

Writing portfolio

01 Apocalypse Made Easy! 07 Agents of Discovery
04 Plastics Explainer 10 Rabbits on Enterprise
06 Mars Rover Exhibit

#1 Apocalypse Made Easy!

A) GAMEPLAY SCRIPT

This is an excerpt of a gameplay script written in YAML (which gets interpreted directly by the app) for the Earthquakes scenario.

```
step: message
if: !ROLE('D')
messages:
  - (Waiting on NAME_WITH_ROLE('D')).

step: map
if: ROLE('D')
message: Please confirm your location. Are you facing Science World's entrance?
latlng: 49.273373, -123.102657

step: choice
key: begin-scenario
if: ROLE('D')
choices:
  - x: We're here.

step: message
if: ROLE('D')
messages:
  - Okay. Read this aloud. <img src='/s/images/childs-drawing.png'>
  - Begin imagination: you wake up and your bed is shaking.
  - The dysmorphic painting that your small daughter made falls to the ground.
  - Your window shatters. Are many cars crashing into your house at the same time?
  - No. It's an <strong>earthquake</strong>. Your house collapses and you perish.
```

step: choice

key: done-bleak-intro

if: ROLE('D')

choices:

- x: Bleak.

step: message

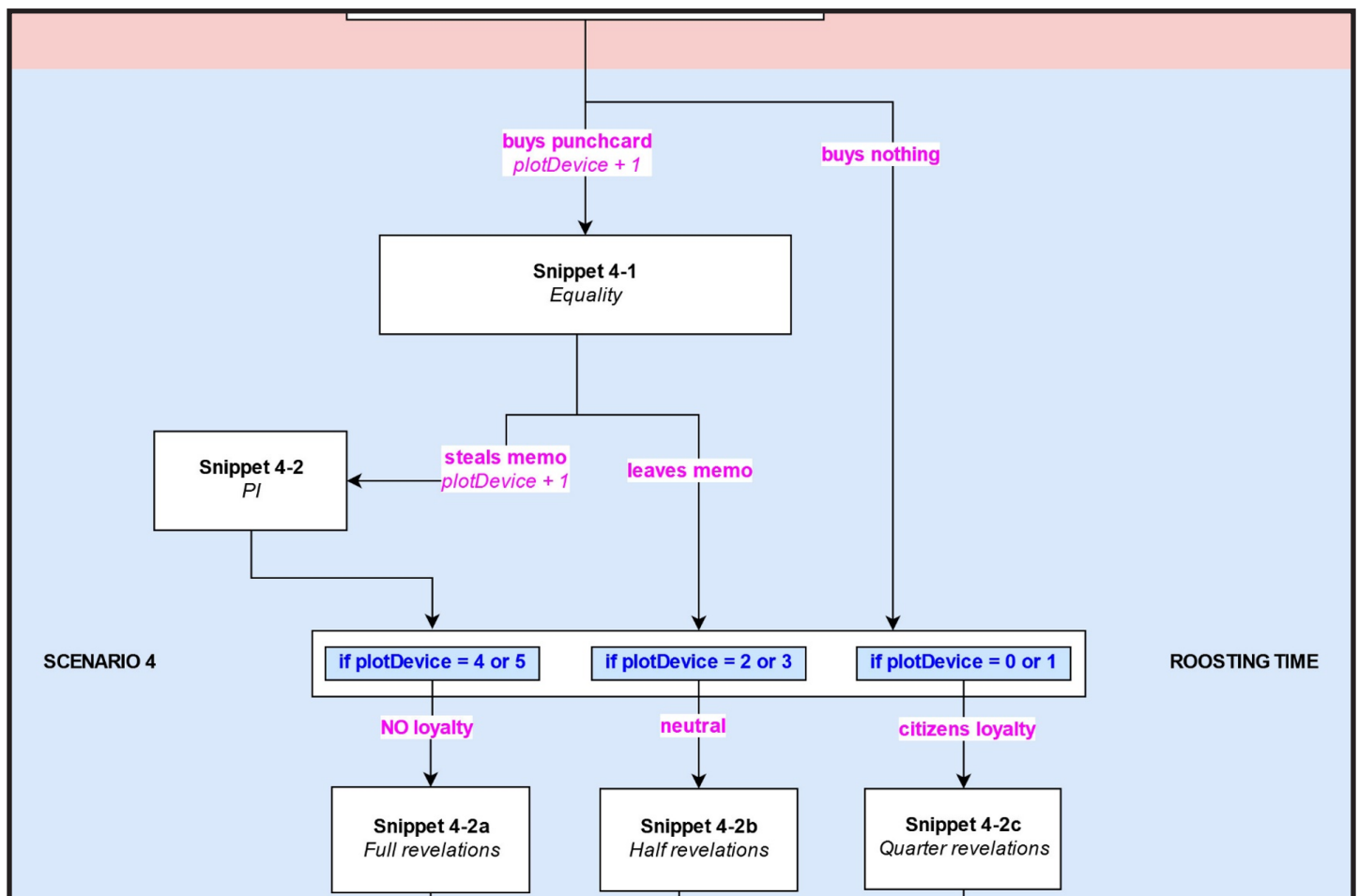
if: ROLE('D')

messages:

- Don't worry. In a few minutes you'll know how to respond to just such a situation. Unless an earthquake strikes *while* you're completing this training scenario.
- Nobody would believe you if you told them that.

B) NARRATIVE BRANCHES

Within *Apocalypse Made Easy!* the story unfolds across scenarios according to a team's performance and choices. This chart shows the conditions under which specific narrative snippets should appear.



C) PLOT SUMMARY EXCERPT

This was used to orient all production team members to the general story, as well as guide visual design, writing, marketing, and artwork for the program.

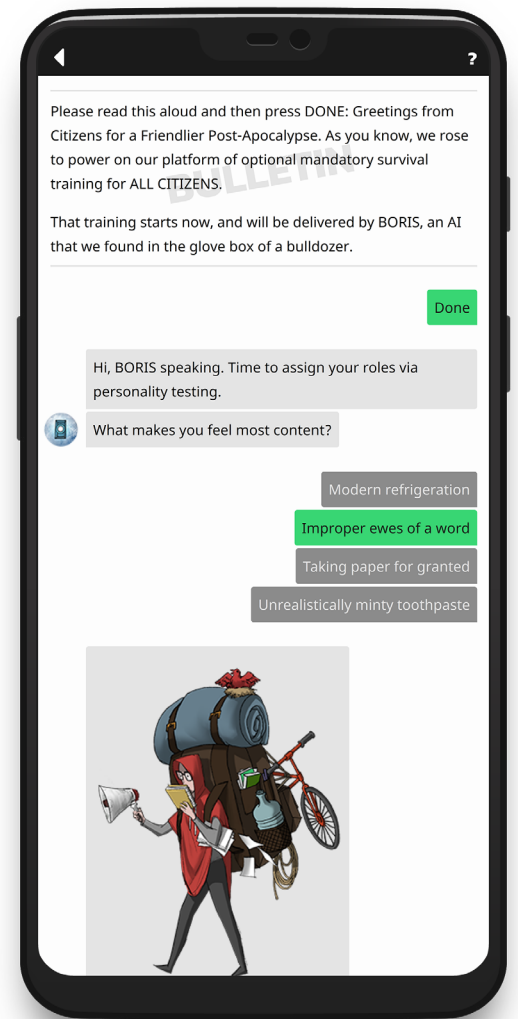
Following a highly confusing election cycle, the single-issue political party Citizens for a Friendlier Post-Apocalypse (AKA the Citizens) have risen to power and implemented their only policy: mandatory apocalypse survival training for all. The Citizens genuinely believe that the world is about to end and that the training course they're imposing will be beneficial. But nobody knows why.

The training course is delivered by BORIS, a poorly-programmed AI that the Citizens created. Soon after you begin training you are contacted by the mysterious Nameless Organization (The NO). They've hacked into BORIS' interface to send you this message: the Citizens are a real suspicious bunch. There **MUST** be something insidious behind the friendly facade and forced apocalypse training.

So you and your team have a choice: gather information as you complete the training course and feed it back to the NO. Or ignore them and implicitly side with the Citizens. If your team decides to work with the NO, you'll need to buy special punch cards that are used to override BORIS' default behaviours, leaving BORIS open to vulnerabilities and random leaks of highly expositional documents.

These punch cards can be purchased on the black market with saltines — the apocalypse-proof currency that the Citizens use to reward your progress through the training scenarios. As you work through the scenarios, the plot is slowly revealed. But the amount/depth of the plot that your team sees is determined by whether you decide to side with the NO, buy punch cards, and repeatedly hack into BORIS.

The gist of the plot is that the Citizens are led by a group of disgraced former executives that ran a company called Formativ: an AI-powered automated construction company. In addition to the construction industry, Formativ was known for innovating in the realm of corporate training, having developed an infamously-difficult suite of teambuilding and onboarding training programs built on the same core technology that powered its construction suite.



In-game screenshot

The training program leveraged principles of adaptive learning in order to optimize the programs to suit a person and group's psychological state of being.

Its software determined that optimal team bonding occurred when groups were placed under duress, and so it started increasing the difficulty of the training programs accordingly.

Soon after it started to realize that the most realistic way to train for difficult situations was to actually create them in the real world. After all, what could provide better training than the real thing?

#2 Plastics Explainer

A) MAIN FEATURE EXCERPT

Part of an ongoing investigation with NBC News on the economics of global plastics. This is an excerpt of a feature I wrote as an introduction to the industry's history.

During World War II, U.S. plastic manufacturing nearly quadrupled. It was used in everything from tires to radar cables to parachutes, and in the production of the nation's first atomic bomb, serving as critically important uranium-resistant gaskets and valves.

When the war ended, the infrastructure to crank out plastic was still in place. Plastic producers turned their attention to the consumer market, and their timing couldn't have been better: an expanding suburbia and booming middle class in the U.S. and Canada meant more money to spend and bigger houses to put things in.

Plastic was "considered the very height of glamor." This is no better epitomized than by Monsanto's House of the Future, an all-plastic, spacecraft-style home unveiled at Disneyland in 1957. The same properties that made plastics desirable presented a new problem: they were too durable. After the exhibit closed, demolition crews took a wrecking ball to the House of the Future. Legend has it, the ball bounced off.

To keep growing, plastic needed to be disposable. Speaking at a 1956 industry conference, Lloyd Stouffer, editor of Modern Packaging Magazine, famously told plastics manufacturers that "the future of plastics is in the trash can." In 1963 Stouffer followed up by writing:

The happy day has arrived when nobody any longer considers the plastics[s] package too good to throw away.

— Lloyd Stouffer

B) SOCIAL STORY

I wrote a short story for social that imagined an absurdly supply (rather than demand)-driven industry to explain part of the problem with plastics.

You're in the produce aisle picking out a nice apple. On your way over to the register, an employee slinks up behind you and whispers, "why not buy a pear, too?"

"No, I'm good with the apple," you say.

"Nobody likes apples," they say. "Pears are where it's at."

"Get away from me," you say. It's been a long day. As you watch the employee slink back into the shadows, you notice something strange. The entire store is absolutely filled with pears. Shelves, fridges, elaborate floor-to-ceiling displays, all bursting with the fruit.

Unsettled, you hustle to the checkout. "Find all the pears you needed today?" says the cashier.

"What? No, I, I just want to buy this apple."

"Free pears with every apple," says the cashier, pushing a small pile into your bag. "And be sure to pick out a free pear on your way out. Today only."

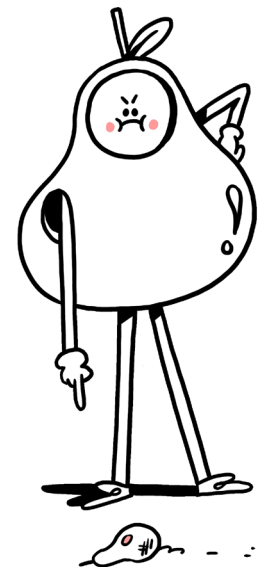
Meanwhile in some boardroom somewhere, some executive goes "wow, pears are really taking off this quarter. We can't keep them in stock. We need to plant more pear trees."

"I know a pear guy," says another executive. "He's not cheap."

"I'll get on the horn with government," says the first executive, "and work something out. The demand is incredible."

Back in the parking lot, you're discreetly dumping the pears into the ravine. Out of nowhere, an anthropomorphic pear appears and shames you for being so wasteful. "But I'm allergic to pears," you plead, pointing to the rash that's already formed on your hand.

"Then you need to dispose of them properly," says the pear in a sing-song-voice. "Trashing pears, it's true, reflects badly on you."



GRC

#3 Mars Rover Exhibit

A) OVERALL CONCEPT

This was from a writing contract I completed for an interactive Mars Rover exhibit at the HR MacMillan Space Centre in Vancouver. I started this project by writing a creative concept document that worked within the client's parameters and educational goals. These are some of the initial ideas for different "days" of the exhibit.



NGX Interactive

Day 424 (Sol 411) | Topic: Rocks | Tool: Camera (Based on the Mastcam-Z)

You're in an open environment on Mars. You cruise around a bit. After a few seconds a flash streaks across the sky and heads right towards you. It lands with a crash and your screen shakes. The crater starts smoking. You roll on over to it. When you arrive, you can't make out much because it's buried in debris. But you can make out a faint NASA logo. A glowing exclamation point icon on your HUD hovers over the wreckage. Once you're centered on the exclamation point, your HUD display changes to camera mode and you're prompted to push the joystick button. Doing so snaps a picture and begins the first challenge.

Day 871 (Sol 845) | Topic: Signs of Life and Minerals | Tool: Laser (Based on the SuperCam)

As this day opens, you're sliding down a steep crater. Gravel is flying towards you. While you slide, you need to quickly move the joystick left and right to avoid crashing into rocky outcroppings. Finally, you land on the ground and tumble onto your back. The camera is facing the sky. You see the two moons of Mars, moving in opposite directions. Your HUD circles the moons and calculates your position based on where they are in the sky. Your rover then activates turtle protocol, where you wiggle back and forth until you get back onto your wheels. Once you do, you see another glowing exclamation point on a dark rocky section on the wall of the crater that you're inside of. When you center in, you are prompted to push the joystick and start up your laser. If it's in the correct spot, it starts to visually "heat up." Hold it long enough and it vaporizes that piece of rock, sending a visual representation of sound and heat waves back towards your screen. You enter the next challenge.

Day 3,219 (Sol 3,124) | Epilogue

You power up but can't move. In the distance you see a little dome on the surface. The sun is setting blue. The dome's door opens, and the experience ends.

B) RESEARCH DOCUMENT

Based on the concepts, I then completed in-depth research into the science behind Martian exploration (excerpted below), which informed visual design and my final in-game copy.

Ancient River

Find proof that water once flowed here.

Camera Tool

The design and functionality of the proposed camera and arm is based on the Mars 2020 Rover's Mastcam-Z, which can see details as small as a house fly from 100 metres away, and the Rover's arm-mounted WATSON camera, which is designed to magnify the textures of rocks.

- <https://mars.nasa.gov/mars2020/mission/instruments/mastcam-z/>
- <https://mars.nasa.gov/mars2020/mission/rover/arm/>

Explore Mode

Visitors will explore the top of a mountainous range. Textures related to dips in the ground and small mountain forms will be featured in this mode. Outcroppings, small piles of rocks, layered rock, "blueberries" and other geological formations will be visible, but not detailed.

#4 Agents of Discovery

A) NARRATIVE ARCS

I was contracted to develop an overall gameplay loop for Agents of Discovery, a location-based mobile game that encourages exploration in parks, museums, and national history sites. The loop needed to work with existing gameplay, relate to bees, and include short, medium, and long-term arcs.

Short Term Arc: The USBees

The USBees, which collectively contain all knowledge, have been released and nobody knows why. Equally mysterious is that the robotic Queen Bee, AKA the Founder, AKA the USBeekeeper, has been kidnapped.

As a new Discovery Agent, you must head into the field and recover the USBees. Plugging them back into HQ is the only way to power up the HIVE and re-open communication with the queen. But it won't be that easy. As part of their security protocol, USBees can only be recovered by solving challenges worthy of a true Agent of Discovery.

When the HIVE hits a certain power level (threshold adjusted dependent on number of nearby sites),

you're able to communicate with the queen and bring her back to HQ. Upon her return, she has no memory — random-access or otherwise — of what happened.

Medium Term Arc: The Discovery Elders

So the queen is back. Things are returning to normal. The USBee recovery operation continues. But then the queen contacts you with some secret and urgent missions. Sometimes when she's speaking everything seems okay. Other times she spaces out. Her fonts go out of whack. Her instructions become contradictory.

All you're able to glean is that you need to track down certain (site-agnostic) caches to recover some computer parts. Once you've gathered them all you head back to HQ to find the queen missing again. Frankly she's becoming a bit of a nuisance but you keep that thought to yourself.

As you search around the queen's chambers a hidden panel suddenly slides open. Emerging behind a wall of smoke, hacking and wheezing, are the incredibly old Discovery Elders. Agonizingly slowly, the Elders reveal the origin of the queen. She is an open-source project that they created way back. She's been infected with a virus. The Elders themselves are the ones behind the kidnapping, but only because they were trying to fix her. The virus reverses her core function to amass, protect, and spread knowledge. It caused her to release the USBees in the first place.

As you gathered the parts needed to fix the queen, the Elders were watching you to make sure you could be trusted because A) they still aren't sure who wrote the virus and B) you've got a real suspicious look about you.

Long Term Arc: The COLONIZE Protocol

With the queen freshly scrubbed and her version upgraded (finally giving her, among other things, a personality), she and the Elders put a plan in motion to prevent this sort of fiasco from happening in the future. Thus begins the COLONIZE Protocol — a way of both decentralizing the AOD's knowledge and putting greater responsibility into the hands of individual agents.

For each region with an AOD presence, a new Field HQ is built that can be added on to by users. It features unique items, designs, monuments, materials, artefacts, and species found in their region. Within the Field HQ each agent gets their own customizable space. But they can also put their resources towards achieving collective goals like a new DuckDeterminer for the HQ games room, or a wind turbine that generates extra coins for all associated users.

Part of COLONIZE is to gather and spread "new" knowledge (unlike the previous stages which were recovering "existing" knowledge). To that end users receive empty USBees with specific challenges in them tied to a user's level, for example to find five different types of pine and snap a photo of their needles.

Completing these fills up a user's USBees, which are then plugged in to the Field HQ's own miniature HIVE server. After the new knowledge is uploaded, the USBee toddles off to a different Field HQ or to Central to spread it. So basically a slower cloud storage system. Metaphors of local/global cooperation abound.

On their way to a different HQ, the filled USBee leaves a trail of its nano-pollen (the material that actually stores the data) behind that only the sending user can see. The user follows this trail to find a special container growing from the ground that can be cracked open for rewards like base materials or devices to annoy your friends. So the USBees are cross-pollinating both by spreading knowledge and more literally.

Through this process, your base is built and maintained. But all is not sunshine. Occasionally the Rogue Agents appear — the group that you learn is responsible for the queen's virus — who try to release your USBees or dismantle some of your base. You'll need to track these rogues down and turn them.



Samples of additional world/character-building copy I wrote for Agents of Discovery

B) TUTORIAL SCRIPT EXCERPT

Based on the USBees concept, I was also asked to develop a new introductory script for the app involving a sassy woodpecker.

(After login the user is brought to the front of the treehouse. If it's a new user the Acorn Woodpecker will prompt them to initiate the Training Camp right away.)

"Thanks for joining the Agents. We need your help!"

(choice) [I'm bored already] / [What happened?]

[I'm bored already]: "Right to the point." (Skip to end)

[What happened]: "Not to alarm you, but see how EVERYTHING IS A DISASTER?"

"That's cause our leader the Queen Bee has been giant robot kidnapped!"

"And her hive of USBees have all been released!"

"Those USBees store the knowledge that we work so hard to collect."

"Our top mission is to bring them all back!"

"But first we need to get you trained ASAP. Ready to start a DANGEROUSLY SHORTENED version of Training Camp?"

[Lead the way!] / [No thanks, that sounds like learning]

#5 Rabbits on Enterprise

A) NOVEL CHAPTER

Is it self-indulgent to include the first chapter of an unpublished novel in a writing portfolio? Probably.

With her hometown set to be obliterated by the demand for electric power, Rosie was determined to hold someone accountable. But first she was gathered beside the few remaining people of Heronrun to observe the destruction.

To be here in person felt necessary, like collecting evidence. And there was no better place to do it than atop Tallblank Hill, where the view staggered.

The place was also symbolic. Tallblank was the meeting point for the town to hash out problems of the day that now seemed as important as a hair is wide. But the problem of annihilation, which they'd met about four times and to record attendance—even Rosie showed up twice—turned out to be unsolvable. "Out of our hands," a rep from the Hydroelectric Authority said during the final meeting. "The shame of it is, it's out of our hands."

At the time Rosie had wondered in that case whose hands the situation was in. When she found out

there'd be no polite strokes of good greetings. Instead she'd grab those hands and slap their owner's face with them, repeatedly, while asking them equally hard-hitting (but always fair) questions.

The wait was becoming intolerable. After another few minutes, Rosie passed restlessness and started vibrating. She glanced around at the others, unable to decide who was the biggest buffoon. How were they so calm? Officer Rellens, who had been called emotionally unstable by two separate Hydroelectric reps on two separate occasions, was just chatting up Mayor Erique about her new cruiser. The Beniora kids were playing sparks, poorly, and without eye protection. Mr. Eritrane was actually asleep, slumped over in his chair. She'd trusted these people, her elected officials, her neighbours. Nobody had done a single thing to stop it.

Even now, no one seemed to care that this was supposed to have started two hours ago. They're destroying our town and can't even stick to their schedule. That's what bothered Rosie the most, she decided. It was rude. It was some tardy executioner arriving winded and frazzled, blaming traffic when they'd simply overslept. It was a final, utter, disrespect of their time after months of pointless workshops, letters, town halls, public notices, and presentations. And still no outrage? Well good riddance to this geriatric town. Rosie never cared for it anyway. So why did she find herself longing for the blended odour of papaya and molten steel that its largest factory once pumped into the summer air? Why was she crying?

The odd time she got this upset, Rosie had to fight the urge to lick the back of her wrists. Today, she failed. This was a trait she blamed on her great grandmother, Gram-Gram being from a time free of warnings about a procedure's likely and generation-spanning side effects. Disclosures were casual, a dismissive wave and assurance it'll probably be fine. That to the best of available knowledge, all good. So she supposed Gram-Gram deserved some slack.

A deep breath. Thinking of Gram-Gram, and then of her daughter Gram, made it easier to convince herself that everything would work out. She would drive to Monera, figure out how this whole thing came to pass, and get justice for the people of Heronrun. She'd seek out the higher-ups, the highest-ups, those that lived above the common concerns and weather, putzing along in their ridiculous blimpjets. She'd make them listen. They'll drain the town, they'll dry it out. They'll fix everything they ruined because they have to. The tips of her fingernails started quivering at the thought.

Rosie glanced over at her car to make sure it was still there. It was. Crammed inside and on top of it were most of the objects she cared most about.

First her woven mattress, treasured above all, wrapped in hydrophobic canvas and more or less secured to the roof. Riding backseat was a small collection of books and records. On the ground were some blankets, pillows, and sets of clothes. Some dishes stacked inside a pot, and a pan she'd stolen from her mom. Ferin's old baseball glove, a game Rosie had really taken to lately. Her bowling shoes and her best

ball. Only one of her stuffed gorillas, Seafoam (naively named by a younger Rosie due to the horrific but educational blue-white rings around its eyes and mouth). And in the trunk was the Hydroelectric Authority's bizarre relocation package: a thin envelope of money—apparently non-negotiable fair market value of the cost of moving, but Rosie had yet to check—along with some electrified home appliances.

"What's this one?" Rosie had asked a few days earlier.

"It toasts your bread," the woman, Arala, told her. She wore a long, idiot, high-visibility raincoat with her name embroidered near the right shoulder.

"Toasts?"

"Toasts. Cooks it, in a way." Arala squinted theatrically, shielded her eyes under the porchlight, and yawned. It was half three in the morning.

"But the bread is cooked already," said Rosie. "Baked, I mean." She reached into her apartment and the porchlight's flame dimmed.

"Appreciated," she said. "It's really a different sort of sensation. Something you have to try for yourself. A lot of things are like that, I find." Before she could stop herself, Rosie was nodding. "Oh, and don't forget that," said Arala, gesturing towards a jug-like apparatus. "It's called a water-cooker. It uses electric power to cook your water. A sterling joy what we can all get done with electric power. Brings it to a boil in under eight minutes. What does that take you on your wood-burning?"

"Probably closer to ten," admitted Rosie.

"And it stinks, I bet." Arala tapped on a tiny spade-shaped insignia at the bottom of the jug and then clasped her hands together. "It's true, the Telentians and engineering are like this."

Rosie didn't know about that. Her Stanstallion Serenade's mechanical failures were practically clockwork. "Okay, thank you. One week, isn't it?"

Arala opened up a ledger. "Just about. Have a good eve—"

At that point Rosie's memory was interrupted by what was definitely an explosion. Then another, followed by several more in quick succession. Within seconds a groaning roar filled the air and the ground started trembling.

When Rosie saw the water, what surprised her was that it was not the oak-sized wave of her nightmares trucking towards the town. Instead it was a gradual, almost mundane thing. It was a supermoon

triggering a regalian tide or a bathtub draining in reverse. Those Monerans seemed to make everything reverse while insisting the opposite.

The water kept rising and Rosie wondered whether even this, the tallest and blankest of hills, was high enough. Maybe the zone maps they'd drawn up and marked with wee green, yellow, and red flags were reversed too. The small electrified appliances she'd received looked nice but Rosie had yet to discover the way to activate them. She decided they were likely as defective as their mathematics. Thinking quickly, panicking slightly, she ran towards the Beniora kids to precautionarily hoist the smaller ones onto her shoulders. But by the time she got within a few feet of them the shaking had stopped. The water lurched gently forwards and the town was submarine.