

SPECULATIVE DESIGN — END SEMESTER ASSIGNMENT — DESG315

OPTING OUT:

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1. Executive Summary

This dossier documents the complete design process of Opting Out: Building The Grove — a speculative design project developed across four assignments for the DESG315 Design Management module at FLAME University. The project began as a personal inquiry into digital nomadism and the desire for flexible, location-independent living, and evolved — through research, systems thinking, scenario building, physical making, and iteration — into the design of a speculative future community called The Grove.

The Grove is a commons-based intentional community set in Odemira, Alentejo, Portugal, in the year 2041. It is inhabited by 38 people across 14 households and 8 nationalities, governed through a shared land trust, and organised around collective food production, intergenerational knowledge transfer, and communal daily ritual. It is not a utopia. It is a carefully designed, internally consistent future world that proposes a specific and honest answer to the question this project kept returning to: when people opt out of the systems they were born into, what do they opt into?

The project produced the following outputs: four iterative HTML-based assignment documents, a physical tactile map artefact, a welcome brochure and spatial map, a soil sensor simulation tool, a community inventory checker, a grove digital twin, and a 2041 trends and context poster. This dossier synthesises and reflects on the entire process — not as a summary of deliverables, but as an account of design thinking, research, failure, iteration, and discovery.

I set out to design for freedom and discovered I was actually thinking about belonging. That shift — from freedom to belonging, from exit to commitment, from the individual to the community — is the whole project.

The project's central question evolved across four phases. In Phase 1: What are the hidden costs of the nomadic lifestyle? In Phase 2: What structural forces shape why people opt out — or can't? In Phase 3: What are the nine possible futures of someone who starts where I start? In Phase 4, the question The Grove answers: What does the preferable future actually look like, in detail, on a Tuesday morning in February 2041?

2. Project Introduction and Personal Context

2.1 Where It Began

This project did not begin with a brief. It began with a feeling. In my early years of design education, I found myself increasingly drawn to the idea of working outside conventional structures. The digital nomad world fascinated me — people building careers on laptops from Lisbon and Bali, designing their own schedules, collecting experiences instead of commutes. I read forums, followed location-independent designers, and started asking the question that would eventually become this entire project: what does it actually feel like to opt out of the conventional life path?

But alongside the fascination was an unease I couldn't fully name. The freedom looked beautiful. The Instagram grids were aesthetically coherent. And yet something felt missing from the story being told. Whose freedom was it, exactly? At what cost? And what happens to the places that these mobile, income-rich workers pass through — and to the people who stay?

These tensions — between freedom and consequence, between individual choice and structural impact, between movement and belonging — became the creative fuel for everything that followed.

2.2 Why This Topic for a Design Project

Design management, as a discipline, sits at the intersection of systems thinking, creative practice, and human-centred inquiry. This project asked me to apply those skills not to a product brief, but to a structural and social question: what does a better life look like, and who gets to have it? That felt like the right kind of design problem. Not a feature to add to an app, but a world to imagine and argue for.

2.3 The Evolution of the Central Question

The project's central question shifted significantly across its four phases. Charting this evolution is one of the most honest things this dossier can do — because the shifts were not random. Each one was forced by what the research, the scenario work, or the making revealed.

- Phase 1: What are the hidden costs of the nomadic lifestyle? — A question that begins with curiosity and a sense that the story being told is incomplete.
- Phase 2: What structural forces shape why people opt out — or can't? — The shift from the individual experience to the systems that produce it. The moment the project grew up.
- Phase 3: What are the nine possible futures of someone who starts where I start? — The turn toward speculative design methodology: one character, nine lives, the futures cone as analytical frame.
- Phase 4: What does the preferable future actually look like, in detail, on a Tuesday morning in February 2041? — The question The Grove answers. The shift from possibility to specificity.

3. Research: Blind Spots of Mobility

The first assignment asked me to investigate digital nomadism not as an aspirational lifestyle but as a system with structural gaps, invisible costs, and unevenly distributed consequences. The guiding question was: what does the Instagram grid not show you?

3.1 Research Question and Methodology

I began with secondary research — reading academic papers on remote work, migration studies, housing economics, and mental health in high-mobility populations. I also read first-hand accounts from long-term nomads, platform blogs, visa policy documents from Portugal, Estonia, Thailand, and the UAE, and critical commentary on the gentrification effects of nomad-class migration.

Alongside this, I conducted informal conversational research — talking to people in my peer group who had tried nomadic work, freelancers who had returned to fixed residency, and one person who had attempted to spend a full year moving between countries on remote work income. The research method was deliberately broad at this stage. I was mapping a territory, not testing a hypothesis.

3.2 The Six Blind Spots

The research converged on six structural blind spots that the nomadic lifestyle narrative consistently obscures. These blind spots became load-bearing elements of every design decision that followed.

Blind Spot 1: Freedom as Anxiety

Freedom without a safety net is not the same as freedom with one. When every aspect of life — location, income, healthcare, relationships — is contingent and optional, the decision fatigue is relentless. Choice, without structure, becomes its own kind of pressure. The nomadic life doesn't remove anxiety; it changes its shape.

Blind Spot 2: Healthcare as a Residency Contract

Healthcare systems are designed for people who stay. International private insurance is expensive, inconsistent, and typically excludes pre-existing conditions. The moment a person becomes long-term mobile, their continuity of care fractures. Preventive medicine disappears. Symptoms are managed rather than addressed. This finding became the backbone of the character Mira's shoulder injury in Assignment 3 — an injury she lives with for a decade because no system knows her well enough to treat it properly.

Blind Spot 3: Community as Infrastructure, Not Feeling

Belonging is not primarily an emotion — it is a structural condition. You belong to a place because of the accumulation of shared routines, recognised faces, obligations, and reciprocities that only time and consistency create. Mobility systematically destroys the conditions for this accumulation. You can be socially busy and emotionally isolated simultaneously. This is the specific wound The Grove is designed to heal.

Blind Spot 4: Children and the Collapse of the Model

The nomadic life is designed, explicitly, for single adults or couples without dependents. The moment children enter the picture, the model breaks. Schools don't transfer. Social networks are severed. The need for stability becomes structural rather than optional. The lifestyle industry rarely acknowledges this, because it is not the demographic it is selling to.

Blind Spot 5: Privilege and the Passport Problem

Opting out is not a universally available choice. It requires a passport that opens doors (citizens of India, Nigeria, or Pakistan face visa restrictions that EU and US passport holders never encounter), income in a strong currency, and cultural capital that determines whether you are received as an "expat" or a "migrant." The privilege matrix embedded in the nomad lifestyle is real, large, and almost never discussed within the community itself.

Blind Spot 6: Identity Without Friction

When you are always somewhere new, you never have to confront your habitual self. The constant novelty of nomadic life provides endless external stimulation that can mask rather than resolve the deeper questions of who you are and what you want. Movement, sustained long enough, becomes avoidance wearing the costume of adventure.

3.3 Design Implications and First Pivot

Before this research phase, I was inclined to design something that celebrated the nomadic life — perhaps a tool to make it easier, or a framework for doing it more intentionally. After it, I couldn't. The structural gaps were too significant, and too unevenly distributed, to build something that simply optimised within them. This was the first major pivot of the project: I wasn't designing for nomadic freedom anymore. I was designing toward something the nomadic life couldn't provide.

Three design principles emerged from Assignment 1 that would shape the rest of the project:

1. Any future I designed had to reckon with healthcare portability and continuity of care — not just wellness aesthetics.
2. Any future community had to be grounded in time, place, and accumulated shared experience, not the rotating social world of co-working hubs.
3. Any design output had to acknowledge structural privilege honestly, rather than presenting a lifestyle as universally accessible when it is structurally exclusive.

4. Systems Thinking and Structural Drivers

Assignment 2 asked me to zoom out. Where Assignment 1 was about the individual experience of opting out, Assignment 2 was about the structural and systemic forces that shape whether opting out is possible, sustainable, or consequential. This required reading in areas I hadn't previously engaged with: futures research methodology, commons economics, migration law, platform capitalism theory, and ecological sustainability frameworks. The reading was uncomfortable in the best sense — it consistently challenged the assumptions I had brought into the project.

4.1 The Futures Cone Framework

The primary analytical framework I adopted was the Futures Cone, developed by Joseph Voros (2003). The cone organises futures thinking into four categories: probable, plausible, possible, and preferable. This framework gave me permission to do something crucial: design toward the preferable rather than merely predict the probable.

This distinction matters enormously. Most futures thinking in design defaults to extrapolation — taking current trends and extending them forward. The Futures Cone framework explicitly allows for the preferable future as a legitimate design space, one that requires not prediction but argument: what future is worth building, and why? That question — what future is worth building — became the driving question for Assignments 3 and 4.

4.2 PESTLE Analysis

I applied the PESTLE framework not as a box-ticking exercise but as a genuine analytical lens for understanding why futures diverge even when individuals start from the same point.

POLITICAL	Expansion of digital nomad visa programs (35+ countries by 2025, including Portugal, Estonia, Thailand, and Georgia); the emergence of retroactive visa suspensions in response to housing pressure (Portugal’s Golden Visa suspension in 2023); and the rise of “digital colonialism” as mainstream political discourse in affected cities.
ECONOMIC	Post-2020 normalisation of remote work (~30% of knowledge workers permanently remote by 2024); purchasing power differentials that make nomadic life affordable for high-income earners while raising costs for local residents; the gig economy’s erosion of employment stability; and rising urban housing costs making stable city life arithmetically irrational for many young professionals.
SOCIAL	The loneliness epidemic predating and accelerated by the pandemic; declining availability of third spaces; burnout rates across knowledge industries; and research showing that deep social capital requires time, repeated shared difficulty, and commitment to place — none of which the nomadic lifestyle structurally provides.
TECHNOLOGICAL	Fragility of platform-based safety nets (two major nomad health insurance platforms collapsed 2023–24); surveillance potential of cross-border mobility tracking; and the emerging possibility of technology that serves communities rather than extracting from them.

LEGAL	The absence of a legal framework for the long-term mobile worker (no pension accrual, no portable national health entitlement, no continuous residency record); the EU Long-Term Residents Directive; and the emerging concept of “administrative statelessness.”
ENVIRONMENTAL	The carbon cost of constant air travel (a nomadic lifestyle involving six countries per year generates approximately 4× the carbon footprint of a sedentary equivalent); and the emerging research on commons-based land stewardship as a model for ecological sustainability that is also socially generative.

4.3 Key Research References

Three references were particularly formative in shaping the eventual design of The Grove.

Elinor Ostrom, *Governing the Commons* (1990). Ostrom’s Nobel Prize-winning research demonstrated that communities can self-govern shared resources without privatisation or state control, provided they adhere to a set of design principles: clearly defined boundaries, proportional distribution of costs and benefits, collective choice arrangements, monitoring, graduated sanctions, conflict resolution mechanisms, and recognition of rights to organise. These eight principles became the foundational governance logic for The Grove.

Auroville, Tamil Nadu, India (1968–present). A living intentional community of over 3,000 residents from 60 nations, operating on principles of human unity, shared stewardship, and non-monetary internal exchange. It was my primary real-world precedent for demonstrating that large-scale, multi-national, value-led communities are not utopian fantasies. Critically, studying Auroville also meant studying its failures: governance conflict, scalability challenges, and the fine line between community culture and coercive conformity. The Grove learns from both.

Herdade do Freixo do Meio, Alentejo, Portugal. A real, working biodynamic farm and intentional community in the Alentejo region — mixed housing, cooperative education, shared food systems, agro-ecological land stewardship. The closest existing analogue to The Grove, and proof of concept for the specific geography and economic model I was speculating about.

4.4 Four Structural Drivers

The research consolidated into four structural forces currently driving people toward alternative living models — not as individual lifestyle choices, but as rational responses to systemic conditions.

- **Economic Insecurity:** Rent-to-income ratios in global cities have broken the post-war social contract. Housing ownership is increasingly impossible for young professionals. Platform work erodes employment stability. When the arithmetic of stable urban life stops working, people move — not because they want to, but because they have to.
- **Cultural Exhaustion:** Burnout rates across knowledge industries are at historically high levels. The “hustle” narrative has curdled into collective fatigue. Institutional trust is in long-term decline. The desire for something slower, more meaningful, and more human is not countercultural — it is structurally predictable.
- **Climate Anxiety:** Climate anxiety produces two distinct responses: collective systemic action, or individual lifestyle redesign. Growing your own food is meaningful; it is not, by itself, a solution to climate change. This tension — between individual lifestyle change and structural transformation — runs through The Grove’s design and is intentionally left unresolved.
- **Erosion of Institutional Trust:** When governments, healthcare systems, banks, and employers are no longer trusted to provide stable ground, exit feels rational. But exit doesn’t fix the institutions — it leaves them further weakened, and leaves the people who cannot exit more exposed. This is the deepest ethical tension of the project.

5. Assignment Three — Mira’s Nine Lives

Assignment 3 introduced the speculative design format that would carry the project’s most important ideas: one character, nine possible lives. Single-character, multiple-life speculative design — sometimes called “character futures” in futures methodology — is more emotionally generative than scenario documents because it holds the systemic and the personal simultaneously. You understand the structural forces through their effect on one human body, one shoulder injury, one phone call to a mother who asks when you’re coming home.

5.1 The Character and the Format

Mira is 22 years old in 2026. She is a junior product designer in Mumbai, 18 months into a job that is quietly draining her. She has eight months of savings and one very clear feeling: something has to change. She is the product of a specific historical moment — the post-2020 remote work normalisation, the rising cost of urban living in Indian metros, the growing discourse around burnout as a structural rather than personal failure. She is not extraordinary. She is the kind of person the digital nomad industry exists to sell to, and the kind of person the system is not designed to protect once she leaves it.

Three trajectories. Nine diary entries — at ages 27, 32, and 37. Each diary entry is grounded in specific PESTLE conditions; each takes the same starting point and shows where structural forces lead, not where individual courage or failure takes you.

5.2 Trajectory One: The Predictable Futures (Lives 01–03)

In the predictable futures, the systems that enable digital nomadism continue to expand and normalise. Visa infrastructure develops. Coworking hubs proliferate. Healthcare products designed for mobile workers emerge.

***Life 01 (Age 27, Chiang Mai):** She renews her Thai Digital Nomad Visa in eleven minutes for \$240. She knows 34 people's first names at the hub — different 34 next month. Her shoulder has been hurting for two months. The telehealth doctor says it's probably posture. The most permanent thing in her life is her Roam+ membership.*

***Life 02 (Age 32, Tbilisi):** A whole district in Tbilisi has been reordered around the nomad economy. The woman who sold bread on the corner for twelve years is gone. Mira's wearable recommends a forest walk. She goes. She does not reduce screen time. The mural says 'Welcome, Global Creatives' in four languages.*

***Life 03 (Age 37, Medellín):** The shoulder surgery happened last year in Singapore — a decade late. Her father died in November while she was in Tbilisi. She got there in 36 hours. The logistics were flawless, which felt obscene. She has window herbs now. Watering them takes four minutes and is the most grounded she feels all day.*

The predictable trajectory is not a failure state. The system works, more or less. But the cost accumulates in the body, in the silent phone calls home, in the accumulated social poverty of a life with abundant acquaintances and almost no depth.

5.3 Trajectory Two: The Possible / Risk Futures (Lives 04–06)

In the possible futures, several political and platform risks that are already visible in 2026 accelerate. Visa policy shifts retroactively. Platform infrastructure proves fragile. Each life extrapolates from observable trends: Portugal's Golden Visa suspension, the collapse of nomad platform companies, the EU's existing long-term residency requirements, and the documented phenomenon of “administrative statelessness” recognised by the UNHCR.

Life 04 (Age 27, Lisbon): Portugal retroactively suspends its Digital Nomad Visa. Mira is technically legal. She watches the anti-gentrification protests from her Airbnb window. The signs say things she agrees with. She does not go down. Her NomadHealth plan doesn't cover anxiety. It has been "situational" for eight months.

Life 05 (Age 32, Tbilisi): NomadHealth collapses. Her medical records are now a data asset in a restructuring. A Georgian woman downstairs brings her comfrey oil for her shoulder — her mother's recipe, offered freely because she noticed Mira was in pain. It does more than three years of telehealth.

Life 06 (Age 37, Between Systems): The EU Continuous Residency Directive requires three unbroken years of documented national residency for social entitlements. Mira has fifteen years of movement and no three consecutive years anywhere. She fills in the same form for the third time. 'Permanent address.' She leaves it blank. The system rejects it.

5.4 Trajectory Three: The Preferable Futures (Lives 07–09)

In the preferable futures, Mira doesn't solve the system by optimising within it. She builds something alongside it. Slowly. With other people. In a specific place.

Life 07 (Age 27, Odemira): She stopped moving eight months ago. Stopping felt like failing until it felt like landing — and the two feelings were so close together she almost mistook one for the other and left. Maria shows her how to read the soil before planting. Not by explaining the science. By showing what to look for.

Life 08 (Age 32, Odemira Commons): She is now the person who makes the comfrey oil. Maria taught her the recipe. She gives three jars a year to the village health worker. A former nomad arrives from Bangalore — a designer, 24, burning out exactly as Mira did. She hands him a tray of seeds to sort. Maria → Mira → him. Knowledge as infrastructure.

Life 09 (Age 37, Odemira Commons): Tonight's governance meeting is about admitting three new households. Three hours. She looks forward to it. This surprises her every time. She has fifteen years of journals. The early ones are full of visa expiry dates. The recent ones are full of descriptions: what the light does to the herb garden in February, how Ines's voice sounds when she asks questions about the soil.

5.5 Why the Preferable Future

The decision to focus the remaining design work on Life 09 was not sentimentality. It was a design argument. The predictable futures show us the cost of continuing on the current trajectory. The possible futures show us what happens when the structural gaps become crises. The preferable

future shows us what a different set of choices at the individual, community, and policy level could produce over fifteen years.

Speculative design is most useful not when it predicts what will happen, but when it makes visible what could happen if different values were allowed to organise social and material life. Life 09 ‘A Shared, Accountable Future’ is the design argument this project makes.

6. The Grove — World Design

The Grove is Herdade do Tempo — a 48-hectare property on the Alentejo coast, 12km from the town of Odemira in southwest Portugal, 8km from the Atlantic. The landscape is rolling golden hills meeting coastal cliffs. The land includes a walled herb garden, an olive grove, field plots, two fishing boats, and a cluster of stone buildings at the community’s centre. In 2041, the land is held under a commons trust — no single owner, collectively governed, legally protected against speculative acquisition under Portugal’s 2034 Rural Commons Act.

6.1 The Physical World

The Grove is situated in a geography that is real, chosen deliberately, and consequential: the Atlantic shapes the community’s food system, its adventure rhythms, and the character of its light. The nearest town is Odemira — 12km by road. The sea is 8km west. The Serra de Monchique mountains are 40km east.

Total Land Area	48 hectares
Location	Odemira, Alentejo, Portugal
Founded	2029
Population (2041)	38 people, 14 households, 8 nationalities
Food Self-Sufficiency	87%
Energy	100% solar
Governance	Commons land trust (Portugal’s 2034 Rural Commons Act)
Credit System	Commons credit ledger — no internal monetary exchange

6.2 The People

The community was founded in 2029 with 10 people and one shared risk: that belonging can be designed, if you commit to it long enough. By 2041, it has grown to 38 people across 14 households.

Mira, 37 — Herbalist, Seed Keeper, Governance Facilitator. Ten years at The Grove. Manages the seed library and the herb garden. Holds the community's botanical memory. Leads the monthly grief circle. Surfs badly on Tuesday mornings. Doesn't care.

Tiã Ferreira, 44 — Head of Kitchen, Regional Workshop Lead. Former Lisbon chef who burned out at 28 and joined The Grove in 2032. Runs two communal meals daily. Teaches food science to the children. Runs paid regional fermentation workshops that have brought three new households to the community. Doesn't love being profiled. The knowledge lives in his hands.

Maria, 81 — Elder, Land Memory. Has farmed this exact land since the 1980s. Her seed labels are still in the vault, in handwriting that predates Mira's arrival. She tells stories on Friday evenings and everyone gets quiet. Walks the herb garden every morning naming things. The oldest knowledge in the community lives in her body.

Duarte, 51 — Carpenter and Builder. Built half the physical structures at The Grove over eight years. Teaches carpentry to the children — they have been building a real chicken coop for six months. Six hand-built furniture commissions per year from the region. Needs very little external money because the commons covers food and housing.

Rui, 45 — Sea Knowledge, Navigator. One of the fishing trio. Teaches navigation by stars to children over 12. Believes you should know where you are without a signal. Reads weather from cloud formations. Has never needed GPS to feel located.

Priya and Selin, 30s — Remote Workers. Both work remotely for outside organisations — Priya in UX research, Selin in climate policy. Fly three to four times a year. Contribute proportionally more to the shared fund. Nobody resents this. Priya designed the community dashboard. Selin's governance documents are used by twelve other commons communities in Southern Europe.

Arjun, 24 — New Arrival. Former product designer from Bangalore, in the 'arrival season' — six months of broad contribution to find his role. Quietly redesigning the community dashboard in his spare time. Nobody asked him to. It is becoming something beautiful.

6.3 The Spaces

The Commons Kitchen and Café: A long stone room with open fires, wood-fired bread ovens, and three long tables. Tião cooks two communal meals daily. Weekend fermentation workshops open to the region. Zero food waste — a kitchen AI tracks what has been harvested, what is in storage, what is expiring. Tião talks to it like a sous chef. It suggests. He decides.

The Herb Garden and Seed Library: A walled south-facing garden with stone beds and a small drying shed. A stone vault, solar-cooled. Hundreds of seed varieties, hand-labelled in Mira's handwriting and Maria's before her. Soil sensors at root depth feed into the community dashboard. Mira checks it the way others check weather — once, in the morning, before touching anything. Technology surfaces. She decides.

The Gathering Room : A long low stone building with a central fire pit open to the sky. 6:30pm every evening without exception. No screens. No agenda. Tea, fire, guitar, children on the floor. The most important infrastructure on the entire land. Never the same twice.

The School Barn : A large converted barn with workbenches, tools, a chalkboard wall, and a physical library. Children ages 5–16 learn here. Teachers rotate based on who holds which knowledge. No theory taught apart from practice. Monday: food science. Tuesday: carpentry. Thursday: market day, where the children run their own stall in Odemira with real money.

The Stillness Room : A small whitewashed room with cork floors. No electronics allowed. Cushions, candles, and Maria's singing bowl. Morning meditation, conflict resolution, collective grief. The bowl resonates when you strike it. That is the point.

The Boat Shed and Cove : 8km from the community. Two small fishing boats, maintained communally. Three members rotate fishing duty. Rui teaches navigation by stars because you should know where you are without a signal.

6.4 The Economy and Credit System

The Grove operates a commons credit system — not money exactly, but exchangeable value. Every contribution is logged in a shared ledger. Credits translate into housing share, food access, resource use, and savings that convert to currency when needed.

Cook for everyone	Earn housing and food credits
Fix the solar system	Earn resource access credits
Teach the children	Earn shared fund credits
High external income	Proportionally higher contribution to the commons fund
Arrival season	Broad contribution, no pressure, six months to find your role

Nobody is dependent on one stream. Nobody is isolated. Nobody is extracting. The economic model generates surplus, distributes it equitably, and produces enough external income to fund the commons fund without external dependency. It has survived drought, governance conflict, and the departure of founding members. It does not require growth — only continued contribution from people who choose to stay.

6.5 Technology Philosophy

Technology in 2041 Odemira hasn't disappeared. It's been reassigned. It handles the invisible infrastructure so human energy goes to the things only humans can do. A smart water system manages the borehole pump. A fully automated solar-battery system generates a monthly digest of collective consumption versus generation. Distributed soil sensors track moisture, nitrogen, and pH at root depth, feeding a living crop calendar. A kitchen AI tracks harvest, storage, and expiry.

The community dashboard, designed by Priya, currently being quietly redesigned by Arjun shows collective data in ways that build awareness rather than anxiety. The gathering room has no screens. Technology enables it by removing friction. Optional passive health wearables stay personal data shared only by choice.

6.6 The Knowledge Chain

The real commons asset isn't the land. It is what the community knows — and what happens when that knowledge moves between hands, between generations, through presence. This chain is not symbolic. It is the primary mechanism by which resilient communities survive generational change. It requires time, co-presence, and commitment that no platform has ever been designed to carry.

- Maria, 81: soil names, plant memory, the old ways of the land, sixty years of seasons
- Mira, 37: the comfrey oil recipe, seed stabilisation, how to read what the soil needs, how to teach without explaining
- Ines, 7: learning why dark soil smells like rain
- Arjun, 24: just arrived, sorting seeds in silence. The next person to arrive will find what he builds waiting for them.

6.7 A Day in The Grove — February 2041

The following is a reconstruction of a specific Tuesday. The kind of day the entire project was built around.

6:00 AM	Mira lights the wood stove. She knows exactly how many logs it takes to heat the room by breakfast. Walks the herb garden before the light fully comes. Touches the soil, pinches a rosemary stem, checks the garlic shoots. Maria taught her this — not as a task, but as a greeting.
7:15 AM	Communal breakfast. Bread Tião baked yesterday. Olive oil from their own trees. Eggs from the 14 hens. Self-serve, unhurried. Someone mentions the cistern level. Everyone knows the number.
10:00 AM	Wednesday botany lesson with the children. Which plants fix nitrogen and which deplete it. Mira doesn't explain abstractly — she shows where the soil is dark and where it's pale. Ines asks why dark soil smells like rain. Mira says she's been wondering the same thing for ten years and they can find out together.
12:30 PM	Tião's slow-cooked white bean stew with their own kale and Tuesday's mackerel catch. Everyone eats together. Loud. Someone brings up tonight's governance meeting.
2:00 PM	Making comfrey oil. Her hands know this process the way others know how to type. Arjun knocks and asks if he can help. She hands him a tray of seeds to sort. They work in silence for an hour.
6:30 PM	The Gathering Room. Ines is asleep across her father's lap. Someone plays guitar quietly. The governance discussion about the three new households starts naturally — not as a meeting, as a conversation. By 9pm they've made a decision.
10:00 PM	The journal. Fifteen years of journals now. She writes: she lives here. She finds it, most days, more than enough.

7. Process Journal and Making

Assignment 4 asked me to document and reflect on the process — not the outcomes, but the thinking. How ideas were generated, tested, rejected, reworked, and eventually converged. This section traces the design process at its most honest: including the directions that were dropped, the instincts that were wrong, and the moments where physical making produced insights that no amount of screen-based work could.

7.1 The Divergence Phase

My instinct throughout this project was to converge too quickly — to identify an interesting direction and run with it before I had properly explored the alternatives. The divergence phase forced me to work against that instinct. It produced more than 20 possible project directions, documented on physical and digital sticky notes. These were evaluated against three questions: Does it interrogate the system, or merely optimise within it? Does it hold the structural tensions honestly, or flatten them? Does it build toward the things I actually care about — belonging, knowledge, community, depth?

The technology-first ideas — the nomad passport app, the AI life path optimizer — failed the first question. They were clever and timely, but they solved administrative friction without touching the human questions the project was actually about.

The lifestyle product ideas — the journal kit, the life design board — failed the second question. They individualised what was a structural problem. They told people to cope better rather than asking what a better system might look like.

The community ideas consistently passed all three. Every time I returned to them, they felt more real. The world-building direction — building the economy, the spaces, the rituals, and the people around Mira rather than just telling her story — only emerged because I stayed long enough in the mess to see it.

I think in constellations, not in lines. I don't arrive at ideas — I orbit them until one pulls harder than the others. The divergence phase was the first time a design method actually matched how my mind works.

7.2 The Convergence Phase

The convergence phase required something harder than generating ideas: letting go of good ones.

The pop-up installation was the most formally exciting idea I had — an immersive, physical experience of The Grove for 20 minutes. I dropped it because it required resources I didn't have and couldn't exist independently of its physical context. The interactive digital twin became a more accessible version of the same ambition.

The AI life path provocation was the most intellectually interesting direction I explored — a future where an algorithm assigns you to an optimal life and you can refuse it. I dropped it because a project about breaking free from prescribed life paths cannot have algorithmic prescription as its answer.

Multiple protagonists was the first instinct for the character work. I dropped it in favour of one person living nine lives because the single-character format is more emotionally powerful. Mira became more real, and more structurally legible, when all nine futures belonged to her.

Dropping ideas felt like loss at first. Then it started to feel like focus. Each choice to remove something made what remained more intentional and more honest.

7.3 The Materials Workshop

A pivotal moment in the project was a materials design workshop midway through Assignment 4. Until that point, everything lived in screens and documents. The workshop asked me to work with physical materials — fabric, card, foam, paper, grass matting — and to build something spatial with them.

What I discovered was that I think differently with my hands. The moment I started laying materials on a base board, the project's spatial logic clarified in ways the screen hadn't been able to produce. The materials chosen for the physical artefact are each deliberate:

- **Artificial grass matting** — the community garden: textured, alive, requiring tending. You feel the weight of the garden before you understand the map.
- **Red chenille** — the gathering spaces: warm, soft, the thing you reach toward. Visitors instinctively touch it.
- **Soft blue felt** — the water systems and coastal edge: memory and direction at once.
- **Burlap/jute** — the seed library: ancient, rough, knowledge that lives in material not in data. Pre-digital. Irreplaceable.
- **Black board paper** — pathways and structural contrast: distinguishing movement routes from gathering spaces without needing labels.
- **Grey rubber/neoprene** — invisible technology infrastructure: smooth, functional, underneath everything. The layer that makes life run without being seen.

- **Blue plastic sheeting** — the nomad world and the sea: slippery, portable, synthetic. Sits at the edges of the artefact. Still present. No longer the centre.
- **Maria's singing bowl** — the Stillness Room: not decorative. It resonates when you strike it. That is the point.

Physical making is not a side activity or a documentation exercise. It is where a different kind of thinking happens. The spatial decisions I made on the board — where the gathering room sits in relation to the kitchen, how the seed library is positioned at the edge of the garden — informed the digital design work that followed.

7.4 AI Collaboration: Where the Tools Entered and Where They Did Not

AI was used throughout this project as a reflective collaborator, not a co-author. ChatGPT was used primarily during the divergence phase — as a mirror, reflecting half-formed thoughts back in full sentences. Gemini was used occasionally to cross-check research. Claude was used to translate research and conceptual thinking into structured narrative form. All intellectual decisions — what Mira experiences, the direction of the project, which futures she lived and how she felt about them, the governance structure, the specific materials and what they mean, the unresolved tensions (which AI consistently tried to resolve — I consistently refused) — are entirely mine.

The critical principle I developed: using AI well means knowing when not to use it. The moments that matter most in this project came from sitting with the world long enough that it started to feel inhabited. No tool accelerates that kind of dwelling.

8. Physical Artefacts

8.1 The Tactile Map

The primary physical artefact is a tactile map of The Grove — a material argument for a future worth building, laid on a wooden tray. Every material was chosen for what it communicates through touch, not just sight. The artefact was designed on a principle articulated during the materials workshop: you feel the difference before you understand it.

The silver and blue plastics — the nomad materials — sit underneath everything as the technological infrastructure layer. Visible at the edges. The living textures — grass, burlap, chenille — cover the surface. This is the preferable future: technology recedes. Human life moves back to the foreground.

A visitor who picks up the tray, runs their fingers across the artificial grass of the garden, reaches for the red chenille of the gathering room, feels the smooth grey rubber of the invisible infrastructure layer — that visitor has already understood the project’s central argument before reading a single word.

8.2 The Welcome Brochure

The secondary physical artefact is a printed folded brochure — designed as if The Grove is a real community, already operating, open to new members. Part welcome guide, part spatial map, part manifesto.

The brochure includes: a full community map with named spaces and landmarks; a brief description of community values, economy, and daily rhythms; information on the arrival season; and a fictional application process. Printed on uncoated textured paper — intentionally analogue.

The design intent is to make The Grove feel real before it is believed. A visitor picking up the brochure should feel the weight of an actual place — not a student project.

9. Digital Tools

Beyond the assignment documents, the project produced three functional digital tools designed to exist within the world of The Grove — artefacts of the 2041 community that can be interacted with. These tools are not decorative. They are functional proofs of concept for the technology philosophy The Grove embodies: tools that serve the community, that surface collective awareness, that you pull rather than being pushed by.

9.1 Soil Sensor Simulation

An interactive HTML tool that simulates the soil monitoring system described in the world-building. Users can read moisture, nitrogen, and pH data across the garden’s different zones, see the morning dashboard Mira checks before touching anything. It demonstrates the design principle of technology that surfaces information without imposing decisions. The data is live, the interface is calm, and the farmer remains the decision-maker.

9.2 Community Inventory Checker

A functional simulation of the commons kitchen’s food tracking system — the AI sous chef that Tião talks to. Users can see what has been harvested, what is in storage, what is expiring, and what

Tião might cook this week. It demonstrates zero-waste food logic operating through conversation rather than notification. The tool behaves like a knowledgeable colleague, not an alert system.

9.3 The Grove Digital Twin

An interactive spatial map of the community — a functional version of the world that allows users to explore the buildings, fields, coastal landscape, and surrounding territory. Click any location to learn what happens there, who is responsible for it, and how it connects to the rest of the community’s life. The digital twin is the most accessible version of what I had originally imagined as an immersive pop-up installation — the world made navigable without the requirement of physical presence.

10. The 2041 Trends Poster

The brief for the trends poster was to show how The Grove — as a speculative artefact — is relevant not as isolated imagination but as a response to observable, current trends in technology, society, ecology, and economics. The poster works as a standalone exhibition piece that contextualises the project for an audience unfamiliar with the preceding assignments.

The poster maps six convergent trend areas against The Grove’s specific design responses, with key statistical anchors:

Housing Unaffordability (+340%)	Median urban home costs 22 years of median salary in Lisbon, 2041. The Grove holds land under a commons trust — no single owner, no landlord, no speculation.
Administrative Statelessness (4.2M)	The EU Continuous Residency Directive (2038) requires 3 unbroken years of documented national residency. 4.2 million long-term mobile workers are residentially unverifiable. The Grove’s commons charter creates 14 continuous years of Portuguese residency for members.
Platform Healthcare Collapse (6.2M)	Three major nomad health platforms restructured in 18 months (2034–36), leaving 6.2M users’ medical records as data assets. The Grove pairs Dr. Alves (12-year GP relationship) with Mira’s herbalism clinic.
The Loneliness Epidemic (61%)	61% of adults report clinically significant loneliness (WHO, 2041). The Grove’s Gathering Room at 6:30pm every evening — no agenda, no screens — is the most important infrastructure on the land.

Food and Seed Sovereignty (38%)	38% of EU food crop varieties at biodiversity risk. Mira's Seed Library: 420 heritage varieties. 87% food self-sufficient.
The Carbon Cost of Freedom (4×)	Six countries in twelve months generates ~4× the carbon footprint of a sedentary equivalent. The Grove: 100% solar, circular food system, local travel.

The poster also includes a key milestones timeline tracing the journey from 2020 (remote work normalisation) to 2041 (The Grove at full capacity). The poster succeeds in its purpose: it makes The Grove legible as a contemporary design response rather than a nostalgic fantasy.

11. Stakeholder Mapping

The Grove does not exist in isolation. It operates within a web of relationships — local, regional, national, and transnational — that shape its conditions of possibility and its obligations.

Stakeholder mapping was used to identify who the community affects, who it depends on, and where the design's responsibilities lie.

Community Members (Primary)	38 people across 14 households. Direct beneficiaries of the commons model. Also the labour force, governance body, and knowledge repository. Their wellbeing is the primary design goal.
Local Odemira Residents (Primary)	The community's nearest neighbours. Affected by land use, local economy participation, and cultural presence. The Grove's market day and regional workshops are intentional interfaces with this stakeholder group.
Regional Farmers and Producers (Secondary)	The Grove participates in seed exchange networks and local food systems. Herdade do Freixo do Meio is a precedent partner in this relationship.
Portuguese Government and Legal System (Regulatory)	The Grove's commons trust is governed under Portugal's 2034 Rural Commons Act — a speculative extrapolation of existing cooperative housing legislation. The legal framework is a designed element of the world-building.
Future Applicants / Arrivals (Prospective)	People like Arjun — burning out in cities, looking for something different. The welcome brochure and digital twin are designed to reach this stakeholder group and set honest expectations before arrival.

External Economy (Peripheral)	Priya and Selin's remote work income, Duarte's furniture commissions, and Tião's regional workshops are the community's interfaces with the external economy. Designed to be proportional and non-extractive.
Other Commons Communities in Southern Europe (Network)	Selin's governance documents are used by twelve other commons communities. The Grove is not designed to be a singleton — it is designed to be legible and replicable.

12. Unresolved Tensions

Good speculative design is honest about what it doesn't resolve. The Grove is a preferable future, not a perfect one. These tensions are named here not as failures but as part of the intellectual integrity the work requires.

Who gets to join The Grove? The community is designed to be inclusive, but the real commons communities that inspired it are not accessible to everyone. They require time, skills, physical mobility, and cultural familiarity with alternative governance structures. This project may be designing a preferable future for a specific class of person. That limitation is real and unresolved.

Technology is still there, and that's a choice. The Grove uses solar systems, mesh networks, soil sensors, and shared devices. This requires manufacturing, supply chains, and global infrastructure with its own environmental cost. A truly sustainable community would need to address this layer. I have not fully designed it.

Children don't always get to choose. Children raised in The Grove are raised in a specific value system. At some point, a 16-year-old in The Grove might desperately want a different life. The community's culture and governance are designed to hold that tension — but whether they can do so without becoming coercive is a question the design can name but not answer.

Governance conflict remains under designed. The Grove uses emergent consensus and talking circles — but real communities break down over money, power, and irreconcilable disagreement. I've designed the ideal-state governance without fully mapping what happens when it fails.

Is this a retreat from the real world? The Grove exists inside Portugal — a real country with taxes, laws, and political shifts. The community exists inside the system it appears to be outside of. The structural transformation required to make The Grove's values available to more people cannot happen through community formation alone.

Mira is idealised — she's also me. Mira carries my values. She is curious, community-oriented, emotionally mature, practically skilled. She is an idealised version of what I want to become. Good speculative design acknowledges the designer's hand in the work, and mine is all over her.

13. Ethics and Positionality

Every design decision in this project encodes a value. The choice of Portugal, of commons governance, of technology as background, of children learning through doing — each one reflects a belief about what constitutes a good life. I have tried to be honest about that encoding throughout.

The designer's position. I am a 22-year-old designer imagining a future I have not lived. The Grove is a design proposition, not a lived reality, and it should not be mistaken for one. The distance between my imagination and the actual experience of building and sustaining a community over fifteen years is enormous. That distance requires humility.

Whose future? Speculative design often imagines futures for people who already have futures. I have tried to build into The Grove's tensions an honest acknowledgment that not everyone has equal access to this kind of preferable future. The privilege matrix documented in Assignment 1 does not disappear because the future is preferable.

Community is not neutral. The Grove's commons model is inspired by real communities in Alentejo. These communities exist in relationship with local people, local ecosystems, and local economies that have their own histories, rights, and needs. A speculative community set in a real geography carries obligations to that geography.

AI and authorship. Using AI tools in a design project raises genuine questions about authorship and intellectual labour. The position I've taken throughout: the design decisions, conceptual direction, and intellectual arguments in this project are mine. AI was a collaborative tool at specific stages. The distinction matters and I've tried to maintain it honestly.

Sustainability claims. The Grove presents as environmentally sustainable. I have been careful not to over-claim. True sustainability is emotional and social as well as ecological, and the social dimensions of sustainability are routinely omitted from design work that only counts carbon.

14. Final Reflection

14.1 What I Learned About the Topic

Freedom without community infrastructure becomes loneliness wearing the costume of independence. Belonging is not primarily an emotion. It is structural. It is built through time, shared experience, commitment to place and people, the accumulation of small obligations and reciprocities over years. Mobility systematically destroys the conditions for this accumulation. A design that promises freedom without addressing belonging is solving the wrong problem.

The digital nomad aesthetic sells a lifestyle that structurally excludes most of the people who would want it. That exclusion is a feature, not a bug — it is built into the product's appeal. A designer who romanticises this lifestyle without examining who can access it is not designing for freedom. They are designing for privilege with better lighting.

Technology's role in the future community is not disappearance but integration. Present enough to serve. Quiet enough not to compete with life. The difference between a tool that serves and a tool that extracts is not technical — it is a question of whose interests the design serves.

14.2 What I Learned About Design Process

Divergence is not a comfortable state. The temptation to converge early is strong. Resisting it produces richer results, but it requires trust in the process — trust that the right direction will eventually pull harder than the alternatives, if you stay in the mess long enough to feel it.

Systems thinking is transformative. The moment I stopped looking at the individual nomad and started looking at the infrastructure — or lack of it — that makes mobility possible or impossible, the project grew up. The design became more honest because it was addressing structural causes rather than individual symptoms.

Physical making and digital making are not separate activities. They inform each other. The spatial logic I developed by laying materials on a board translated directly into the digital design work. The hand knows things the screen doesn't.

Storytelling is a design tool, not a decoration applied at the end. The Grove became real — felt inhabited rather than described — through specific details: Mira's Tuesday surfing that she's bad at

and doesn't care about, Maria's seed labels from the 1990s, the children's market stall. These details are not embellishments. They are where the design argument lives.

14.3 What I Learned About Myself as a Designer

I think with my hands. I didn't fully know this until the materials workshop. Physical making is not a side activity — it is where my best thinking happens.

I enjoy building worlds more than solving problems. The world-building work — the map, the characters, the daily rhythms, the governance structure, the economy — is where I came alive creatively in this project.

I am more comfortable with ambiguity than I was at the start. I used to need a clear brief before I could begin. Now I understand that clarity is not a prerequisite for starting — it is a consequence of doing the work.

My values are in this work. The Grove carries specific beliefs about what a good life looks like: that community is infrastructure, that knowledge should be intergenerational, that a good life is measured by depth of relationship rather than breadth of experience. I used to hide this kind of conviction, treating it as bias to be minimised. This project taught me it is not a weakness — it is the source of the design's honesty and coherence.

14.4 The Shift This Project Made

I started this project with a question about freedom. I am ending it with a much more complicated and interesting question about commitment — to a place, to people, to a way of being that requires staying.

The most honest thing I can say about this project is that it changed the question. I set out to design for freedom and discovered I was actually thinking about belonging. That shift — from freedom to belonging, from exit to commitment, from the individual to the community — is the whole project.

The Grove is not a place I have lived. It is a place I have thought my way into — carefully, iteratively, with research and failure and physical making and collaboration. What it represents is not a blueprint, but a direction: a way of asking what if life could be organised around belonging, not productivity? Around depth, not breadth? Around staying, not optimising? That is a question worth asking. And asking it, with rigour and honesty, is what I hope this project has done.

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