential of gaming for anticipatory governance. *Earth System Governance*, 11, 100130. https://doi.org/10.1016/j.esg.2021.100130
- Wilkinson, A., & Eidinow, E. (2008). Evolving practices in environmental scenarios: A new scenario typology. *Environmental Research Letters*, *3*(4), 045017. https://doi.org/10.1088/1748-9326/3/4/045017

- Woiwode, C., & Woiwode, N. (2019). Practical Spirituality and the Contemporary City: Awakening the Transformative Power for Sustainable Living. In A. K. Giri (Ed.), *Practical Spirituality and Human Development: Creative Experiments for Alternative Futures* (pp. 129–151). Springer. https://doi.org/10.1007/978-981-13-3687-4_9
- Wolf, M. J. P. (2017). Beyond Immersion: Absorption, Saturation, and Overflow in the Building of Imaginary Worlds. In M. Boni (Ed.), *World Building* (pp. 204–214). Amsterdam University Press. https://doi.org/10.2307/j.ctt1zkjz0m.14
- Worldbuilding Glossary. (n.d.). MDPRESLEY. Retrieved July 9, 2024, from https://www.mdpresley.com/worldbuilding-glossary

Appendix A - Informed Consent Form for RQ1

In this study I want to learn about the transformational potential of worldmaking efforts undertaken by Indian environmental activists for sustainability. I also want to understand how the findings on worldmaking from Indian activists and lawyers can used for worldbuilding in games. Participation in this research is voluntary and you can quit any time without any penalty or reason. Your answers will be accessible only to the research team (Shreeya Patangay, Dr. Joost Vervoort and Dr. Jeroen Oomen). I will process your data confidentially and anonymously in accordance with the with data protection legislation (the General Data Protection Regulation and Personal Data Act). Please feel free to answer the questions generously and as honestly as possible.

I will keep you completely anonymous and confidential meaning I will not include your name, date of birth or any other personal information. I might make a very general profile on you which may include gender, age, and profession to refer to your quotes and findings. This provides a little bit of context to understand the pattern/findings for the research. I will share this general profile made on you and you may make changes to it as you find comfortable (make it more general or specific).

I confirm that:

- I am satisfied with the information I have received about the research.
- I have no further questions at the moment.
- I had the opportunity to think carefully about my participation in this research.
- I will answer the interview questions honestly.

I agree that:

- The data collected through this research will be use and stored for scientific purposes.
- The research collected data that is anonymous can be shared and re-used by other scientists to answer other scientific questions.

I understand that:

• I have the right to the scientific report after it has been completed.

Do yo	ou agree to participate?		
0	Yes		
0	No		
Signat	ature		

Appendix B - Interview Information sheet for RQ1

Introduction

You are invited to participate in this research as a potential interviewee. This research explores the transformational potential of worldmaking from Indian environmental activists' efforts. The study will focus on understanding how Indian environmental lawyers and activists and anyone involved with such make sense of the world around them and instigate change by worldmaking in their day to day life. Furthermore, this study goes a step beyond and attempts translating the findings into a game (All Rise) where worldbuilding is a way to reach those involved in gameplay. This is hopes to inform the players of the game of the power of worldmaking practised by Indian environmental activists.

The above-mentioned research is conducted by Shreeya Patangay, a master's student studying Sustainable Development program, Earth System Governance track at the Department of Sustainable Development, Utrecht University. The study is supervised by Dr. Joost Vervoort and Dr. Jeroen Oomen.

Participation

Your participation in this study is voluntary and you can quit any time without providing reason or consequence to do so. We consider your participation in this study very valuable and highly appreciate your time and dedication to find time to schedule an interview. We assume the interview to take anywhere from 45 mins to 60 mins. The questions will be asked by the interviewer. You can refuse to answer any question you might find uncomfortable to answer. You are also allowed to ask the interviewer to clarify any questions you might not understand. The answer provided by you during the interview will be noted and may be used for scientific purposes. These may include scientific journal publication, presentations, and conferences. An overall pattern/finding will be presented in this case. Individual quotes may also be used to further explain findings. Lastly, the full transcript of your interview will not be presented or published.

Data protection

We will record the interview over MS teams which may involve video and audio files. We will also use MS teams for transcribing the interview which will be refined further using the video/audio file. Therefore, the video and audio files will be used to improve the quality and accuracy of the data collected during the interview as the use of the software may entail technical mistakes.

The recordings and transcription of the interview will only be available to the master student and academic supervisors. We will process your data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

Everything we record in this interview will remain confidential and anonymous. This means we will not ask for your date of birth or any other personal information that may be used to trace you by us or a third party. We may only ask for your name to refer to you during our conversation in the interview, but this will also be kept anonymous and not used in any of the publications further on. We may make a general profile on you to refer your data and quotes.

This general profile will be sent to you to approve, and you may request any changes you want i.e. make it more general or specific. Lastly, we will process your data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

Appendix C - Informed Consent Form for the Discussion Workshop for RQ2

In this study I want to learn about the transformational potential of worldmaking efforts undertaken by Indian environmental activists for sustainability. I also want to understand how the findings on worldmaking from Indian activists and lawyers can used for worldbuilding in games. Participation in this research is voluntary and you can quit any time without any penalty or reason. The data collected will be accessible only to the research team (Shreeya Patangay, Dr. Joost Vervoort and Dr. Jeroen Oomen). I will process your data confidentially and anonymously in accordance with the with data protection legislation (the General Data Protection Regulation and Personal Data Act). Please feel free to engage and participate in the workshops generously and as honestly as possible.

I will keep you completely anonymous and confidential meaning I will not include your name, date of birth or any other personal information. I might make a general profile on you which may include gender, age, and profession to refer to your quotes and findings. This provides a little bit of context to understand the pattern/findings for the research. I will share this general profile made on you and you may make changes to it as you find comfortable (make it more general or specific).

I confirm that:

- I am satisfied with the information I have received about the research.
- I have no further questions at the moment.
- I had the opportunity to think carefully about my participation in this research.
- I will participate in the workshop authentically and honestly.

I agree that:

- The data collected through this research will be use and stored for scientific purposes.
- The research collected data that is anonymous can be shared and re-used by other scientists to answer other scientific questions.

I understand that:

• I have the right to the scientific report after it has been completed.

Your r	ole in the All Rise team is:
Do yo	u agree to participate?
0	Yes
0	No
Signat	ure:

Appendix D - Discussion Workshop Information Sheet for RQ2

Introduction

You are invited to participate in this research through discussion workshop(s). This research explores the transformational potential of worldmaking from Indian environmental activists' efforts. The study will focus on understanding how Indian environmental lawyers and activists and anyone involved with such make sense of the world around them and instigate change by worldmaking in their day-to-day life. Furthermore, this study goes a step beyond and attempts translating the findings into a game (All Rise) where worldbuilding is a way to reach those involved in gameplay. This is hopes to inform the players of the game of the power of worldmaking practiced by Indian environmental activists.

The above-mentioned research is conducted by Shreeya Patangay, a master's student studying Sustainable Development program, Earth System Governance track at the Department of Sustainable Development, Utrecht University. The study is supervised by Dr. Joost Vervoort and Dr. Jeroen Oomen.

What does this discussion workshop entail?

The first phase of data collection involved interviewing Indian environmentalists (journalists, advocates, activists, litigators, lawyers, etc) on their worldmaking practices. This is followed by the second phase of data collection (in which you will be involved) which involves me presenting my findings from phase 1 and facilitating a discussion amongst the All Rise team. It is an open dialogue during which I will record your insights, opinions, and methods that you might apply in game design to contextualize the findings.

Participation

Your participation in this study is voluntary and you can quit any time without providing reason or consequence to do so. We consider your participation in this study very valuable and highly appreciate your time and dedication to find time to partake in these workshops. Since the project is directly connected to the All Rise game, we have made the decision to plan two moments for discussions. One for preliminary findings and one for a later moment in time where I have processed all the data thoroughly.

You can refuse to participate/answer/discuss anytime you might find it uncomfortable. You are also allowed to ask the presenter (Shreeya) to clarify anything that might be unclear, and you might not understand. Your input during the discussion will be noted and may be used for scientific purposes. These may include scientific journal publication, presentations, and conferences. Individual quotes may also be used to further explain findings. Lastly, the full transcript of your interview will not be presented or published.

Data protection

We will record the interview over MS teams which may involve video and audio files. We will also use MS teams for transcribing the interview which will be refined further using the video/audio file. Therefore, the video and audio files will be used to improve the quality and accuracy of the data collected during the interview as the use of the software may entail technical mistakes.

The recordings and transcription of the interview will only be available to the master student and academic supervisors. We will process your data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act). Everything we record in this interview will remain confidential and anonymous. This means we will not ask for your date of birth or any other personal information that may be used to trace you by us or a third party. We may only ask for your name to refer to you during our conversation in the interview, but this will also be kept anonymous and not used in any of the publications further on. We will ask you your role in the All Rise Team and further make a general profile on you to refer your data and quotes. This general profile will be sent to you to approve, and you may request any changes you want i.e. make it more general or specific. However, if you wish to opt out of letting us know your role in the team, you may keep the dedicated space for this in the consent form blank. Lastly, we will process your data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

Appendix E - Follow up questions asked through email for second round of data collection

- 1. Can you walk me through a normal day in your life (work + after workday)?
- 2. Could you share some pictures from your work desk, reading desk, your hobby space? Any place you like to read, write, draw, paint, play/listen to music, wind down? **These could be multiple pictures**
- 3. Do you have a prized collection of your books that you have collected over time/bookshelf? If so, could you share a picture of this?
- 4. Do you have art that you have hung up that inspire you or you find important if your life that grounds you / evokes any other emotions? Could you share a picture of this?
- 5. What sort of books do you read? Movies/documentaries do you watch to get inspired for personal development and work? These could be cultural, political, informational, simply for leisure, environmental, to inspire imagination, future thinking, etc
- 6. What do you do in your quality time with friends, family, colleagues? These are probably likeminded people you prefer and choose to spend time with.

Development and refinement of the game: the following questions are only to grasp the willingness of the interviewees to help us develop the game better.

- Would you be willing to playtest the All Rise game and provide some feedback in future?
- Following this would you also be willing to participate in a workshop for the development of the game?

Appendix F - Responses to the follow up questions in Appendix E

The Ponderer

2,3, 7: "I usually sit on a couch facing a balcony - which has many potted plants. But the best thing about it (and we got lucky here) is the neighbor's mango tree, which falls over our house. Every year, from April to August, the tree is in full bloom, providing shade and fruit. During the day, we see tiny birds and squirrels and cats - taking turns to interact with the tree. And if you haven't experienced it, Bangalore weather this time of year is just so lovely. I work, listen to music, unwind, talk to family, daydream, often while facing this view. Or with it somewhere in the background. I also go up to our terrace to think/chat/take a break/mull over work - the sunset is always rewarding, and the open sky feels like I can really breathe. (You can also see the top of the mango tree from here.) Always gives me the right perspective - on what should matter in a day."



Figure 9. The view from the Ponderer's rooftop.

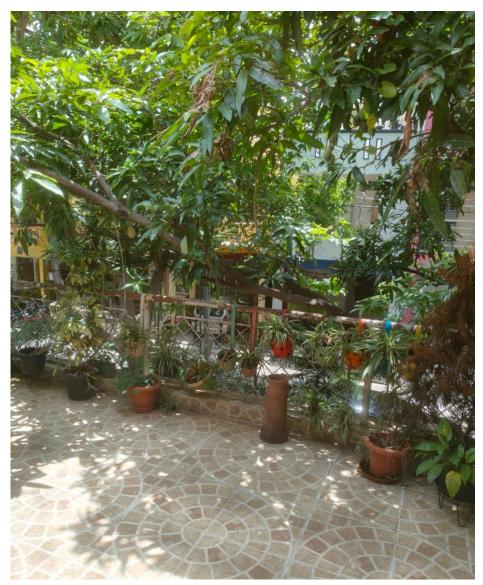


Figure 10. The view of the Ponderer's balcony.

4: "Growing up, the 4 of us (parents, sister, and myself) would set off to this secondhand bookstore in the city. Each of us would get a basket to fill up with titles and authors we hadn't heard of before, and the 4 of us would then learn from each other's interests. Over the years, that allowed me to read & appreciate different genres. But as I've grown older and immersed myself in text-driven narratives (by way of being a lawyer/editor etc), I've really found myself circling back to visual narratives. Like graphic novels, amongst others, which help me contemplate the world's problems in an imaginative way. Have captured one tiny portion of the bookshelves that full up the house - with some of my fav books."

5: "I actually don't have art hung up yet. I instead watch electronic/other sets sometimes that have been shot in nature/ scenic locations - like Cercle's channel for example. "



Figure 11. The view from the Ponderer's window.

6: "I've been finding it a little difficult to get back to reading novels, given I write and read so much for work. But I do prefer podcasts & audiobooks, or more nonfiction these days. I've also taken a break from movies - but occasionally watch romcoms for light breaks - or nature-related documentaries to boost my spirit. I do however listen to music almost all the time - indie, electronic (more on the melodic side), prog rock, psychedelic/dream pop/funk etc. I find music to be differently stimulating, allowing partial immersion with space to think in parallel - unlike movies or books."

8: "I spend a lot of time in conversation with friends and family. I like to understand what they're thinking about, what's troubling them, and how they see the world. I also particularly enjoy creating moments of alignment - how can we find mutual areas of fun and interest, where there's a combined spark. Over the years, with lots of effort and conversation, that has resulted in deep connections with parents x friends who now enjoy discussing many things in a safe

space - values, politics (in a broad sense, all causes), food, music, and nature. Even our shared experiences are therefore around these."

9: "I'll refrain from sharing photos of my tattoos - but I can tell you that I always wanted it to feel like nature is growing on me. I have flowers like roses, lotuses and bougainvillae, ferns, seashells, dragonflies etc wrapped around my arms. Just a reminder that my existence and purpose is 'beyond human' - and that to live otherwise is both to live in denial and infinitely less rich."

"Yes to both playtesting and the workshop!"

The Thrifter

1: "I really do not have a routine as such or a normal day or I don't follow a rigid structure everyday so it will be difficult for me to define my normal day. I do not engage in too many activities in one day and I am very slow with my work and I take a lot of time and I do not work everyday. I run, play tennis, paint, sing, sew clothes and nothing is fixed as a routine. I like to break routines and patterns so that I am not bored."

6: "I read books that are largely nonfiction but I do not read them to get inspired or something. I just read because it entices me. I read a lot of books on philosophy Indian, and eastern philosophy sometimes history but not too much on environment because that's what I deal with day in and day out. Sometimes I read Tamil literature or historical fiction."

8: "Well when we meet friends we do not talk about work. We talk about other things and I think that really relaxes me. Sometimes mundane things. Or sometimes politics or how we can grapple with our problems in life."



Figure 12. Landscape picture 1 from the Thrifters adventures.



Figure 13. Landscape picture 2 of the Thrifters surrounding environments.



Figure 14. Landscape picture 3 from a walk taken by the Thrifter.



Figure 15. The view outside the Thrifter's window.

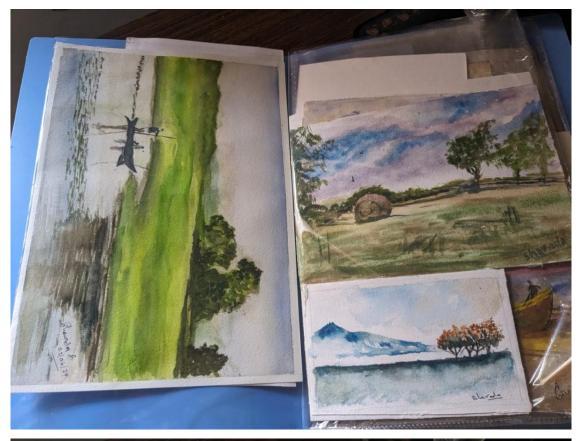




Figure 16. More artworks made and shared by the Thrifter (top & bottom).