## The Ground Turns Orange

October 29, 2021

Aztorian Government building. We see Emma.

[NARRATION: Societal Evolution. Its dynamics have been captured in equation form. A mathematical formal system describing emergent laws of how a human society evolves over time.

Characteristics resemble thermodynamics, fluid dynamics, and quantum field theory.

Given a set of parameters, with the correct and constantly updating Jacobian, the tensor algebraic equations spit out the expected changes encoded as probability waves. It is a set of multi-linear mappings from parameter space to material space.

Here in the Aztorian Government, the human computers perform calculations tirelessly, working through the proposals of reform, deciding the impact of each one.

This has been the primary way of decision making for humans since World War 3. True meritocracy in selection of proposals.

But perhaps this also makes the government as an entity on its own, separate from the ordinary people. And they are about to let a catastrophic event slip pass.]

Lucca walks on the streets. He looks down. Between the bricks that form the pavement, the colour is yellow-orange.

LUCCA: "The ground is turning orange."

Interior, Aloh's dining area.

TV: "Today, Aztoria experiences a West wind."

MARRIED MAN: "Something's off today."

MARRIED WOMAN: "Maybe you're off."

MARRIED MAN: "WHat was that?"

MARRIED WOMAN: "Nothing."

LUCCA: "And the air smells nice."

Flashback. Lucca is small, speaking to mum.

LUCCA: "Mum, why does the air smell nice in winter?"

MUM: "Because people are burning firewood in their houses."

End flashback.

LUCCA: "Burning! The wind is blowing from the west, where the Great Oceanian Deserts are! Orange ash and yellow sand, getting caught in the gaps of the pavement... That's why the ground looks orange!"

Interior, INstitute's meeting room.

ALMA: "Great, just in time, Lucca. There is a giant fire burning in the west, approaching the city of Aztoria."

Large panel showing a monstrous fire.

RACHEL: "It's a fire on an unprecedented scale. Why did the government not notify us?"

FREDA, in broadcasting room: "Emergency announcement from the Civil Protection Institute. There is a fire approaching Aztoria. The government has not responded, and the Institute will take over.

Western Districts prepare evacuation immediately. That includes Districts 40, 41, 42, 43, 44, 45, 46, 48, 49.

I repeat. There is a fire approaching Aztoria..."

Science team meeting room. Lucca walks in. All major scientists in Aztoria are sitting in. Susan is in the crowd, and waves at Lucca.

Head of Chemistry is presenting to the Directors.

HEAD OF CHEMISTRY: "Fire needs 3 things. Combustible material, oxygen, and high temperature. So to destroy a fire, we could lower the temperature. Water is such a method, being the powerful heat absorbant it is. However, there is not enough water to extinguish the fires. We also considered targeting the oxygen. We could use the gas method, with our jets, spreading inert nitrogen gas to replace the lower atmosphere of oxygen. Again, not feasible for a fire on this scale.

Thus we turn to the combustible material. It sounds counter intuitive, but we are going to remove the trees that are providing the fire fuel."

AGENT: "Getting rid of all the trees? Defeats the whole purpose of trying to stop the fire."

SCIENTIST, with diagram: "Not so. THe land mass of Oceania is mostly desert. The fire comes from a relatively small forest

mass to the west of Aztoria. COnnecting this mass of trees with the main Aztorian forests, is but a very narrow strip of trees, 10 kilometres wide. We shall call this the "combustible corridor".

All we need to do in our operation, is to get rid of a strip of trees across this Combustible Corridor. Leaving a gap wide enough so that the fire doesn't reach over, while preserving most of Aztoria's greenery. This plan is feasible."

DIRECTOR IAN: "Great. We will deploy tree removal teams to the Combustible Corridor immediately."

As the people leave the room, Lucca and Susan discuss outside.

LUCCA, playful: "Why is the head of neuroscience here?"

SUSAN: "All major scientist from every branch of the University in Aztoria were called here. Since the terraformal regulations, we haven't had a fire on this scale for centuries."

LUCCA: "You all reached here so quickly!"

SUSAN, smiling: "Thanks to the all-reaching Aztorian Train."

Susan and Lucca look over the city.

SUSAN: "First the Newon Plague, then a huge fire... Who knows what awaits us next."

LUCCA: "I know what you mean. Aztoria... feels like a strange city."

SUSAN: "Hahaha! Doesn't it! I'm glad you feel that way. It feels like... we're the only two same people around here."

SUSAN, leaning on Lucca: "Luc... Remember back in highschool,

I asked you to take a walk with me?"

LUCCA: "Yes, Susan. I was happy to be asked."

SUSAN: "Can you... walk with me again?"

LUCCA: "Yeah. Whenever you're free."

SUSAN, serious: "But, I am here for an extra reason. There is Newon activity within the Institute."

They walk through the levels of the Institute.

After turning one of the corridors, they see a Newon writhing in the hallway.

LUCCA: "A newon. How did it get in here?"

SUSAN: "Where humans congregate, there will be Newon."

LUCCA: "Why?"

SUSAN: "Do you have a magnetic beam pistol?"

LUCCA: "Here. Don't you have one too?"

SUSAN: "I'll be fine."

LUCCA, dreadfully: "You look really sleepy. Are you sure you are alright?"

SUSAN, fumbling the pistol: "Yes."

LUCCA: "Align the outer magnetic cylinders, then connect the electric current."

SUSAN, nervous: "Got it."

She fires a powerful magnetic beam, the Newon disintegrates. She almost falls down, but Lucca catches her.

SUSAN, smiling: "Trust me, nothing is out of the ordinary."

LUCCA: "I will trust you. But notify the Institute immediately when it is."  $\label{eq:LUCCA:}$ 

SUSAN, panting: "When you have time, visit me at the Aztoria University."

Montage of the Institute in action. The fire is stopped.

News articles show: "The Institute triumphs once again."

Interior, Government building.

"Emma, have you heard? There was a fire outside."

EMMA: "Really? And?"

PERSON: "The Institute defeated it, swiftly and cleanly."

EMMA: "Amazing..."

As they speak, a knock can be heard in the entrance of the government building. The gate opens, and a group of agents rush in.

The computers are seized and taken out of the government building.

EMMA: "Hey, hey! What're you doing?"

AGENT: "The Institute is taking over. You will be relieved of your duties as computers."

EMMA: "OW, that hurt!"

AGENT: "Sorry. We don't mean to be so blunt."

 $\ensuremath{\mathsf{Emma}}$  makes a face. Then gets escorted out of the government building.

Interior, Institute. Director Alma and Lucca are playing a game of encirclement-chess.

DIRECTOR ALMA: "Question time, Lucca."

LUCCA: "I knew it."

DIRECTOR ALMA: "Fire on this scale has not been a thing for a long time. With the terraformal regulations in place, earth's climate is simply impossible to produce a forest fire. Yet the ground turned orange, and fire did happen. What do you think about that?"

LUCCA: "It would suggest that the fire was a man made event."

DIRECTOR ALMA: "Oh? A manmade event. Why? Who do you think has to gain from it?"

LUCCA: "It's beyond me, Director."

DIRECTOR ALMA: "Let me ask you a different question."

DIRECTOR ALMA: "On first glance, just like a fire, Aztoria is propped up by 3 things. Lucca, who holds power in Aztoria?"

LUCCA: "The three pillars of Aztoria are the CPI - that's the Civil Protection INstitute... The Aztorian GOvernment... and the Aztoria University."

ALMA: "Institute, Government, University. COrrect. Let's start with the University. Who tells it what to research and what to teach?"

LUCCA: "The Aztorian Government, through the equations of SED, deciding which subjects are worthwhile to the healthy development of society."

ALMA: "So really, the power of the University is the power of the Government."

LUCCA: "You're right."

ALMA: "And who gives the government the equations of SED, so that the hard working computers can perform computations?"

ALMA: "So really, the power of the Government is the power of SED, which is... the power of the Institute."

LUCCA: "I... I see."

ALMA: "Here's another question. Who controls the Factory Array?"

LUCCA: "The Civil Protection Institute."

ALMA, pleased: "Who decides what is produced at the Factory Array? What food capsules, what uniforms, what-"

LUCCA: "I see what you mean. The Civil Protection Institute."

ALMA: "Therefore, it is the Institute that feeds the people, gives them clothes to wear, gives them places to live."

LUCCA: "That's... Aztoria is a one-organisation show huh."

ALMA: "An organisation with absolute control over every important facet of society... can decide to supercede the others..."

LUCCA: "Are you suggesting that's what the Institute will do?"

ALMA: "Precisely. When Aztoria began, there indeed were the 3 pillars that held it in place. Over centuries, whether by design or accident, the responsibilities have been flowing towards the CPI - because we hold the holy grail to happiness - the study of Societal Evolution Dynamics."

LUCCA, only looks at ALMA with a sincere curiosity and unsettlement.

ALMA: "No organisation can outlive its original mission statement. Eventually everything tends to bureaucratically degenerate."

LUCCA: "The Civil Protection Institute has lived alongside humanity

for many centuries now, hasn't it?"

LUCCA: "Of course."

Alma smiles.

As they say this, they hear an announcement from the broadcast  ${\tt room.}$ 

DIRECTOR FREDA: "The Government will be no more. From this day on, all decisions will be directly made from within the reliable and efficient Civil Protection INstitute. Thank you for your attention."