

# CALCULATED BLISS



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*by*

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# CONTENTS

<i>Happiness Day</i>	I
<i>Ministry of Numbers</i>	9
<i>Priority</i>	21
<i>My utility</i>	31
<i>Sector 7</i>	37
<i>Ginger</i>	55
<i>The Golden Hare</i>	65
<i>State of Emergency</i>	83
<i>Evacuation</i>	93
<i>Confession</i>	99
<i>Emmanuelle</i>	117

*Insomnia* 125

*The fourth floor* 131

# HAPPINESS DAY

IT IS A HOT, HUMID MORNING. I'm at home, making a double-shot cappuccino. The day calls for the extra caffeine: I had a long, exhausting night at the office.

The bells of a nearby church announce it is 8 o'clock. I went to bed no earlier than 5am, so I need the double-shot cappuccino if I want to make it through the day. I have limited myself to only one coffee per day since the doctor advised me to cut my coffee consumption. However, if there ever is a day to skip the doctor's advice, it is today.

After taking a first sip of the cappuccino, I sit on the sofa to see the fruits of all the hard work during the last few weeks. I turn on the TV. It doesn't matter which channel the TV is on, as they are all showing the same programme: the Prime Minister is addressing the nation with his annual speech. He was due to start at 8am. It is 8:02am, and the Prime Minister's speech is already underway, punctual as ever.

## *Calculated Bliss*

‘It’s been twelve months since I last addressed you, my fellow citizens. It’s been twelve months since I promised to you that the growth we have experienced over the last few years would continue,’ shouts the PM with a deep but clear voice.

He stands in a big room, with two tall plants on each side. The entire room is, in fact, full of plants: the limestone pillars behind him are wrapped in thick ivy, covering most of the pillars, and small palm trees line the back wall until almost no stone remains visible. At times, it seems he is standing outdoors; only the chandelier above reveals that the speech is, indeed, indoors.

The Prime Minister is wearing a light navy suit with a long coat over it. The fabric seems quite thick – how is he not boiling with so much clothing, on this hot day? After a brief pause to catch his breath, he continues his speech.

‘There was some scepticism that the government would not deliver – it would be foolish of me to pretend otherwise. We have had a number of consecutive quarters of growth, and many doubted this trend would continue. Many predicted we would reach a plateau. Some even warned of a contraction.’ The PM shows a faint smile, almost as if he is laughing at the fact that people even considered he would fail to deliver on his promises.

‘Over the past decade, we have witnessed unprecedented growth, averaging almost 10% year-on-year. Well,



dear citizens – I am pleased to announce that last year our Gross Domestic Utility grew by 9.8%!’

The room erupts with cheers from the audience. I hadn’t realised there was an audience until now, but judging by the noise, there must be at least a hundred people. I lower the TV’s volume to avoid disturbing my neighbour – although he is probably watching the speech too.

‘The growth of our Gross Domestic Utility shows that the total welfare of our citizens continues growing. Our communal happiness is higher than ever. Our government has worked hard to continue making our citizens happy, to increase all of our utils, and it has delivered!’

At this point, the loud cheers make it difficult to hear the PM talk.

‘Finally, I would like to finish by thanking all civil servants who have worked so hard in the last few days and weeks to gather and process all the data to accurately calculate this year’s Gross Domestic Utility. It is no simple feat to measure the total utils of our great nation, but the collective inter-ministerial effort has ensured that we would have an accurate, timely figure for today – our National Happiness Day!’

As one of those civil servants the PM refers to, I am quite content with myself that my efforts, as well as my colleagues’, are recognised in his annual speech. What a classy gesture! I glance at the clock. It is already almost 8:30am, so I take the last sip of the coffee and get ready to go to work.

## *Calculated Bliss*

As I leave the house, I realise I haven't had breakfast yet. I was too distracted by the Prime Minister's annual address, and now my stomach is making its displeasure known. Still, it's a blessing in disguise: an excuse to grab a croissant from my favourite bakery, which happens to be on the way to the bus stop.

Locking the door behind me, I step onto the pavement and join the steady flow of morning commuters. As I walk, trying to decide if I should choose the regular butter croissant (a true classic) or the chocolate croissant (more controversial among croissant connoisseurs, but I like that it is creamier), I hear someone shout a few metres behind me:

'Sir! Sir!'

I continue walking, oblivious that someone is calling for me.

'Sir! Please, stop sir!' shouts the man.

'Or perhaps I should get the peanut butter croissant they introduced last week? It did seem very tempting the last time I went there,' I continue thinking, fully focused on this dilemma.

'JOHN! PLEASE, STOP!' shouts the man, determined to grab my attention. He succeeds, and I turn around. The man is a tall, broad-shouldered and slightly overweight policeman, running towards me with haste. He is holding his cap with one hand, as it will surely fly away otherwise due to his clumsy running. On the other hand he is holding a medium-sized device, which

is around 20 centimetres tall excluding a small antenna that stands out from it.

‘Is everything alright, officer?’ I ask, confused by the scene.

‘Absolutely, John! I was simply using the praxometer, as usual, when it made a recommendation for you.’ He presses a few buttons on the device he is holding, and proceeds to read from it. ‘There is a new bakery that just opened on Wood Street. It is only a small detour from your usual route to the bus station, but the praxometer considered the detour will be worth it as the utils gained from their croissants, even after adjusting for the annoyance due to the slightly longer commute, will more than outweigh the utils you would gain from the croissants from your usual bakery.’

‘Oh, that’s fantastic,’ I exclaim. ‘I will certainly pay that new bakery a visit. What is it called?’

‘It is the Golden Bread Bakery, sir,’ replies the policeman, still trying to catch his breath from the sprint.

‘Thank you officer, I will head there now.’

‘Excellent! Have a nice day, sir,’ says the policeman with a smile, as he starts walking away.

Following the praxometer’s advice, I take a left turn to Wood Street to give the new bakery a try. I don’t have to walk for long until I reach the Golden Bread Bakery: a quaint bakery with a very appealing selection of sour-dough breads, baguettes, cakes and pastries.

## *Calculated Bliss*

I still haven't decided which croissant to get. I am undecided between the plain croissant and the chocolate-filled croissant. I feel quite hungry and they both look delicious, so I decide to get both. Today is a special day, anyways. After a pleasant short conversation with the woman who runs the bakery (a lady in her 50s fulfilling her lifelong dream of having her own little bakery) I leave the Golden Bread Bakery and walk to the bus station. I take the first bite as I take a seat on the bus. It is the best croissant I have ever had.

The bus is surprisingly empty. At this time I am rarely able to find a seat, but today there are plenty to choose from. I am even able to find two empty seats, offering extra comfort – a true luxury! People often take the day off on National Happiness Day to spend it with their families. That's probably why the bus is so empty.

Someone left today's *Optoria Herald* on the seat. It is still in good condition, so I take it to read it.

'Blossomfield's serial killer arrested and named: Marcus Smith,' reads the front-page headline. Below, a mugshot of a man is shown. He has a long, black beard and somewhat untamed hair. He looks scared.

To be honest, I can't help but feel relieved. The Blossomfield murders are a string of five unconnected murders that occurred over a period of two or three months in the vicinity of Blossomfield. Most of the murders hap-

pened in the evening after dark, though one took place early in the morning before dawn. The last victim was killed more than three months ago, but the police had struggled to find the serial killer.

Some people are nowadays hesitant to go outside when it's dark; not only in Blossomfield, but elsewhere in Optoria too. They're just too afraid. I'm glad he's been caught. Hopefully, this will bring some peace and reassurance to Optorians.

'Marcus Smith, a baker who lives in Sector 17 but works in Sector 18 near Blossomfield, has been arrested for the Blossomfield murders. He was taken into custody late Monday evening after police raided his home. Angela Ballard, Commissioner of the Optorian Police, told the *Herald* that objects believed to be directly tied to the murders were discovered on Smith's property. These included the knife used in the first killing, the hammer used in the third, and earrings belonging to the fourth victim. Forensic teams are expected to continue searching his home for further evidence in the coming days.'

'The arrest concludes an investigation that some Optorians protested had taken far too long. These murders shocked the nation and put public safety into question. 'With the person responsible for these horrific murders off our streets, we hope Optorians can feel safe again,' said Commissioner Ballard. 'Our accounting team estimated that Marcus Smith's arrest results in an increase of over 100,000 utils to Optoria,' she added.'

‘Marcus Smith’s case will now proceed through Optoria’s judiciary system, where his fate will be determined by a public utility assessment. If declared guilty, his sentence will be determined by placing him in simulated scenarios to measure his usefulness to society through praxometer readings.’

‘If Smith’s scores fall below the threshold for citizenship, he may be assigned to a “High-Utility Service Unit,” where he will contribute to Optoria’s utility through controlled experiments like medical testing or resource optimization trials. Alternatively, he could enter a monitored rehabilitation program if potential for utility improvement is detected.’

# MINISTRY OF NUMBERS

I ADJUST MY GLASSES, a habit that seemed to bring clarity to both my sight and my thoughts. I take a deep breath and step through the towering entrance of the Ministry of Numbers.

The Ministry of Numbers is one of many ministries that ensure the correct functioning of the nation of Optoria and its government. It is probably, nonetheless, the most important ministry. Optoria's public policy, and all actions of its citizens, is determined with the sole goal of maximising and promoting the welfare, well-being and happiness of Optorians. Decisions that promote these values are deemed to be worth pursuing; actions that don't, on the other hand, are to be avoided or even prohibited, if they sufficiently reduce the welfare of the nation.

This goal is not left to chance or subjective interpretation. Instead, actions are rigorously analysed to measure the extent to which they promote these values. The result

of this analysis is a single number, called utility, which objectively quantifies the effect of actions on the total well-being of Optorians.

This analysis is carried out with the help of the praxometer, an ubiquitous device that has become as integral to Optorian life as the air we breathe. The praxometer, a marvel of modern engineering, measures the utility generated by any action, policy, and decision. It is used in all areas of the state, including legislation, healthcare, education, the judiciary system, and even in everyday life of Optorians. The praxometer ensures that all activities contribute positively to the nation's collective happiness, as determined by intricate algorithms and data analytics.

The basic unit of the praxometer is the *util*. For example, the enjoyment the average person receives from a good cup of coffee is about 1 util. Of course, not every person would receive *exactly* 1 util for drinking a cup of coffee: some people particularly enjoy coffee and would thus receive more utils. Other people might not like coffee as much, so they would receive less than 1 util (or even negative utils, if they dislike coffee). However, the utility the average person would receive from a nice cup of coffee is, as measured by the praxometer, about 1 util.

The praxometer is a truly marvellous device. Not only does it measure the utility of actions inputted into the device, it can also spontaneously suggest courses of action that yield a higher utility than the status quo. For example, when the policeman rushed to inform me that the



praxometer suggested I should get the croissant from the Golden Bread Bakery rather than the usual bakery, it was because the praxometer detected that whereas the croissant from my regular bakery would give me 2 utils, the one from Golden Bread Bakery would result in 3.5 utils.

I know the utility of drinking coffee, eating croissants and many other actions better than most. I work as a Senior Accountant at the Ministry of Numbers. My job involves a number of roles. I gather statistics about the utility of various sectors of the nation, to make sure they are helping the total utility of Optoria. I monitor the utility of the work of other ministries, and suggest amendments if they are not efficient enough in maximising utility. Occasionally, the government might provide for examination a range of new policies they are looking into. I, together with other colleagues at the Ministry of Numbers, would then examine these proposals to study their effect on the nation's utility. The task is complex and highly non-trivial. We would analyse the effects of each proposal to each aspect of society; check if the new proposals interacted with other existing policies in undesirable ways; measure the net effect on Optoria's utility; and, if the net effect is positive, we would check if the new policy achieves superior utility to other alternatives. It is an arduous endeavour.

The nature of the work involved in the correct running of the Ministry means that, unlike other ministries, the Ministry of Numbers mostly employs people with a

technical background: mathematicians, physicists, engineers... My background is in statistics, with a doctorate from the University of West Optoria.

My role in the Ministry of Numbers shows why the Ministry is of paramount importance for an efficient functioning of Optoria. The Ministry of Health, Ministry of Labour, Ministry of Transport, and other ministries each work to optimise the utility of a specific sector of society. The Ministry of Numbers, on the other hand, ensures that these pieces coordinate and fit well together to achieve the ultimate goal: maximising the nation's utility. It has a view of the bigger picture and oversees the performance of all other ministries.

I walk through the grand entrance of the Ministry of Numbers. The building, an imposing structure nestled in the heart of the capital of Optoria, shows the nation's commitment to efficiency and the pursuit of utility. When designing the building, the architects ensured that everything about the building, from its aesthetics to its functionality, was done in a way that maximised the utility of those who work within its walls.

The building emerges above the surrounding skyline. Its sleek lines and sharp angles are in stark contrast to the more traditional structures nearby. Constructed from a blend of glass and steel, the facade glimmers in the early morning sunlight, highlighting the building's modern design and intricate geometric patterns.

Inside, the air is filled with the earthy scent of soil and foliage. Plants of all shapes and sizes decorate every corner, from sprawling ferns that cascade from hanging pots to towering trees that stretch towards the atrium's steel ceiling. This verdant oasis is not merely an aesthetic choice. Research has shown that the presence of plants could enhance utility by improving air quality, reducing stress, and increasing worker productivity. Most government buildings in Optoria take advantage of this and include plenty of plants in their interior. However, no other building contains as many plants as the Ministry of Numbers, where the lush interior is proof of the guiding philosophy of utility maximisation in Optoria.

I greet the receptionist and head to the lift. It is a golden cylindrical cage located between two leafy palm trees, not big enough to fit more than four people. Martha, an engineer at the Ministry of Numbers, is waiting for the lift.

'Morning, John! Happy National Happiness Day! Did you watch the Prime Minister's speech today?' she asks with a smile on her face.

'I certainly did! We spent a lot of time gathering the data and statistics to calculate our Gross Domestic Utility, and I did not want to miss his speech.'

'I hear you! I noticed how hard all accountants have been working the last few weeks – they were in the office before I arrived in the morning, and they were still there by the time I left the office in the afternoon.'

## *Calculated Bliss*

‘It was a lot of hard work, yes. I am happy we finished before the National Happiness Day.’

The lift arrives, and we both get in.

‘I was impressed by the performance of our nation. I must admit I was one of the sceptics who was not entirely sure if we were going to be able to keep up with our previous growth in Gross Domestic Utility,’ says Martha as the lift starts going up.

‘But an increase in 9.8% in the GDU! I was certainly not expecting that. It really makes me proud of our work here at the Ministry. It is nice to see that our hard job makes an impact on everyone’s utility, you know? Anyway – this is my floor. See you, John!’

The Engineering Department is located on the first floor. Accounting, where I get off, is a couple of floors higher, on the third floor.

Despite being significantly taller than the buildings that surrounded it, the Ministry of Numbers has only four floors. The ceilings are very high, which together with the amount of natural sunlight and abundant plants gives one the impression of being outdoors.

Each floor has a number of tall but thin dendriform columns. Barely 20 cm in diameter, they stretch over 25 metres in height. Near the top, each column widens, crowned with a disc about 10 metres in diameter. They look like water lilies seen from underwater, and when paired with the ferns scattered throughout the floor, they

give the observer the impression of being submerged in a vast pond.

Each accountant has their own standalone desk, spaced just far enough apart to allow focused, dedicated work, yet close enough to encourage occasional serendipitous conversations and free flow of ideas. The interior designer (with the aid of the praxometer, of course) worked out the optimal desk spacing, which resulted in a distance of 4 metres between desks on either side, and 3.5 metres between desks in front and behind.

I arrive at my desk, located 8 rows away from the lift. My desk, like all desks at the Ministry, is oval-shaped. So are the chairs, which have a rounded back support. This is a common feature of the Ministry of Numbers. The praxometer had shown that sharp, squared edges tend to increase anxiety and stress. Round edges, on the other hand, transmit serenity and tranquillity. The difference in utility is slight, just a fraction of a util, but such attention to detail and pursuit of utility is characteristic of the Ministry. It also sets the tone of what is expected from its accountants: if the Ministry itself makes sure to optimise for even such small differences in utility, accountants should also make sure that no stone is left unturned in the pursuit of maximisation of utility. No improvement is small enough to be overlooked or ignored.

## *Calculated Bliss*

There is a big stack of documents on the desk. I had been so busy the last few weeks in preparation for the National Happiness Day that work piled up on my desk. It is now time to get back to it.

The first item is a formal request from the Ministry of Transport:

To Whom It May Concern,

Optoria is growing. Its population has grown significantly over the last decade, and unfortunately our public transportation system has not kept up with it. As a result, Optorians living in the periphery of the capital have to deal with overcrowded, infrequent trains and buses in their daily commute to the capital. Likewise, those living in the capital cannot easily visit the beautiful countryside, mountains and villages of Optoria on the weekends due to the lack of adequate public transport.

This has greatly increased stress and dissatisfaction of Optorians. The resulting reduction in total utility is, of course, detrimental to our Gross Domestic Utility.

The budget of the Ministry of Transport has stayed about the same over the last years, despite the increasing need to upgrade our public transportation. The Ministry would

like to request 3.5 billion Optorian dollars to fix this.

We would create a new north-to-south rail line, which would connect the northern and southern towns with the capital. We would also increase the frequency of the existing west-to-east line, relieving pressure to this overcrowded line. In the meantime, we would introduce new local bus lines to complement our railway services.

I have attached a detailed map of the proposed new lines, and a technical report about the project.

I trust that these upgrades will significantly increase the utility of Optoria.

Yours sincerely,

Nicole Stuart

Secretary of State for Transport

The letter was followed by a note from Margaret, my manager:

Hi John, could you take a look at the attached request from the Secretary of State for Transport, please?

Thanks,

Margaret

I sighed. What I am being asked is far from trivial, and will take time. Money is, obviously, a scarce resource. It needs to be allocated optimally. I don't doubt that the proposed project will increase utility in a certain sector of society, but that has to be checked using the praxometer. Sometimes a proposal which, on the face of it, will clearly increase utility ends up actually decreasing the overall utility due to unintended consequences. Perhaps the proposed railway line crosses an area of natural beauty, affecting enough people to a sufficient degree for the whole project to have an overall negative effect on utility. Perhaps introducing new local bus services to replace some train journeys ends up increasing pollution in the area, leading to health issues for Optorians. The world is a complex, interconnected and unpredictable place. Even a seemingly simple proposal can have unsuspected second or third order effects that need to be evaluated. This is, of course, impossible to do for a mere human being. It is a task for the praxometer.

There is also the issue of opportunity cost. The requested budget for the project, 3.5 billion Optorian dollars, is a lot of money. If that money is spent on renewing Optoria's transportation infrastructure, that's 3.5 billion Optorian dollars that are not spent elsewhere. Even if the project is shown to increase Optoria's utility, it also needs to increase utility more than other alternative allocations of the money.



Of course, it isn't up to me to decide whether the project will go ahead at all. It is Simon, Margaret's manager, who will make the ultimate decision. What is being asked from me is to create a report analysing the impact of the project and make a recommendation. It will take several days of work with the praxometer, so I decide not to waste any time and get started right away.

## *Calculated Bliss*

# PRIORITY

IT HAS BEEN A LONG DAY. It has been a tiring day of crunching numbers, planning out scenarios, and inputting simulations in the praxometer. I am ready to go home and get some rest.

It is already 7pm, but I am not the only one left at the office. As I walk to the elevator, I wish a nice evening to several colleagues that are still on their desks, working. A hardworking bunch, these accountants are!

The Ministry of Numbers turns off the main lights by 6:30pm, and only some dimmed lights are left on to guide workers to and from the lift. Accountants that want to stay longer have to use their desk lamps for light. They are one of those small banker's lamps with an emerald green coloured glass lampshade and a gilt stand. They have a pull switch to turn them on and off.

During busy times, like it is today, the sheer number of desks with their lamps turned on is truly mesmerising. The lamps' green glasses create a sea of green dots, scattered throughout the floor of the Ministry. The green

## *Calculated Bliss*

lights reflect on the ever-present plants, as well as on the tall, thin columns. They look like fireflies in a dense forest.

I take the golden lift to the ground floor. The receptionist has already left for the day, so I head straight to the entrance through the palm trees.

The bus stop is a short walk away from the Ministry. I notice that the bus is already at the stop, so I run to avoid missing it. However, the bus is not going anywhere. There is a relatively large group of people, about 20 people in total. They do not look happy.

I can not make out what is going on. At the centre of it appears to be a well-dressed man with a three-piece suit that looks bespoke. He can't be older than 30. The entire bunch seems to be arguing with him.

'Do you know what is going on?' I ask an old man who is witnessing the dispute.

'Not sure. They were already shouting at each other when I came. Whatever it is, they are pretty mad at the young man! I just wanted to catch the bus, but it doesn't look like it will leave any time soon.'

The person in front of the gentleman turns.

'It's about that man over there, and the lady next to him,' he says pointing to the suited man and a woman who is in her 80s. 'We were all on the bus, where the man was seated on a priority seat. The lady got on, clearly struggling with her walker. She asked the man if he would mind if she took the seat. He said no, that he would not

give up his seat. The lady, taken aback by his response, looked at him incredulous. A girl who was standing next to the man told him that he shouldn't be so rude, and he should just offer the seat to her. The man doubled down and said that he was sorry for the lady, but that he was doing just fine and didn't want to stand up.'

I raise an eyebrow in disbelief.

'That's when all hell broke loose. The girl started arguing with him, and more passengers joined her. The man remained stubborn, unwilling to stand up. The chaos behind forced the driver to pull over at the bus stop, and make everyone leave the bus.'

A policeman then shows up. It was the same policeman that suggested I try the Golden Bread Bakery this morning.

'Alright, alright! Settle down please! What's going on here?'

The crowd explains to him what had happened. They explain that they consider the behaviour of the man abhorrent, and that they found it outrageous he would put his own comfort above the old lady's, who would clearly benefit more from taking the seat.

'It goes against the principles of Optoria!' screams someone.

'Alright, enough!' The policeman was struggling to calm down the crowd.

'I said enough! There's a simple way of settling the issue. I'll just check with the praxometer what is the dif-

ference in utility between both events – the man keeping his seat, and the man giving up the seat to the ma'am.'

The policeman turns to the well-dressed man.

'Sir, I must warn you that if the difference in utility is greater than 50 utils, you will have to accompany me for further questioning, as it might be considered as a misdemeanor for utility deprivation. Do you understand that?'

'I do, sir.'

'Fine, let me check the praxometer.' The policeman starts pressing the buttons of the device. I can tell by the swiftness and lack of hesitation that he is well-versed in the use of the praxometer. It is not an easy device to use, I've seen people struggle with it even after years of practice. Not him, though – he clearly knows what he is doing.

'There you go. I should now get the result. Let me see... it says the difference is 56 utils...'

The crowd cheers in jubilation.

'Just take him already!' shouts a person at the back.

'...in favour of the gentleman,' concludes the policeman. The cheerful atmosphere turns to stone-cold silence.

The girl that initiated the argument is the first to break the silence.

'Wait, what? How can this man enjoy 56 more utils than the old lady for remaining on the seat? Look at her, she's struggling to stay upright even now!'

‘Calm down, please. I will have to ask you all to stay with me. You may have all committed misdemeanour. Please, stay in place,’ says the policeman addressing the crowd. He then turns to the man that was at the centre of the dispute. ‘Not you, sir – you are free to go.’

If the mood of the group was sour until then, it quickly became downright hostile. The people could simply not understand how the policeman turned the situation against them.

I don’t want any problems, so I decide to leave the scene. The walk home is 30 minutes anyway, not too long – so I decide to give up on the bus and start walking along Red Hill Avenue, passing by the Ministry of Numbers.

I walk along the avenue, leaving the noise behind. Soon, however, the loud, angry, utility-sucking noise is replaced by another loud, but much more cheerful, noise. As I take a turn away from Red Hill Avenue, the reason becomes apparent: there is a parade – and a large one. It is the National Happiness Day parade. A marching band with drums, trombones, trumpets, cornets and all sorts of other instruments is enthusiastically playing Tchaikovsky’s *Marche slave*. It is the national anthem of Optoria, and has been for over twenty years now. Lyrics were added to it, written by the Optorian poet Frederick Loch – who I believe died only last year? A choir follows the marching band, and they start singing the national anthem.

## *Calculated Bliss*

From mountains high to valleys wide,  
We stand as one, in strength and pride.  
Our hands build a brighter day,  
For the common good, we pave the way.  
United hearts, with purpose clear,  
The path of light, we hold so dear.

Optoria, our land so free,  
In unity, we rise, we see.  
The good of all, the highest aim,  
In every heart, we light the flame.  
Together strong, our spirits high,  
For the common good, we'll strive and fly.

Each step we take, for one and all,  
No task too great, no dream too small.  
In work, in peace, our aim we hold,  
To raise our land in worth untold.  
For every voice, for every hand,  
We shape the future of our land.

Optoria, our cherished land,  
In unity, together we stand.  
For the common good, our hearts aflame,  
In every soul, we call your name.  
Together strong, with spirits high,  
For a brighter future, we'll reach the sky.

Behind the choir there is a massive balloon in the shape of a red fox, the national animal of Optoria, a symbol of happiness and utility. Behind, a group of young boys and



girls (probably from a local school) wave the flag of Optoria – a brown-and-blue flag with a red fox in the centre.

Some people have said in the past that the annual parade is a bit over the top, even unnecessary. I know enough to know otherwise. I oversaw the budget of this year's parade. The marching band, including the choir, will provide 9,287 utils; the red fox balloon will generate another 14,102 utils; and the horses (I can't see them, I guess they've already passed) will be another 8,198 utils, at just over 400 utils a horse. In total, the parade will increase the utility of Optorians by over 50,000 utils. The cost of the parade, around 40,000 Optorian dollars, is expensive, but well worth it. Activities that generate more than 1 util per dollar spent are usually good investments.

Lastly, as it is customary for Optorian parades, a group of domesticated red foxes (guided by two people dressed in uniform) mark the end of the parade. The cute animals are playfully jumping around, and the crowd loves them – particularly the children.

For the longest time, scientists thought that foxes could not be domesticated. There had been attempts in the past, but they all failed. At most, ethologists managed to tame some foxes to an extent. Full domestication, however, proved to be elusive.

The difference between taming and domestication is a subtle but significant one. When a wild animal is tamed, it begins to accept and tolerate the presence of people around it. Its behaviour is modified so that its natural

instinct towards humans (be it aggression or evasion) is suppressed. Nevertheless, this behavioural change only concerns that animal. Offspring of a tame animal are not tame: the taming process would need to be repeated for each of its descendants. To make this change permanent, its genome needs to be modified in a way that serves humans. This is when domestication happens. Offspring of a domesticated animal are domesticated.

After many unsuccessful attempts, scientists resigned to admit that domestication of foxes was simply not possible. Then, something wonderful happened.

For a long time, red foxes had become regular visitors of Optorian cities – particularly its suburbs. Attracted by the abundance of food, the fox population in urban areas grew over time. At first they only frequented areas near parks, and were wary towards humans. They only left their dens at night and they would run into hiding as soon as a person came into sight. On the rare occasions when a person would surprise a fox, making it feel trapped with nowhere to hide, the fox turned hostile and attacked the person.

Over time, however, foxes became more comfortable around people. They stopped running away from them; fox attacks, fortunately, became a thing of the past; and these nocturnal beings started making appearances during the day, even far from parks or green areas. They were showing the first signs of tameness.

Finally, the final step that eluded Optorian zoologists took place. Permanent genetic changes emerged among the urban fox population: their brains became smaller, their snout became shorter, and they lost their natural physical and mental agility which was needed to catch live prey, but no longer necessary among humans. Nature achieved what deliberate, targeted human intervention could not achieve. Foxes became self-domesticated, not too dissimilarly to how dogs and cats were believed to have been domesticated millennia ago. It wasn't long until foxes became human companions, and now they are the most popular pets in Optoria. I used to have one when I was a child – we called him Ginger.

The last red fox walks past me. That's my cue to leave the area, before all the people watching the parade do the same. I turn back, and swiftly continue my walk home.

## *Calculated Bliss*

# MY UTILITY

I OFTEN THINK about my own utility. What is the utility of my life? How much do I contribute to Optoria's total utility? Is the impact of my life on Optoria net positive?

The answer is not straightforward, as there is more than one way of measuring this. There are, in fact, at least three ways of measuring it.

First, and perhaps the simplest, is my own personal utility. My life consists of a collection of experiences, a stream of episodes that started the day I was born and will finish the day I pass away. Each of these events has an associated utility. The higher the utility of an event, the more happiness, well-being or satisfaction I get from it. This utility is precisely quantifiable. When I enjoy a nice cup of coffee with friends, I gain 6 utils. When I watch a good film, I gain 9 utils. On the other hand, each time I get the flu and fall sick, I lose 23 utils. When you add up all the utils of all events throughout my life, you obtain my personal total utility.

What is my personal total utility? Well, I don't know exactly, but I am sure it is positive. I have had bad experiences in life, such as the day my fox Ginger died. Those certainly had negative utility. But I have had plenty of positive experiences in life, and overall I am confident my personal total utility is (so far) positive.

Another way of measuring my life's utility is by measuring the world's utility. The world's utility consists of the sum of your, mine and everyone else's personal total utility, and all my actions contribute (either positively or negatively) towards it. This is what Optoria's Gross Domestic Utility measures.

Finally, there is a third way of measuring the impact of my own life in Optoria's utility. It is the world's total utility, if I didn't come into existence. We Utility Accountants call this the world's utility *ex-persona*, although I don't like these technical terms. If I simply did not exist, what would the world's total utility be? Would it be higher than the current, actual world's utility? Or lower?

You could be forgiven for thinking that the world's utility *ex-persona* is simply the world's total utility, minus my own personal total utility. If I were Robinson Crusoe, stranded on an island disconnected from the rest of society, that would be true. I am not, however, Robinson Crusoe, and I do interact with people everyday. There are many ways in which I have impacted the world's utility. But measuring this impact can be counter-intuitive.

As an accountant at the Ministry of Numbers, I impact many aspects of society. My decisions have deep ramifications in the lives of the citizens of Optoria. I think this impact is positive – how positive, nevertheless, is a different question.

To show this, let me put medical doctors as an example. They're commonly regarded as one of the professionals with the highest impact to Optoria's utility – they regularly help people and save lives, after all. What the actual impact of a doctor is, however, can be deceptive.

I once read in *The Optoria Herald* that whereas doctors generate around 250,000 utils throughout their career, the difference between Optoria's utility and a doctor's Optoria's utility *ex-persona* is only around 10,000 utils. I must admit I found this small difference shocking when I first read it in the newspaper. The reason is that if a person who is currently a doctor hadn't been born, someone else would have taken his or her place in our hospitals. Another applicant who did not obtain a place would have replaced the doctor, if they hadn't been born.

The hiring process in our hospitals is, obviously, meritocratic. Hospitals hire the best people, as they can do the best job in maximising the utility of their patients. When assessing Optoria's utility *ex-persona*, one needs to evaluate the state of the nation and its utility, if the person didn't come into existence. In the case of a doctor, if they hadn't been born then a less skilled doctor would have taken their position. The less skilled doctor would

still take good care of their patients – albeit not as well as the more skilful one. In other words, the less skilled doctor would still generate plenty of utility to Optoria, but not as much as the more skilled one. The researchers that carried out the study worked out, with the help of the praxometer of course, that this difference in utility generated is around 10,000 utils.

Reading about this study made me think about my own world's utility *ex-persona*. Would have the world been a better place, had I not been born? How much impact have I really made?

If I was never born, presumably my parents would've had another child. My friends would've found another friend. My partner would've found another person. And I have no reason to believe that I am a better son, a better friend, a better partner than these alternative people. They may have made them happier, and produced higher utility.

In the meantime, I have been a resource-eater all my life, which is clearly utility-reducing. I have generated waste; polluted the air, the environment, the planet. During my education, I have fought hard to get into competitive places: a scholarship, a place at university, a job. If I hadn't existed, these would've been taken by someone else, increasing his or her utility. In this sense, my existence has produced net-negative utility on others, as I have robbed other people from opportunities and utility they may have had if I wasn't born.



It is true the person that would replace me as Senior Accountant would be less skilled at the job as myself, as the Ministry of Numbers is (like hospitals, and all other institutions in Optoria) meritocratic. Nevertheless, is the difference in utility between my contribution in the job, and this other alternate person's, that significant?

I could of course put an end to my soliloquy and pondering, and just consult the praxometer. It would tell me exactly how much my utility and my contribution to Optoria's utility are. Still, I don't want to – I am too afraid to find out the answer.

## *Calculated Bliss*

## SECTOR 7

IT IS YET ANOTHER HOT DAY. How hot exactly, I do not know. My thermometer marks 25 degrees Celsius, which is as high as it can go. No thermometers in Optoria show temperatures above 25 degrees. The reason for this is simple. Anything above 25 degrees Celsius is hot: it is t-shirt weather. Practically, it doesn't make much difference if the actual temperature is 25 degrees, 30 degrees or 35 degrees. It is still hot, and I will leave home in a t-shirt regardless. Displaying very high temperatures on the thermometer does have a psychological impact, though. When a person sees that the temperature outside is, say, 35 degrees (which is very high) that alone can increase the subjective feeling of heat in the person. It will make the heat more unbearable. They are better off not knowing the exact temperature, other than it is simply above 25 degrees. That is why the Optorian government doesn't allow home thermometers to display temperatures in excess of 25 degrees Celsius.

## *Calculated Bliss*

I am about to leave home and head to the office, when my phone rings. It's Margaret, my superior at the Ministry of Numbers. This is unusual: she never calls me on my phone.

'Hello?' I say after picking up the phone with haste.

'Hi John. It's Margaret. I hope you haven't left home yet?'

'Not yet, I was about to.'

'Good, good. Did you see the news?' I sense some worry in her tone. This isn't a casual, social call.

'No, I haven't. Hold on, let me turn on the TV.'

I take the remote and turn the television on. They're broadcasting live from somewhere in Optoria, but I can't quite work out where it is. There is a big demonstration which has completely taken over the streets.

'Oh gosh, I am watching the images just now. Where is that? What has happened?' I ask Margaret.

'It's Sector 7, in the South East. It started yesterday, but today the situation has escalated significantly. I don't know if you're up to date with the politics of the area, but for some time now the residents of Sector 7 have complained that their utility has not kept up with the rest of Optoria. They argue that their utility has actually steadily declined over time, and that they're being neglected. This is all subjective, of course. They don't have access to the praxometer to accurately measure utility, like we do at the Ministry of Numbers. Nevertheless, their discontent is very much real, and many of them were looking forward

to the publication of the Gross Domestic Utility sector by sector.'

The live broadcast shows Optorian police arriving in the area and beginning to bring the crowd under control.

'They were expecting to see a decrease in utility in Sector 7, thus proving their claim,' she continues. 'To much of their surprise, the utility in Sector 7 grew by almost 11%.'

'Oh wow! That's well above the national growth.'

'Exactly. And obviously not what they expected. There were some small protests yesterday, with residents claiming the figures were fraudulent. That small scattered protests have become a very large one this morning. People are angry, John. They really think we tampered the numbers.'

'That's nonsense!' I cannot believe what I am hearing. 'Joanne oversaw the calculation of the Gross Domestic Utility of all sectors in the South East. She is an upstanding woman, she's been at the Ministry for over 20 years. She would never put her integrity and reputation in question by doing something like this.'

'I know, I know. Still, we should look into this. I want a second opinion on how the utility in Sector 7 was calculated, which is why I want you to head there right now, and see what you can find. This is a directive coming from the very top.'

'The Secretary of State for Numbers?'

'No, John. The *very* top.'

‘The Prime Minister himself?’ I ask, incredulous.

I took her silence as confirmation.

‘Of course, Margaret. I will head there right now. I will let you know my findings.’

‘Thanks John. I think you can take the 205 bus line, I believe there’s a stop near where you leave.’ She hangs up.

She is right, the 205 bus stops down the road from where I live. I turn off the TV and quickly leave my house.

I take a seat on the bus. It is quite full, and the only seat left is at the back of the upper deck. As the bus sets off, the onboard announcement confirms I did not take the wrong bus (it wouldn’t be the first time).

‘205 to Beechcombe Valley,’ says the announcement.

I smile. See, *combe* has a Celtic origin, and it means *valley*. Therefore, Beechcombe literally means *beech valley*. At some point in history, locals must have forgotten the origin of the word *combe*, and after correctly observing that Beechcombe sits in a valley (like their ancestors observed long ago), they must have started calling it Beechcombe Valley – literally *beech valley valley*.

I find these linguistic peculiarities quite amusing, but I can’t fail to wonder why in this day and age such inefficient uses of language are permitted. Why hasn’t the government reverted to simply Beechcombe? Or Beech Valley, for further clarity? Although, I suppose the amuse-

ment itself is utility-increasing, and hence makes the name worth preserving.

Beechcombe Valley reminds me of another place, although I am not sure if this one is real or made up as a joke. I once heard of a place called Boxcombedene Valley. The word *dene* comes from Old English, and it also means *valley*. Boxcombedene Valley thus means *box valley valley valley*.

As I keep myself distracted with the etymology of Optoria's toponyms, I realise thanks to the automatic announcement that it is time for me to get off the bus.

'Penbre Hill, Sector 7,' shouts the speaker in a metallic, somewhat irritating voice.

The moment I step off the bus, I can tell that Sector 7 is unlike any other place in Optoria I've been to. To start with, there is concrete everywhere. This choice of material is unusual in Optoria. There are buildings here and there made out of concrete in other sectors, but all of Sector 7 appears to be built using this material. It is of a greyish brown colour, and of a very rough texture. The only exception seems to be the paving, which is made out of red bricks.

The industrial, brutalist use of concrete is in juxtaposition with the abundance of plants and foliage that dominate the buildings and the landscape. Unlike other parts of Optoria I am more familiar with, the plants used in

Sector 7 are more tropical. Humidity is very high here (a fact my sweat glands quickly registered) so the presence of tropical plants makes sense. However, I can't help but wonder: which came first? Were the tropical plants introduced because of the high humidity in Sector 7, or is the high humidity a result of the plants themselves?

Regardless, its plants are at the heart of the sector as much as its concrete. They are both in harmonious balance, neither dominating over the other. Even the high-rises, of which there are plenty, are hugged by ivy, moss and hanging plants.

It is quite crowded, but the unrest I saw on TV seems to have calmed down – for now, at least. I start walking, but to be honest I have no idea where I'm heading. It is also difficult to get a sense of direction here. There are no streets or roads, or at least not in the traditional sense. The sector seems to be organised in multilevel “streets” (in the absence of a better word to describe them), with pedways and walkways connecting one level with another, one high-rise with another. They are not even organised in any recognisable pattern I can discern. It almost seems as if each public area, each walkway, each staircase was built over time as needed, organically and without any central planning overseeing how each piece fits the over-all neighbourhood, not unlike the foliage that surrounds it.

All this makes it absurdly difficult to navigate. I have glanced at a big square not too far from where I am stand-



ing, but I have no idea how to reach it. It is one level below, but I don't know where the stairs are. Even moving in that direction on the level I am on is non-obvious. I want to cross to the other side of the level, but I can't find a walkway I can access. I start walking hoping to find a way there, but the path is somehow taking me further away from where I want to go. I decide to go up a ramp to the level above me, because I have seen a walkway above me which might allow me to cross to where I want to go.

Luckily, I am correct, and I cross the pedway towards the next high-rise. I am now on the third level (or is it fourth? I can't tell anymore) and I want to find my way down. In any other complex in Optoria, you would expect to find a conveniently placed staircase that would take you to any of the floors. Not here.

I continue walking, and I suddenly find myself walking through a corridor. There doesn't seem to be a well-defined *outdoors* or *indoors* here. One seemingly blends into the other without realising.

I finally find a staircase, but it only takes me to the level below. I have to find my way through the level, until I finally come across the next staircase. I believe I am now on the first level – I just need to descend one more level to reach the big square I am after. The final staircase is, unsurprisingly at this point, nowhere to be found. I decide to head in the opposite direction on the first level to cross yet another walkway, where there is a ramp taking me to the ground floor.

How is this Escherian, labyrinthic complex allowed in Optoria? Elsewhere in Optoria, sectors are designed with their obvious purpose in mind: making sure people can go from A to B as easily and quickly as possible. If anything, the opposite is true here. Even if I were to try to design the most confusing, maze-like sector possible, I couldn't have done a better job.

In any case, I manage to get to the ground floor, and I soon arrive at the large square. There is an elongated rectangular pond in the middle. At one end, a waterfall falls from a big, elevated concrete pipe, perhaps 5 or 6 metres wide. There are small fountains in the centre of the pond, releasing water in an arc-shaped trajectory in all directions. There are no bridges to cross the other side. The only way to cross seems to be through a pedway, above the square, or circumnavigating the long pond.

All over the pond, there are clumps of abundant water lilies. They form such a thick, dense layer that I could probably walk on them without falling into the water. I don't think I will risk it, though. The water has an emerald green colour. I'm not sure if it's from the vegetation below, or if it's simply very dirty. In any case, I don't want to find out.

The water lilies and the green water remind me of what the Ministry of Numbers would look like viewed from above the dendriform columns, in the evening, when the green banker's lamps are on.

There appear to be narrow corridors just below the water-level, scarring the pond from one side to the other. They sit just over a metre below the pond, with the water standing at shoulder-height of the few people crossing it. There are small circular lobbies evenly spaced along the corridor, where some people are seated chatting to each other.

That's when I notice a man crossing the corridor, trying to catch my attention. It's Freddie, an old friend from school.

'Well, if it isn't John himself!' He's shouting, and some people turn to see what is happening. Discretion was never Freddie's forte.

'Freddie? What are you doing here?' I haven't seen him in years, so I'm surprised to see him.

'When they told me it was you coming here today, I didn't believe it at first. How are you, mate? How long has it been?'

We are now face to face, but he's still shouting as if he was on the other side of the square.

'Too long, too long! I'm not sure I understand though – were you expecting me?'

'I sure was. You see, I'm the Local Administrator at Sector 7 now. How things have changed, huh? After the protests here over the last couple of days, we got in touch with the Ministry of Numbers. They told me they would send a Senior Accountant to investigate the issue. That's when they told me they would send you, to look into it!

Of all people! Let's go grab a beer mate, and we can discuss the situation here.'

'I'd love to, Freddie, but I can't drink while I'm on official business for the Ministry of Numbers. Shall we get coffee instead?'

Freddie smiles.

'Alright, alright, mate, that's fine. You've always been so responsible, and so uptight, I may say. No worries – there's a coffeeshop around the corner.'

Freddie has always been a funny chap. We were close when we were at school, but we ended up losing touch when I went to university. He never excelled at school, which is why I was (pleasantly, I must say) surprised when he said he was the Local Administrator of Sector 7. It is a notoriously difficult position to be appointed to.

The coffeeshop Freddie suggested is not so much a coffeeshop, but a pub that happens to serve coffee. The place is empty, saving an old gentleman drinking beer by the counter. The coffee here will probably not be great, but it doesn't matter. I'm not really here for the coffee, I just want to catch up with Freddie and learn what is going on in the sector.

We take a seat at a table when the waitress comes to take our order.

'Hello, what can I get you?'

'Pimple and blotch for me,' says Freddie.

'I'll have a flat white, please,' I follow.

The waitress glances back at the counter, and takes a couple of seconds to reply. She looks surprised by my order.

‘Sorry darling, we only have black coffee.’

‘That will do, thanks.’ I am probably the first person to order coffee here in a long time.

As the waitress leaves, I turn back to Freddie.

‘So, how are things, Freddie? You look great, I must say.’

‘Oh, cheers, you’re too kind.’

‘To be honest, I didn’t expect to run into you here. Last I heard, you were still living up in Sector 14?’

‘I did, mate, I did! After school I stayed at my folks’, picking up odd jobs – you know, to help with the bills. I then met Clara, and after a couple of years we got married and moved here, to Sector 7. Things weren’t easy, we both struggled to find steady work, and after she got pregnant I knew I had to sort things out. So I decided to start studying again, and I eventually landed a job at the local council.’

The waitress interrupts Freddie to bring our order. She puts the black coffee in front of me, and the scotch in front of Freddie.

‘Cheers,’ says Freddie to the waitress with a smile. ‘That was about ten years ago. Our son’s all grown up, and after a few promotions, I’ve worked my way up to Local Administrator. Things are much better now.’

‘That’s great to hear, Freddie. So, how are you finding life in Sector 7?’

‘Well, there’s a lot to it. The sector has a lot to offer, starting with its people, who have been nothing but welcoming to me and my family. But it also has its own issues. Deep, systemic issues. For instance – how many times did you get lost trying to get here?’

‘Quite a few times, actually. I don’t think I’ve ever been more confused by a place. I was starting to wonder if it was just me.’

Freddie laughs. ‘No, mate, trust me – it’s not just you.’

He takes a sip of his scotch and leans back.

‘You see, Sector 7 is... a bit of a mess, mate,’ he says, shaking his head slightly. ‘The problem here is that when people build something, they don’t bother thinking about what’s already here. There’s no urban planning, no overall design. It’s like every new building or walkway just gets thrown on top of whatever was already standing.’

He gestures around the pub, as if the very walls were an example of what he means.

‘It’s all disconnected. No one asks, ‘How will this fit with the rest of the sector?’ They just go ahead and build, completely ignoring what’s next to it, what’s under it, and what’s above it. Over time, you end up with this crazy, patchwork sector, where you’re constantly getting lost, or worse, going in circles without even realizing it.’

Freddie laughs bitterly.

‘It’s a joke, really. The only reason anyone finds their way around here is because they’ve lived here long enough to know the shortcuts and back routes. But for someone like you, who’s new to the place? Or me, when I first came here? It’s like trying to navigate a maze that keeps shifting. A couple of months ago, my neighbour had a friend come to visit. The poor bloke couldn’t find his way to the house. He got completely lost.’

‘Really?’ I ask, relieved my lack of sense of orientation in this place is not unique.

‘Oh yeah,’ continues Freddie, shaking his head in disbelief. ‘He spent hours wandering all over the sector, asking people for directions, but you know how it is here – one person’s idea of ‘left’ takes you five levels up, and ‘straight ahead’ lands you in some dead-end courtyard. He couldn’t find the house, and to make matters worse, he couldn’t even find a way out of Sector 7. He just kept going in circles.’

I lean forward, intrigued. ‘So, what happened?’

Freddie sighs and takes another sip of his drink.

‘My neighbour found him 48 hours later – two whole days, mate. He was in total despair, just one level above where he was supposed to be. Exhausted, dehydrated, and utterly lost, and the whole time, he was right there, barely a stone’s throw from his friend’s place.’

He pauses for a moment, gauging my reaction. I sit quietly, listening intently, as he continues.

‘That’s just one problem, though. Perhaps the most visible one, the one visitors like you experience when they come. The sector’s layout is just the tip of the iceberg, though. If you think that’s bad, wait until you hear about the utilities. After you’ve lived here long enough, you get used to the convoluted design of the sector. No matter how long you’ve lived here though, you never get used to the water shortages, power cuts... It’s a nightmare.’

‘Sector 7’s infrastructure is ancient. Some of the pipes and wiring haven’t been replaced in over fifty years. Every time there’s a problem, they patch it up, but they don’t actually fix anything. It’s just quick fixes on top of quick fixes, and the whole system is held together by duct tape, mate. Sometimes, they don’t even bother to show up to fix the issue. Last month a pipe burst on Toad Lane, flooding the pavement. Despite repeated complaints nobody showed up to fix it. We see a lot of that over here, community members helping out and doing the government’s job for them. After a week we gave up, and some members of the community had to step up and fix it. It’s just yet another patch, though. I am sure it will burst again.’

I take a sip of my coffee, noting how bitter it tastes. It fits the conversation.

‘But that’s not even the worst of it,’ Freddie adds, lowering his voice. ‘The praxometers here are faulty.’

I blink in surprise. ‘Faulty? What do you mean?’

Freddie leans in, eyes narrowing. ‘I mean, they must be. A month ago someone from the Ministry of Numbers



showed up, with a team of 5 or 6 people. They wanted to gather data for this year's Gross Domestic Utility calculation.'

'Yes, accountants at the Ministry of Numbers go up and down Optoria in the months leading to Happiness Day to collect utility data. I think Joanne is the Senior Accountant that leads the team,' I add.

'That's right, yes, Joanne was her name! She came into my office with her team, and explained they needed to interview residents of Sector 7. They needed praxometers for that, as they would be measuring the utility of the lives of local residents. At first I thought they wanted to talk to every single resident, which I thought was quite mad. She then explained that they needed to interview only some of them. She even had a list, with the names of those to be interviewed!'

'That is the usual procedure. We take a sample of each sector, one that represents the population there, and measure their utils. This data is then extrapolated for the totality of the sector.'

'Indeed, that's what she told me too. Anyway, they each borrowed a praxometer and proceeded to interview everyone on the list. To be honest, we were looking forward to this, because we were convinced their results would show what we already knew first-hand: that life here is going from bad to worse, and is surely lagging behind the rest of Optoria. When Happiness Day arrived and the results were made public, much to our surprise,

the utility in our sector not only did not decrease but actually increased by a whopping 11% – more than the national average! How can this be possible, unless praxometers here are faulty?’

I sit back, taking in Freddie’s words.

‘Is that why the protests began?’ I ask him.

‘Yes. People thought the results would expose the truth about our living conditions. They wanted to see the data reflect their struggles, the real-life experiences they have day in and day out. But instead, the Ministry’s report painted a picture of a thriving community, and that didn’t sit well with anyone. It felt like a slap in the face. So that’s when the protests erupted.’

‘What did the protests look like?’

‘It started with small groups gathering outside the local council office. Just a few people holding signs, demanding accountability. But then it grew. More and more residents joined in, chanting and waving banners. They’re calling for an independent investigation into the utility data, but it’s all spiralled out of control. The Optorian police ended up dispersing the crowd, but I fear the unrest will return.’

‘I understand, Freddie. I’ve been tasked to look into the matter, and don’t worry – I will make it my highest priority.’

Freddie looks out the window, and then looks back at me.

‘Thank you, John. Hopefully you and the Ministry will get to the bottom of this – you know, before the protests escalate into riots and things get out of hand.’

The room falls into a heavy silence.

## *Calculated Bliss*

## GINGER

I WAS ONLY 12, but I remember that day as if it were yesterday.

The road was twisted and full of sharp turns, forcing my father to keep his speed low. Out there, in Optoria's countryside and far from the polished lanes of the city, the asphalt broke into patches of gravel and mud. It was full of potholes, too, making it a bumpy ride. My father was good at spotting the worst of them, steering around each crater with practised ease, but there were too many to dodge. Our old car didn't have AC, so we fought the heat the old-fashioned way: by lowering the windows, even if it meant dust blew in.

My father drove in silence for most of the trip. The radio was tuned to a talk show debating whether pets should count toward a household's utility output and, by extension, the Gross Domestic Utility. One commentator insisted that while a cheerful dog might lift a family's mood and thus increase national happiness, the idea of

an animal having its own utility was absurd. A pet, he said, is a means, not an end.

His opponent disagreed. Animals, he argued, feel pleasure and pain just as humans do; ignoring their utility simply because they can't express it was "speciesist." I didn't know what that word meant at the time, but I listened closely all the same.

I found the debate very fitting, because we were on our way to a fox sanctuary in Thorpe Town, a small village deep in Optoria's countryside. We were adopting a fox. It was the reward I'd been promised for improving my grades at school. My parents believed I had a gift for numbers and might one day become a good accountant, but I'd never shown much interest in school itself. They thought the promise of a fox might motivate me, and perhaps make me the first in our family to go to university.

I'd wanted a fox since I was nine, when I saw a group of red foxes marching in the parade on National Happiness Day, so it didn't take much convincing to accept the deal. It didn't even take much effort to improve my grades – partly because they were already so low they couldn't really get any worse, and partly because I never found the material difficult to begin with. I just never cared enough to put in the effort. My parents' bargain changed that. I started doing my homework, handing in assignments on time, and even paying attention in class; not out of sudden passion, but out of calculation. Within a few weeks my grades rose enough to surprise my teachers, and to

convince my parents that I'd earned what was promised. True to their word, they agreed to let me have the fox, and a couple of weeks later I found myself on that trip to the fox sanctuary.

It was a long trip from our house in Sector 14. To pass the time, I watched the landscape slide by. The same fields repeated like copies of a template, patched with the same shades of green and yellow. Occasionally a house or a rusted tractor broke the pattern, and I'd try to guess how people lived there, or what their utility readings might be. It was a way of keeping my mind busy, measuring the world in numbers I didn't yet know how to calculate.

The road eventually narrowed into a gravel path lined with white poplars, their trunks pale against the haze of heat. At the end of it, a chain-link fence came into view, enclosing a cluster of low buildings with white roofs that glared under the sun. A faded sign read "Well-Life Sanctuary – Registered Hybrid Breeder (Class B)." My excitement grew as my father slowed down and parked next to a row of dusty vehicles. I pressed my forehead against the window and stared at the field beside the buildings. It was full of red foxes, running and playing freely. I had never seen so many, and I never have since.

As soon as we stepped out, the heat pressed against us like a thick blanket. The air smelled of dust and straw, mixed with something sharper – disinfectant, maybe. Beyond the fence, the foxes were running around on the dry grass. Two of them were playfully wrestling each other; a

## *Calculated Bliss*

group of four or five were simply running in circles, chasing each other; and a few foxes were lying under the shade of a large poplar tree. They looked happy.

We walked toward the main building, a low structure with floor-to-ceiling windows, and entered beneath a sign bearing the emblem of the Ministry of Welfare. Inside the air was much cooler and it was mostly silent, except for the faint humming of a ceiling fan. A receptionist in a beige uniform looked up from behind a counter and smiled with the kind of politeness that had been trained into her.

‘Good morning, welcome to the sanctuary! How may I help?’ she said, still smiling.

‘It’s beautiful here,’ my father said. ‘We come from the city and, frankly, it’s nice to get out into the countryside for a change.’

‘Thank you! Most of what you see in the sanctuary is new. We finished renovating it last autumn, after some much-needed repairs.’

‘You’ve certainly done a fine job,’ replied my father, smiling back to her. ‘This is my son, John. We’re here to adopt a beautiful red fox.’

The receptionist leaned over her desk to look at me. I was shy back then and stayed close to my father’s side, peeking out from behind his leg as if it might shield me from her attention.

‘Is it a fox you’re after, young man? We have plenty of those here,’ the receptionist said, looking at me.



She came around the desk toward us, then headed for the door.

‘Follow me!’ she instructed.

We followed her down a corridor. I remember the air smelling of disinfectant; sharp, sterile, and faintly like ammonia. The air was cooler than outside, but heavy with the scent of animals: warm, earthy, and oddly comforting.

The receptionist spoke as we walked, reciting facts in the steady tone of someone who had done it hundreds of times. The sanctuary, she said, was home to more than fifty red foxes. All of them were born on-site, through a process of careful breeding and some gene editing. Each one was tagged, trained, and evaluated for suitability before adoption, she explained.

She approached another woman in a white lab coat, who was gently holding a young fox in her arms.

‘This is Professor Johnson,’ she said. ‘She will help you find the best match.’

Professor Johnson turned to us with a smile even wider than the receptionist’s, as if enthusiasm were part of the job description.

‘Hello everyone! Welcome to the sanctuary!’ She was gently rocking the little fox. ‘This little one is our most recent addition. He is only three days old. He is too young to join the others on the outside, so he’ll stay with us in the nursery for a while longer,’ she said. ‘Once he’s strong enough, we’ll move him to the outdoor enclosure

with the others, until we find a suitable owner to take him home.'

She carefully returned the fox to its crib, then faced us again.

'I believe you're looking to adopt a red fox, isn't that right, young man?' Professor Johnson said to me.

I nodded, and she smiled approvingly.

'Brilliant!' She seemed genuinely excited. 'Then we'll begin with a compatibility assessment. Here at Well-Life Sanctuary we want to make sure the right fox goes to the right person. We don't rely on chance. Every adoption is guided by the praxometer, to make sure we choose the one that will make you the happiest.'

My father gave a small laugh; I didn't. I was already wondering what my numbers would be.

She gestured toward a glass cabinet where several slim, metallic devices rested in a charging dock. Opening it, she unplugged one and switched it on.

'It measures micro-expressions, hormonal responses, and limbic resonance between species,' she explained. 'From that, it estimates how happy each fox is likely to make you. We then assign you the one that yields the highest expected utility.'

A soft blue light blinked along the device's edge as she spoke.

'We need to calibrate the praxometer now,' Professor Johnson said. 'Before we can test your compatibility with

the foxes, we need to record your neutral state. It only takes a moment, just hold still and look straight ahead.'

I did as she said. The device emitted a faint hum, almost like breathing. A small display lit up with shifting numbers I couldn't read. After a few seconds the praxometer started beeping, and the blue light turned green.

'Good,' she said. 'Now let's see which of our residents resonates best with you.'

She turned toward a glass wall that opened onto another room. Beyond it, several foxes moved restlessly in their pens, fur flashing red and gold under the light. My pulse quickened; it felt less like a choice and more like being chosen.

Professor Johnson signalled to follow her through a sliding glass door into the adjoining chamber. The foxes watched us from their pens; alert, graceful, and quiet, as if they knew they were about to be tested.

'We'll bring them one by one. The device will read how you respond to each fox. You don't have to do anything, just think about how the fox makes you feel.'

'Sounds simple enough,' I said, trying (and mostly failing) to hide my excitement.

'It is, don't you worry,' she said with a smile. 'Alright, let's bring the first one.'

She pressed a button, which opened the first enclosure. She whistled and a fox came forward. It was small, had glossy red fur, and seemed rather cautious. After a few

seconds, Professor Johnson handed me the praxometer. The metal felt cold against my skin.

‘Just hold it like this,’ she instructed, guiding my hand until the sensor faced the fox. ‘It works by proximity. It won’t take too long.’

A narrow beam of light flickered between us. The fox hesitated, sniffed the air, then looked at me with dark, restless eyes. Numbers started to appear on the screen.

‘Two hundred and twelve,’ Professor Johnson said. ‘Very good. We’ll bring the next one now.’

Each fox was very different. Some were playful; others were rather timid; and I thought a couple were a touch too aggressive. After what must’ve been over thirty foxes, Professor Johnson concluded the test.

‘I believe that’s the end of the compatibility assessment. Please, wait in the lobby just outside while we analyse the results.’

I don’t know how long we waited for the results, but I remember it felt unbearably long. The lobby was almost silent except for the faint buzz of a fluorescent light and the ticking of a wall clock that seemed to slow with every second. My father flipped through an old brochure about hybrid welfare programs; I pretended to read one too, though I was too restless to pay any attention to it.

At last, the door opened. Professor Johnson stepped out, tablet in hand, her expression the same trained smile she had worn all morning.

‘Thank you for waiting,’ she said. ‘We believe we have found a suitable match for you. Are you ready to meet your new fox?’

‘Yes!’ I shouted.

We followed her back through the corridor, past the glass walls, and into another room. Inside, a small fox ran in circles, its tail twitching with nervous energy. Its fur was a deep, burning orange, the kind that caught the light and refused to let it go. It was smaller than I’d expected, but it was full of energy. I didn’t say anything (I was too amazed) but I couldn’t stop smiling.

‘We’re pleased to introduce you to subject A15,’ Professor Johnson said. ‘Though it clearly needs a proper name. Have you thought of one?’

‘I have!’ I said. ‘I’ll call her Ginger.’

## *Calculated Bliss*

# THE GOLDEN HARE

I STEP OFF THE BUS, heading back from Sector 7. It is early evening, but the warmth still hangs in the air. My conversation with Freddie lingers in my thoughts. I also spoke to several other residents, and the resentment appeared to be widespread.

I spent the entire bus journey thinking about what the issue could be. I already had several hypotheses. My initial thought was that the Ministry's calculation of the sector's Gross Domestic Utility was actually correct. How could it not be? Much care is put into the whole process, and it was hard to believe that Joanne and her team could have arrived at anything other than the right number. I have worked with Joanne in the past, and I know she is a great accountant. The calculated total utility of the sector is probably correct, and the people responsible for the riots are probably a minority of unlucky residents who had experienced personal setbacks that skewed their perception of life in Sector 7. It isn't uncommon for dissatisfaction to arise from isolated cases. After all, every population's

utility distribution will have people that have fared better, and worse, than the average.

On the other hand, every person I spoke to today shared the same view: their lives are getting materially worse every year, contradicting the picture portrayed by the sector's Gross Domestic Utility. Moreover, Freddie also echoed these concerns, and as Local Administrator he should be aware of the issues that involve his sector. 'How can the utility score go up when we can barely maintain what we have?' he had asked me, just before I left. No, it couldn't be just a discontent minority responsible for the disturbances; the consensus among the residents painted a clearer picture of a community struggling under the weight of unmet needs. Something else had to be going on.

Perhaps the praxometers Joanne's team was given were faulty. I've never heard of a faulty praxometer, but I suppose it could be possible. That may explain why the utility of the sector was overestimated. It still seems unlikely, though. In any case, I'll have to look into it tomorrow in the office.

It is dark, as night has now fallen. The streets are dimly lit, and most houses have turned off their lights. The exception is the local church, which is holding a late evening service.



As I come closer to the church, I hear the priest preaching. I always found religion quite an interesting concept. I was raised in a Catholic family, and I even went to a Catholic school for a few years when I was a child. In a country where the utility of everything is measured and maximised, faith seemed to stand apart. I struggled to understand what function it served or how the resources devoted to it could be justified. How did it maximise utility? Why are religions even permitted?

Over time, though, I came to realise that religion, like everything else in Optoria, has its own way of contributing to utility. Faith can offer comfort, community, and a sense of purpose to those who practice it. For many, the rituals, traditions, and teachings provide emotional support, helping them cope with life's uncertainties. Its impact may not be measured as precisely as other activities', but the praxometer still recognises its value, which is why religion remains an accepted part of society in Optoria.

I can't fully understand what the priest is preaching, but I can hear isolated words.

"We pray God that he brings utility to Utopia, for..."

I can't make out the end of the sentence. Praying is a concept I find somewhat puzzling – even blasphemous. When a person prays, he is addressing God directly. He is asking – nay, demanding – God to act in ways He would not have otherwise acted. The prayer tells God that He has made a mistake in the current world order, and also assumes he has the wisdom (a wisdom he assumes God

is lacking) to advise God on how to correct it. Isn't that blasphemy?

Praying is not the only habit or superstition Christians engage in that might possibly be blasphemous. I've heard that there are nuns in Optoria who don't take baths without wearing a bathrobe. When pointing out that no one will see them, they reply that God will. Isn't it blasphemy, according to the Christian doctrine, to doubt God's omnipotence? Why do these nuns believe that God can see them through the walls, but not through the thin cloth of the bathrobe?

It is also customary among Christians in Optoria to bury the dead. However, this practice was prohibited years ago under the Corpus Act, a law passed by Parliament to ensure that every body serves a productive purpose for the nation. Under the act, reusable organs are donated to those in need, while the rest of the body is repurposed in other ways: for medical research and education at universities, for crash testing by car manufacturers, or even as compost to enrich agricultural soil – whatever increases utility.

Optorian Christians, however, have been vocal in their opposition to the act. They argue that repurposing the bodies of the deceased, rather than burying them according to tradition, interferes with their resurrection by God, ultimately endangering their chance at eternal life. But isn't this, in itself, a challenge to God's omnipotence? If He is truly all-powerful, wouldn't He be capable of res-

urrecting a body, no matter its state? Isn't such doubt a form of blasphemy as well?

"...trust in the all-powerful hand of God, for He..." preaches the priest.

I've always had a good memory for passages from books and texts, which is why I still remember many verses and passages from the Bible by heart. It's curious; the Church repeatedly insists that God is omnipotent, all-powerful – but I don't seem to remember the Bible explicitly mentioning this. It certainly includes numerous examples of God's might, but I don't remember it stating that God is actually all-powerful.

Some people quote the Psalms as evidence of this, where it is said that God "does whatever pleases Him". Certainly an all-powerful God would be able to do whatever pleases Him. But that's not necessary. There might be things He cannot do; it just so happens He simply does not please to do them. It is possible for two people, one rich and the other poor, to both be able to buy whatever they wish: one by virtue of having a lot of money, the other by virtue of wishing nothing at all. Similarly, a being that is not all-powerful can still do "whatever pleases him", simply by not having many wants and desires.

Thus, omnipotence paradoxes cease to be a problem with the Christian God. Can God move an immovable rock? If he can't, it is because he doesn't please to. If he can, then he doesn't please to move it.

## *Calculated Bliss*

The Book of Isaiah is also quoted as evidence of the omnipotence of God: “so is my word that goes out from my mouth: It will not return to me empty, but will accomplish what I desire and achieve the purpose for which I sent it.” In other words, when God speaks, His word is fulfilled. This does not show God is all-powerful, though, as the same can be said about the mute.

I’m still pondering about what I witnessed in Sector 7. There is a pub near my house, The Golden Hare, so I decide to have a pint before I head home – hopefully that will clear my mind.

As I walk in, I am welcomed by the cool, familiar scent of ale, wrapping around me like an old friend. The air inside already feels a lot cooler. The Golden Hare is an old pub, I think it’s stood there for at least 300 or 400 years, with barely any change. Crooked wooden pillars support the pub, just about holding it together. There’s a fireplace at the back, and inexplicably given the warmth outside, the fire is on. Even more inexplicably, a man is seated on one of the two armchairs facing the fire. He is even wearing a long coat, and (blimey!) even a scarf. It’s Alistair, a regular over here. I don’t know much about him, to be honest. I don’t even know his last name. I know he is retired, but I ignore what he used to do for a living. Rumours say he once was a high-ranking official in gov-

ernment, many years back. He usually sits there, by the fire, minding his own business.

There are small booths throughout the pub. Most of them are empty at the moment, though. Only one of the tables is taken, by two gentlemen having what sounds like a heated discussion about fly fishing.

I head towards the bar, where an old man sits with two pint glasses in front – one empty, the other half-empty. He seems to be having a vivid conversation with the bartender.

‘Evening, John! How are you tonight?’ asks the bartender with a smile.

‘I won’t lie – a bit tired, to be honest. It’s been a long day.’

‘Nothing a good pint can’t fix, I’m sure! What can I get you?’

‘A pint of Foxfire, please.’

‘Of course – coming up now’ he says, as he starts pouring the beer.

The old man turns to me.

‘Great choice, young man, great choice. I used to be a General Manager at Foxfire Brewery, and I can tell you, the attention to detail in the production line to ensure our ale was of the greatest quality is unmatched.’

‘I can vouch for that, my uncle has worked at the brewery in Sector 23 for over two decades, and he’s taken me there twice or thrice in the past. It’s always been my go-to

beer,' I reply to him. My reply seems to make him more interested in me, and he moves his chair closer to me.

'That's where I used to work as well, in Sector 23! What is your uncle's name?'

'Jason, sir. Jason Baker. Do you know him?'

'I certainly do! I was his supervisor for his first couple of years. I then retired, and unfortunately I lost touch with everyone at the brewery. I have fond memories of him and the rest of the crew at the brewery, though. Next time you see him tell him Jeremy Bingham says hi.'

'I surely will, Jeremy. How long did you work there?'

'Not too long, actually. I believe I joined five years before your uncle started. I spent most of my career at the Ministry of Numbers, but I got somewhat tired and decided I fancied a change. I've always wanted to brew my own beer, but I was too old to start my own brewery. Entrepreneurship is a young man's game. I figured that joining a brewery was the next best thing. I always enjoyed Foxfire, so I thought – why not!'

'That is quite a change. I work at the Ministry of Numbers myself, as a senior accountant. What did you do there?'

'I was a physicist, working in the Engineering Department. My area of expertise was meteorology. I worked on a small team of six to seven people. At first, our job consisted of improving the praxometer's meteorological models. For the correct calculation of utility, weather prediction is crucial. For example – should a given wedding's

reception be held indoors, or outdoors? The answer of course depends on a myriad of things, weather being the most important one. Nobody wants to have an outdoor wedding reception if it will be cold, windy or rainy. The loss in utility in that case would be too great. No, the praxometer should accurately forecast what the weather will be the day of the wedding, and suggest an appropriate venue accordingly.'

'As time went on, and our meteorological models became better and better, it became clear that the natural next step would be to fully automate weather adjustments and allow the praxometer to directly control atmospheric conditions without human intervention. That was our next big breakthrough, but it took time and dedicated effort to achieve it. Within a year, we were able to induce rain over small areas. Then, we managed to control the cloud creation. It wasn't long until we gained full control over Optoria's weather: everything from the temperature, humidity, atmospheric pressure, wind, rain... you name it. It was quite remarkable, actually: an entire nation's weather regulated by the praxometer, in the service of the nation's utility.'

'That's fascinating. Modifying the weather is something I've always seen the Ministry do, and I suppose I've taken it for granted. It's interesting to think about a time when daily weather was random, outside of our control.'

'Oh yes, it definitely wasn't always like that. The Ministry has it too easy nowadays. It can measure anything,

it can control everything. It wasn't like that in my time, we had to adapt to whatever resources we had in our disposal. And it was even more difficult before my time. My grandfather, God bless him, used to tell me the most intriguing stories about how different Optoria was when he was young.'

'In what sense?' I ask. I'm realising that even though I know the ins and outs of the praxometer and how it fits Optorian life, I know shamefully little about how it came to be the cornerstone of our society.

'Well, for starters, there were no praxometers back then. They hadn't been invented yet.'

I suppose I always knew there was a time before praxometers, but I honestly hadn't put much thought into how things were done back then.

'No praxometers? How did they go about their lives? How did society even operate, without knowing the utility of anything?'

'That's a very good question, and a tricky one. They still had the concept of utility, of course, even if they couldn't measure it with the precision that we do nowadays. They knew that running out of milk at home and murder both had negative utility, but that the utility of murder was orders of magnitude worse than being left with no milk. Nevertheless, they couldn't decide on other cases that were less clear. For example, if someone prefers reading a book over watching television, does he still prefer one hour of reading over two hours of television? Or



over three? Balancing these preferences without a praxometer was often pure guesswork.'

'This inability to measure utility had implications in public policy too. Optoria's government often had decisions to make where it was far from obvious which of the available choices would maximise utility. For instance – should the government invest in education, or expand our infrastructure? If they choose to invest in education, what form of investment should they make? Perhaps open new schools, or improve existing ones? Or maybe higher education should be improved? The government consulted with experts for advice, but these so-called *experts* really knew nothing at all. Their advice was mere speculation, which was often biased and even contradicted other experts' recommendations.'

'That sounds really chaotic and inefficient,' I interjected.

'And you're right. But they still needed a method to decide on general matters, so over time certain rules were developed. These are rules which, based on past experience and consensus among experts, should lead to the greatest well-being and happiness if followed. These rules were codified in a book, which was religiously followed. You can probably still find a copy in the local library. Nowadays it's only of interest to historians, though.'

'So people just followed these rules blindly?'

'Pretty much. No deviation from the rules was allowed. Even in blatantly obvious cases where following

one of these rules would generate lower utility than breaking it, it was nevertheless obeyed. The reason, according to the consensus at the time, is that allowing a single exception might lead to allowing a second one, which in turn leads to allowing a third one... It is a slippery slope that results in lower overall utility in the long-term, compared to simply following the rule from the start.'

He proceeds to drink down what was left of his beer.

'Would you pour me another one, please?' he asks the bartender, who was also listening to the conversation. 'As scientific understanding advanced, researchers suddenly gained the ability to model social behaviour and quantify emotions: desires, sadness, joy, jealousy, love... Everything could be measured. They reduced it all to a single number: the util. Every single action, scenario or state of affairs could be measured in utils. This was a major breakthrough for Optoria. It took additional time to refine and integrate it into a practical device, but eventually, they succeeded. That's how the praxometer was born. The government quickly took notice, initially using it sparingly for large-scale policy decisions. However, its effectiveness soon became undeniable, and the praxometer now influences most of our daily decisions.'

I am really enjoying the conversation with Jeremy, but the exhaustion from the long day it's been today is catching up with me. It's almost 9pm, and I have a lot to do tomorrow at the Ministry of Numbers, so I should head home.

‘I’d love to stay longer and hear more stories from your grandfather’s time, but I’m afraid I should leave now,’ I say apologetically. ‘Hopefully I’ll see you again in the pub, and we’ll continue our conversation!’

‘Thank you, young man. Sadly your generation is rarely interested in these stories, so it’s always nice to find a willing ear. I certainly hope I will see you again.’

It is pitch black as I enter my house. I’m glad I stopped at the pub first; it helped me clear my mind and take the edge off the day’s events. The quiet hum of my empty home greets me as I lock the door behind me, and the silence feels oddly comforting after the noise and confusion of Sector 7. I shrug off my coat and put the kettle on. It’s become a habit to have some herbal tea before bed – it helps me sleep better.

I sit down as the kettle heats the water, reflecting on the events of the day. With everything I’ve seen and heard, I know sleep won’t come easily tonight; hopefully, the tea will help. It is only just past nine, but it feels much later.

I turn the TV on. They are showing a Daniel Atterfield documentary on the hunting patterns of arctic wolves. His familiar, calming voice is exactly what I need right now. The camera follows a pack of wolves running across icy tundra and snow-covered plains. I sometimes wonder if life would be easier as a wild animal, free from the worries, responsibilities, and stress of modern life – just

taking each day as it comes in the great outdoors. But I quickly dismiss the thought. Appealing as it may seem, the lives of these wolves are marked by a constant fight for survival. They're always just an unlucky streak of hunts away from starvation, a single bad fall from being fatally crippled, or an illness away from death.

'The pack of wolves has sights on what they hope will be their next meal: an isolated muskox, that got separated from the rest of the herd,' narrates Daniel Atterfield.

'Despite being over ten times their weight, these wolves are not afraid to take on the muskox. A single wolf alone would stand no chance against the formidable animal. However, their strength is in their numbers. They know that if they coordinate and work well together they can take it down.'

The documentary shows the wolves quietly dispersing around the muskox. Little by little, step by step, they stealthily approach their prey. When they're still several metres away, the wolves stop – and observe the ox, who is still eating grass, minding its own business. The tense calm is broken by one of the wolves, who runs and charges against the prey. The muskox's fight-or-flight instinct then kicks in: it starts running away from the wolf, while the predator is trying to bite and penetrate its teeth into the thick fur of the muskox. Realising it cannot outrun the wolf, the ox proceeds to charge against it. That's when the rest of the wolves begin to run towards their prey. One by one, they try to get hold of it but the muskox is able

to successfully fight them off. At first, that is. Finally, one of the wolves manages to stick its teeth in the ox's leg. Despite violently turning one side and another, it won't let go. Other wolves take advantage of the weaker muskox, who quickly finds itself on the ground with three or four wolves on top. The great animal, despite its size, is defeated and the wolves, with their white fur now stained in blood, stand victorious.

While the wolves are still feasting on the muskox, the program is abruptly interrupted. A short transitional clip that displays 'BREAKING NEWS' is followed by the live pictures of a news presenter on a TV studio. He is looking rather serious.

This is unusual. News on TV after 8pm has been forbidden for many years now. It was found that it typically increases the audience's anxiety, as important news is rarely good news. This can affect the sleep quality of some people. Ensuring Optorians are well-rested and enjoy a good night's sleep yields higher utility than whatever utility is obtained from being informed of the latest news in the evening. The rational thing to do, then, was to introduce a general ban of any news on TV (and radio as well) after 8pm. An exception was made for truly important news, when the utility gained from being aware of it is sufficiently great to offset any potential decrease in utility due to sleep loss. That is why I know this breaking news must be important – and probably not good for Optoria.

‘We are terribly sorry for disturbing your evening,’ the presenter begins. She is wearing a red dress that matches the general red colour of the studio.

‘We interrupt our scheduled programming to bring you breaking news. Widespread riots have erupted across Optoria. They began in localised parts such as Sector 7, but this afternoon they extended to neighbouring sectors. Reports indicate that additional hotspots of protests have emerged elsewhere in Optoria too, such as Sector 37 and 23.’

‘These have resulted in clashes with the Optorian Police Force, with the authorities attempting to contain the unrest and safeguard the nation’s utility. Tragically, we’ve received confirmation of two fatalities and several injured people in Sector 8, just a few miles from where the initial disturbances began yesterday in Sector 7.’

‘One of the casualties was a 43-year-old police officer who was struck on the head with a rock after reportedly removing his helmet. The second victim is a 54-year-old man believed to have been involved in the protests, although his exact role in the events remains unclear. The cause of his death has not yet been disclosed.’

The broadcast cuts to live footage from what I believe to be Sector 23. There are no cars circulating on the streets. Instead, the roads have been taken over by a mob of at least 1,000 people. The camera zooms in on a tense standoff between protesters and the Optorian Police Force, who are wearing helmets and wielding shields.

The officers maintain a defensive formation as objects rain down from the mob. Between the two groups lies a stretch of about 30 metres – an eerie no man’s land lit by the flames of overturned dumpsters.

‘The Prime Minister has declared a State of Emergency across Optoria. Effective immediately, only essential personnel will be permitted to go to work. A full list of exempted roles will appear on your screens momentarily.’

The live footage transitions to a scrolling list of essential personnel categories: healthcare workers, fire and rescue services, police, public transport operators... and Government Ministries.

I feel my stomach tighten – does that include me?

The news presenter continues:

‘Optorians not classified as essential personnel are instructed to remain at home during the State of Emergency. Exceptions will be made only for medical emergencies. Violators will face immediate arrest, as stated by the Prime Minister.’

I let the broadcaster’s words sink in. A State of Emergency. It had been a long time since Optoria last declared one. Certainly I never experienced one during my lifetime. My mind races, trying to make sense of the situation. Two deaths already. Riots across multiple sectors. It’s not just about Sector 7 anymore. It was my impression that the issues I witnessed today in Sector 7 must have been endemic to that sector. The fact that other sec-

tors are also rioting clearly proves me wrong. How did it escalate so quickly?

The scrolling list of essential personnel is still on the screen. My eyes dart across the categories: healthcare workers, police, transport operators... and finally, Government Ministries. Yes, I believe that must include me. As it stands, I can't afford to stop now – not with my assignment hanging in the balance. Investigating the utility calculations for Sector 7 feels more urgent than ever. The spreading unrest only heightens the need for answers. For that, I'll need access to the Ministry's utility registry and my work praxometer. Tomorrow isn't just another workday. It's a chance to uncover what's gone wrong, before things spiral further out of control.

'We will continue to bring updates as they develop,' says the broadcaster. Her tone is sombre but steady. 'This is an evolving situation, and we will continue to monitor the situation across Optoria.'

The channel switches back to footage of Sector 23. The no man's land between the protesters and the police has narrowed – the mob is pushing forward, throwing debris, shouting slogans. The flames from the dumpsters cast flickering shadows in the dark night.

I turn off the TV, unable to watch any longer. My thoughts race as I sit there in the quiet. Finally, the silence is broken by the whistle of the kettle finishing its boil.



# STATE OF EMERGENCY

I LEAVE HOME AT THE USUAL TIME, wearing my usual clothes, ready to take my usual bus line. But I know today will be anything but a usual day.

For starters, the absence of regular commuters rushing up and down my street is striking. What is usually a bustling road is now completely empty. Well, not quite *completely* empty – the exception is Mr. Jones, who is walking on the other side of the street carrying a grey briefcase, dressed in a grey suit and wearing a grey hat. A fitting choice of colours for what is, undeniably, a grey, sombre day. He is a surgeon at Optoria Hospital and, hence, essential personnel as far as the State of Emergency is concerned.

He greets me with a subtle tip of his hat. I respond with a nod. It is a small, discreet gesture, but it feels oddly significant, like a small acknowledgement of the significance of today. I don't know Mr. Jones very well (in fact, I

don't even know his first name), yet at this moment I feel a strange, fleeting connection with him. There we are, two acquaintances, who in light of recent events share a simple nod that signifies much more: a wish to stay strong, a wish to stay united, no matter what the day brings.

He continues on his way, his footsteps steady, moving with purpose. He turns at the intersection and disappears from my sight. It is just me on the street now.

I continue towards the bus stop.

As I walk down the street, the signs of last night's chaos reveal themselves like scattered pieces of a puzzle. A trash can lies on its side, with its contents spread across the pavement and crumpled papers fluttering weakly in the breeze. A storefront window is shattered, the jagged edges of glass glittering in the dull morning light. Inside, overturned mannequins stand as silent witnesses to whatever unfolded here. I wonder what these mannequins might have seen during the night.

Even the air feels heavier here. There's an acrid smell of burned rubber mingling with the usual city smells. Further down, a lamppost leans precariously, its base dented and scraped. Someone has scrawled a slogan on a wall in bright red paint: "STOP THE LIES, TELL US THE TRUTH!" The message sends a shiver up my spine. I am surprised to see that the mob spread to my sector. Protests are unusual in Optoria, and seeing them spill into my own quiet sector is unsettling.

Yet, there's no one around. No clean-up crews, no police tape, not even the lingering presence of those who might have caused this. It's just me, alone, with the remnants of whatever flared up overnight.

I quicken my pace, the bus stop now within sight. I don't feel at home at the moment, despite having lived in this street for over ten years. I just want to arrive to the Ministry of Numbers as soon as possible.

As I approach the Ministry of Numbers after getting off the bus, I notice more people on the street. This is expected, I suppose – they all work at the Ministry, and are required to come today. Nevertheless, it's nowhere near as busy as it is on any other working day.

Most people are walking briskly towards the Ministry, heads down. There are small groups of three or four people in the plaza in front of the Ministry, murmuring things to each other. They are probably catching up on the events of the day, ensuring they're informed about the latest developments and, no doubt, sharing their thoughts on the current situation in Optoria. I know this because I want to join them. I want to hear what they have to say, how they think and feel about these turbulent events. But I have no time – there's much to be done, and with the rapidly developing situation, every moment counts.

## *Calculated Bliss*

The Ministry feels different today. I've always liked the way the sun shines on the building's glass and steel, but today it doesn't appear to shine as bright. As I step inside the building, the usual earthy smell of the plants decorating the interior feels faint, almost absent. Even the green foliage looks rather grey today. Of course, this is probably just my mood affecting my perception, but something does feel off.

I cross the atrium towards the lift. There are three other employees waiting for it, engaged in a barely audible conversation. As I approach them, they notice my presence and stop their conversation.

We wait for the lift together, without uttering one word to each other.

I'm finally at my desk. I usually take the first few minutes of the day to chat with my colleagues, but not today. I dive straight into today's task, as instructed by Margaret: finding out whether the published utility of Sector 7 is correct.

Calculation of Optoria's Gross Domestic Utility is a behemoth of a task. The nation is subdivided into a number of regions of similar population, and a Senior Accountant oversees each region's utility calculation.

The calculation of the utility in each sector in a region is done by an accountant, together with a team of clerks. They interview a group of randomly selected citizens over

a period of a week or two. They take praxometer readings of the activities each person in the group performs throughout the day, and they use these readings to extrapolate the person's total utility for the last year. Once this is done for every member of the randomly selected group, the utility of the entire sector is extrapolated from the total utility of the group. The reported total utility of the region is the aggregated utility of all sectors that fall within it.

I was the Senior Accountant overseeing the North Central region, so I understand the challenges of the task better than most. The region is home to over two million Optorians and encompasses 12 sectors. Conducting all the necessary interviews took us just under two weeks – a task that could have been completed in a single week if not for Sectors 16 and 17. These sparsely populated rural areas required extra time to reach everyone on our list.

Sector 7, part of the South East region, has a comparable population to North Central but comprises only five sectors. Of these, Sector 7 is the largest.

Joanne was responsible for this region. An experienced accountant at the ministry, she was actually my manager when I first joined the Ministry of Numbers. I've always regarded her as highly competent. After my promotion, we no longer worked closely together, but we occasionally collaborated on projects. Those moments reaffirmed my respect for her sharp analytical mind and meticulous attention to detail. That's why I find it hard to believe

she could have made an error in calculating the total utility of the South East region (and Sector 7 in particular). Perhaps a minor discrepancy could have slipped through, I concede, but nothing close to the scale the residents are claiming.

To investigate the issue, I decide to start by opening the records of some random residents from Sector 7. I want to see if anything obviously erroneous stands out.

I can do this by checking the historical recordings on the praxometer on my desk. All praxometers at the Ministry of Numbers are connected to the National Registry of Utility, which records all praxometer readings in Optoria. When conducting the interviews, utility readings are saved in the registry, appropriately labelled to indicate that the recording was used towards the calculation of the Gross Domestic Utility. Typically, clerks also add a few notes about the subject, like their name or address.

I get the list of all subjects interviewed in Sector 7, and pick one file at random.

*Full name:* Sarah Moore.

*Age:* 38 years and 173 days.

*Residence:* Sector 7.

*Time living in the sector:* 17 years and 316 days.

*Utility reading:* 14 utils for the full day. Estimated annual utility: 5,110 utils.

I then pick another one at random.

*Full name:* Oliver Hogan.

*Age:* 71 years and 281 days.

*Residence:* Sector 7.

*Time living in the sector:* 71 years and 281 days.

*Utility reading:* 11 utils for the full day. Estimated annual utility: 4,015 utils.

I am somewhat surprised, to be honest. A daily utility of 14 or 11 utils is quite low. I believe the reported Gross Domestic Utility per capita for Sector 7 is just over 75,000 utils, which works out at just over 200 utils per day. Sarah's and Oliver's readings are well below average.

Has an error been made perhaps when aggregating all utility readings?

That should be easy to verify. I select all records from Sector 7 used to estimate the nation's Gross Domestic Utility, and then calculate their average utility. The praxometer quickly returns the result:

*Number of records selected:* 2,732.

*Total annual utility:* 208,205,720 utils.

*Average annual utility per person:* 76,210 utils.

So the Gross Domestic Utility per capita of the sector matches my expectation. I quickly check what Joanne's report for Sector 7 shows, and indeed – her report shows the same figure: residents of Sector 7 had an annual average of 76,210 utils.

## *Calculated Bliss*

The anger of the mob that has caused havoc in Sector 7 (and elsewhere in Optoria) appears to be unfounded, then. The figures released by the Ministry of Numbers regarding their total utility *are* correct, and therefore the increase in utility with respect to the previous year *is* correct.

I'm still not at ease, though. Numbers may not lie, but I witnessed first hand how real the anger of the protesters is.

There is also the case of Sarah and Oliver. Their annual utility is well below the sector's average. Was it simply a coincidence, to have picked two files with such a low utility?

I decide to check the *median* annual utility of Sector 7, rather than the *average*. This might show a more accurate view of what the utility of the *average resident* in Sector 7 is. I send the request to the praxometer, which shows me a shocking result:

*Number of records selected: 2,732.*

*Total annual utility: 208,205,720 utils.*

*Average annual utility per person: 76,210  
utils.*

*Median annual utility per person: 4,619  
utils.*

I find myself having to re-read multiple times what the praxometer just showed me. I expected a slight difference between the average and median annual utility: it



is well-known (it is even taught in every Utilitarian Statistics course at university) that the utility distribution is typically skewed in such a way that the average utility of a population is slightly higher than its median utility, about 10-20% higher typically. The results for Sector 7, however, are unlike anything I've seen before. The average utility is an order of magnitude higher than the median. The only way this can happen is by having a few individuals, whose annual utility is so high that they significantly skew the average utility of the sector.

I ask the praxometer to show me the three residents with the highest annual utility. The names that pop on the machine are Chris Warner, Amber Swanson and Nathan Chase. Their annual utility? 15 million, 13 million and 10 million utils respectively. That's almost 3,000 times the annual utility of the average resident of Sector 7. To be honest, I didn't even know such high utilities were even possible.

No, it can't be. Surely these readings are just wrong. Yes, that must be it – for some reason, these utility readings were wrongly taken. Either the praxometer itself was faulty, or the clerk that annotated the utility reading misplaced a comma. That is the simplest explanation – and in my experience, the simplest explanation is usually correct. A few clearly erroneous records have created massive outliers, which skewed the utility statistics of the sector. I suppose the same may have happened in other sectors too.

I'm quite content with the explanation. I just have to write a report with my findings, and present it to Margaret. I will even write a few proposals to solve the issue – finding and deleting the outlier records, interviewing the people with erroneous annual utilities, or even repeating the whole study from scratch – as well as proposals to avoid such mistakes in the future.

Or that was my plan, at least.

# EVACUATION

**B**EFORE I CAN PUT PEN TO PAPER, the loud speaker in the office announces a rather disturbing message.

‘Attention, please. Attention, please. We have an important announcement to make.’

It is a woman’s voice, and it sounds rather robotic. I am not sure if it’s pre-recorded or someone is making the announcement live.

‘The Ministry is currently surrounded by rioters who are attempting to break in. Please, head to the nearest exit.’

A few workers who were initially unconcerned by the announcement raise their heads after hearing the second part of the message.

‘You will be escorted through an underground emergency exit. Please, do not attempt to leave through the main entrance, as it’s currently blocked by a large group of protesters. For your own well-being, please follow the Safety Marshal to safety.’

## *Calculated Bliss*

As soon as the announcement finishes, two people with bright yellow vests with SAFETY MARSHAL written on their back enter the room.

‘Ladies and gentlemen, please follow us. Leave everything behind, don’t take anything with you,’ shouts one of them.

People start walking towards the exit. They all try to preserve order to make the evacuation as swift as possible, but the relative haste is evident.

I hesitate what to do. It is of paramount importance to finish the report and send it to Margaret. I decide to take with me as much paperwork as I can to finish the report at home. However, before I can even put everything inside a folder one of the marshals interrupts what I am doing:

‘Sir, you must leave now, and you cannot take anything with you.’

‘I understand, but it’s very important I take these documents with me, as...’

‘Sir, I must insist again, you have to follow the crowd and exit the building. I am under orders to escort outside anyone who refuses to leave.’

I stare at him for five seconds, unsure what to do. I don’t want to argue with him or create unnecessary trouble, so I decide to comply. I will write a report at home with whatever I can remember from what I’ve learned today.

‘Alright, it’s fine, I’ll leave now.’

The marshals are taking us down a narrow staircase located on a corner of the building. The entrance is by a large fig tree, and I must confess I never noticed there was a staircase behind it.

The stairs seem endless. Despite being on the third floor, due to the high ceilings the stairs seem to go down many more than three floors. We just seem to go round, and round, and round...

After a good five minutes going downstairs, I realise we must have gotten past the ground floor already. We must be going down underground.

Shortly after, my suspicions are proven right. We go through a small door at the end of the staircase, where a marshal is directing all people through a long, narrow tunnel.

‘Ladies and gentlemen, please follow the lights through the tunnel without stopping. Stopping halfway will block those behind you. Once you reach the end of the tunnel, please take the stairs back up to street level.’

If going downstairs seemed endless, the tunnel truly does seem to go forever. The poor lighting, narrow walls and uncertainty of what is going on up on the surface is making me anxious. My mild claustrophobia doesn’t help either.

Finally we make it to the end, and after going upstairs we come out from underground. We are actually surprisingly close to my home. It shouldn't take me more than four or five minutes to get there.

Just as I'm picturing the cup of tea I'll brew when I get home, a large group of people turns the corner toward us. They must have recognised we work at the Ministry of Numbers (perhaps the suits gave it away?) because they start running towards us. They do not look happy.

I obviously don't wait to find out if they are friendly or what they want, and neither do any of my colleagues, so we start running away from them. I am just following everyone in front of me, but luckily they seem to be going towards my house. I hope I can take shelter there.

It's already past noon, and the heat of the day is at its highest. My lack of fitness is beginning to show, too. I must admit I don't exercise as much as I should, and as the initial adrenaline is wearing off, I find myself gradually slowing down. I'm close to home now, though – hopefully I'll make it there.

We go past a large park I frequent when I go for a stroll on Sundays, Keystone Grounds. It's a wooded park with lots of narrow, twisting trails and abundant vegetation. It's the perfect park to go to if you want to experience the countryside in the heart of Optoria. I figure it's also the perfect park to hide and escape from a furious mob. It can be difficult to navigate there, so my knowledge of the trails should play to my advantage.

I take a turn and go inside Keystone Grounds. All other Ministry workers keep going straight – all but one, a lady who decides to follow me instead.

It's difficult to run here: the uneven surface, the tree roots and occasional low hanging branch makes it challenging. Also, I'll be honest – I'm already pretty tired from running, so walking for a while doesn't seem like a bad idea.

The lady is still behind me, following me as I make my way through the woods.

'Do you know the way?' she asks me. I can tell from her strong breathing that she probably also welcomes a walking break.

'I do, yes. I live nearby, and I know the park well. Follow me.'

I'm heading towards the West exit of the park. It is the one closest to my house.

'The exit is right over there,' I tell her while pointing to a tall gilded gate at the end of the trail. 'I live very close, you should come in with me until things calm down out here.'

'That's very kind of you, but I don't want to cause any trouble. I'll keep walking, hopefully I'll find a way to get home.'

'Nonsense! It's no trouble at all. It's not safe out there right now, you should come over for a couple of hours or so.'

## *Calculated Bliss*

‘Cheers. Yes, you’re right, perhaps I shouldn’t stay outside for now.’

We exit the park and finally we arrive to my house.

‘I’ll make some iced tea; it’s quite hot today. Would you like some?’ I ask, after taking my shoes off.

‘I’d like some tea, yes, but could you make it a hot brew instead? I actually got somewhat chilly, I wouldn’t mind something hot to be honest.’

I can’t help but raise an eyebrow. How can she say she’s cold? It’s sweltering out there! Perhaps the shock of having to escape an angry mob left her feeling chilled. The body reacts to stressful events in strange ways, sometimes.

‘Sure, no problem, I’ll make you some hot tea. I’m John, by the way.’

‘Thanks, John. I’m Emmanuelle.’



## CONFESSION

I LIKE TO USE OOLONG FOR ICED TEA. A friend of mine recommended one in particular, harvested high in the mountains – not sure which country. It is naturally sweet, which makes it perfect for iced tea. I'm quite strict about how I prepare oolong tea. I have a thermometer that makes sure it's brewed at the right temperature, around 90 degrees Celsius. I like my tea strong, so I let it brew for about 7 minutes. I pour the tea in two glasses, one for Emmanuelle and the other for myself. I added some honey to mine. I like adding honey to iced tea. Not much, less than half a teaspoon – but it makes the drink delicious. I add some ice to my glass, and I head back to the living room.

'Here you go, Emmanuelle. Be careful, it's quite hot and...' I start saying, before I stop suddenly.

Emmanuelle is crying disconsolately, staring into nothing. She turns her head and looks at me. Her eyes are red and full of tears. For a moment, she says nothing, her lips

## *Calculated Bliss*

trembling as if she's unsure what to say. Finally, her voice cracks as she whispers:

'It's all my fault, it's all my fault...'

I leave the tea on the table by the couch and sit beside her.

'Don't worry, it's all good now. You're safe from the mob now. Here, have some tea, it will help you.'

'No, it's all my fault, it's all my fault.'

'Don't be silly! How could all this be your fault?' I ask with a laugh, wanting to downplay the situation.

Emmanuelle looks at me, her tears flowing freely now, her expression a painful mix of guilt and despair. She pulls her knees to her chest, wrapping her arms around them tightly as though trying to hold herself together.

'You don't understand, John,' she says, with her voice breaking. 'None of this was supposed to happen. Perhaps, if I had spoken out, if I didn't just play along... Perhaps none of this would have happened.'

I frown, unsure of what she means.

'Spoken out about what?' I press gently, while moving a bit closer to her on the couch. 'Spoken out about what, Emmanuelle?'

She wipes her cheeks with her palms, clearing away the tears. She takes a deep breath and reaches for a tissue from the table.

'What do you do at the Ministry of Numbers, John?' she asks, her voice steadier now, carrying an unexpected firmness.

‘I am a Senior Accountant.’

She nods slowly.

‘I see. Well, I outrank you by quite a bit. I am the Head of the Justice Department.’

‘Justice Department? You mean the Ministry of Justice?’ I ask, confused. I know of the Ministry of Justice, of course. It is one of the main ministries in Optoria. I’ve never heard of a Justice Department within the Ministry of Numbers, though.

‘Yes, John. The Justice Department, within the Ministry of Numbers. Optoria does have a Ministry of Justice, of course. However, it merely carries out and enforces directives. Directives coming from us, the Justice Department. We are the ones who set the policy – the ones who decide what justice looks like in Optoria.’

She takes a sip of her tea.

‘You are an accountant – a Senior Accountant actually! So you can probably imagine how we decide on changes for Optoria’s justice system.’

‘With the praxometer,’ I murmur. I am not sure where she’s trying to get at.

‘Yes, the praxometer of course. After all, we need to make sure our judiciary behaves in whichever way is most beneficial for Optoria. We cannot leave that to chance or guesswork, so yes, we make extensive use of the praxometer.’

‘For the longest time, we’ve always followed a simple maxim: whatever increases utility is good, whatever decreases utility is bad.’

‘Well, of course. Isn’t that self-evident?’ I ask, confused.

‘Is it, darling? Maybe it is. I certainly thought so, until not long ago. For some time, though, I’ve had a feeling of disquiet about it. I couldn’t pin-point what it was, though. I started having issues sleeping at night. I started to question decisions made by my department, even decisions made by myself. I couldn’t tell why, but they just didn’t seem right – despite clearly increasing Optoria’s utility.’

‘I then reached a tipping point. Have you heard of the Blossomfield murders, darling?’ asked Emmanuelle.

I’m surprised she has to ask if I’ve heard of the most horrific murders in Optoria’s recent memory. Judging from her face, though, she genuinely isn’t sure if I’ve heard of them.

‘Of course I have, everyone in Optoria has. To be honest, I’ve been a bit worried for a while, feeling unsafe in my own sector. And I live nowhere near Blossomfield, I can’t imagine what the residents around Blossomfield must have felt like. I’m glad they’ve caught that man, Marcus Smith.’

‘Quite, yes, those murders were terrible. The case gave us a lot of work, at the Justice Department. See, for a long time Optorian Police didn’t have a single clue of who

might have done it. Not even a suspect. That was until just the other day Marcus Smith was arrested as the sole perpetrator of the crimes. How would you feel, darling, if I told you Marcus is actually innocent? That he had nothing to do with those murders?’

‘Innocent?’ I ask, perplexed.

‘Yes darling, innocent.’

‘How do you know? Does the police know? Why would they charge an innocent man with those murders?’

‘Of course the police know, and so does everyone in the Justice Department – well, everyone with a high enough rank. As you rightly remarked, the period leading up to Marcus Smith’s arrest was a grim one. In those days, no one in Optoria felt safe. People avoided going out alone after dark, and parents refused to let their children play unsupervised on the streets. Fear lingered constantly, a shadow over the lives of every Optorian.’

Emmanuelle paused briefly, wrapping her hands around the warm tea mug. She took a small sip, briefly looked at the window, then back to me.

‘Each new murder only deepened the sense of dread and hopelessness. Optoria’s utility was draining, and we couldn’t have that. Time dragged on, and the pressure for a solution became unbearable. Finally, the praxometer provided one. It was simple... yet disturbingly dark.’

‘What was it?’ I ask, leaning in. Although I’m relatively senior within the Ministry of Numbers, I am far removed from the high-ranking officials who make the truly crit-

ical decisions. Listening to Emmanuelle speak felt like a rare glimpse into the inner workings of the Ministry's upper echelons.

'Optoria was craving for a culprit. But it didn't matter whether the person was truly guilty or not, as long as someone could be held responsible to ease the collective fear and unease. Once a person (any person, really) was arrested, Optorians would feel safe again on our streets.'

'Hold on,' I interrupted it. I wasn't sure I understood what she was implying. 'You're not suggesting that you framed an innocent man, right?'

'I'm afraid so, darling. He's an unfortunate pawn in a utility-promoting scheme, organised by the Justice Department. I feel for him, but the praxometer's advice was clear – and it had the numbers to back it up. Optoria was losing hundreds of thousands of utils every day as a consequence of the nation's insecurity. His arrest stopped that, overnight. Sure, he has personally suffered a great loss of utility as a result, but the praxometer is clear that overall, the decision was beneficial for Optoria. Moreover, Marcus was selected from a long list of candidates because he had no family or friends. This minimised the negative impact on the utility of those around him.'

I am perplexed by what I just heard. I am not sure what to make of what I am hearing, and I cannot find the words to explain how I feel.

'But...' That's all I can utter.

‘I had the exact same look the day I saw the praxometer’s report. Since we were children, we’ve been taught to seek utility. Remember in school, when we were told to share our toys or snacks with others because it made everyone happier, even if it meant giving up something we wanted? Those moments taught us that small personal sacrifices could lead to a greater collective benefit. By sharing, the group’s overall utility increased far more than if we had kept everything to ourselves. It all made perfect sense back then. But as I grew older and gained more life experience, the utility-maximizing choice didn’t always feel like the right one. I couldn’t quite explain why, though.’

‘What if the killer comes back?’ I jump to ask. I immediately realise I was rude to interrupt her reflection, but the question felt too urgent to hold back.

‘What do you mean, if the killer comes back?’ she asks, raising an eyebrow. ‘Are you asking what will happen if the real killer starts murdering again?’

‘Yes. In that case, not only would the fear return, but the public’s trust in the authorities would be deeply shaken. After all, even if the real killer is eventually caught, how would Optorians be sure the authorities are right this time?’

‘I see you are a good accountant, darling, always considering every possible scenario and its impact on Optoria’s utility. Yes, that is certainly a possibility – a possibility that the praxometer of course considered. We believe the

scenario is an unlikely one, though, as the killer has been inactive for many months now. However, if they do resurface, we will claim that the new killings are not by the original murderer but by an imitator: a copycat following the footsteps of Marcus Smith.'

'What about the trial? Won't Marcus' trial prove that he's innocent?'

Emmanuelle laughs at my comment.

'Trial? What trial? Your naivety amazes me, John. There won't be a trial – not a real one, anyway. He'll simply be declared guilty, without any meaningful process to prove otherwise. As for the praxometer's sentence, I can't say for certain, but I'd wager it'll recommend the death penalty, with his organs harvested and donated to Oportoria's hospitals. A util-maximizing outcome, as always. Anything other than the death penalty is too risky, as the truth may come out.'

I stare at her, unsure whether I should be horrified, angry, or simply numb. The issue is, I don't know why I'm feeling this way. Her explanation seems totally rational. Charging an innocent man with murder so that an entire nation feels safe again does seem to overall increase utility. It is net-positive. Since I was a boy, I've always been taught to never put an individual's welfare above an entire nation's. The collective welfare always comes first. Yet this seems wrong.

'I had the same look on my face when I first understood the praxometer's recommendation,' Emmanuelle says,



her voice quieter now, almost reflective. 'I found the mere idea of framing such horrific murders on an innocent man truly repulsive. But when you strip it down, when you look at the numbers objectively, there's no other conclusion. Marcus' sacrifice ensures a safer, happier Optoria. How can we ignore that? How can we justify doing anything other than following the praxometer's recommendation?'

Emmanuelle stops talking and looks at me. I am not sure if it was a rhetorical question, or if he expects an answer from me. She finally speaks, her tone hesitant, as though she's weighing her next words carefully.

'But... over time, I started to feel that maybe – just maybe – there's something we're missing. Something bigger than utility. I couldn't articulate it at first, but I've come to think it has to do with the idea that... every person has certain... certain things about them that must not be violated. No matter what the numbers say.'

She frowns, struggling to find the right words, her hands gesturing aimlessly.

'It's... it's like every individual has a kind of... shield, I guess you could call it? Something that says, 'You can't cross this line, even if it would make everyone else better off.' You see what I mean?'

I stare at her, confused.

'A shield? What do you mean?'

'I don't know if 'shield' is the right word,' she admits, with frustration creeping into her voice. 'It's like... a rule,

or a boundary. Something that protects a person's... dignity, or their existence. And other people cannot cross this boundary, cannot break that rule, no matter how much it would benefit the nation.'

Her voice trails off, her unfinished thoughts dissolving into complete silence. We sit there for what must have been at least five minutes, until I come back to the question I asked when I found her crying:

'What did you mean earlier, that it was all your fault? Were you referring to Marcus' arrest?'

'No, John. I was talking about something else. Something much more severe, I'm afraid. It all started 15 years ago. There is a Research and Development department at the Ministry of Numbers, called the Innovation Department. It tries to find new innovative ways to maximise utility. The praxometer was an invention by the Innovation Department actually, a long time ago.'

'Well, several years ago the scientists at the Innovation Department stumbled upon something new. Radically new. It happened during a period of utility stagnation, when our Gross Domestic Utility stopped growing and even had some contracting quarters. The government was looking for solutions everywhere, but despite numerous attempts to optimise the utility of every aspect of Optoria, progress seemed elusive.'

'Yes, I remember that period,' I told Emmanuelle. 'That was around the time when I joined the Ministry of Numbers as a junior accountant, fresh out of univer-

sity. I do remember everyone was quite stressed with the issue, and everyone was working very hard to find a solution, a way out of it. Nevertheless, the ministry was able to finally turn it around and restart the growth in the nation's utility, right? Was that thanks to the Innovation Department?'

'That's right, darling. As part of the government efforts to help Optoria's utility, the Innovation Department was commissioned to find artificial ways of increasing a person's utility.'

'Artificial?' I ask, confused.

'Artificial, yes. Something that could increase a person's well-being, with immediate effect. The task was a bit vague and, to be honest, I don't think the government had much faith that the scientists could find anything useful – not at least in the timeframe they were interested in. However, to much of everyone's surprise, not even a month passed before a young scientist discovered something marvellous: a chemical compound that, when ingested, amplifies whatever utility the person receives. They named it Hedonine.'

Her answer just created more questions than it answered.

'What do you mean by "amplify"? And this chemical compound, what is it, a pill you can just take? Why have I not heard of this before?'

'As you well know, every action in our lives has an associated utility. Things that improve our well-being have

positive utility, things that decrease it have negative utility. How an action affects our utility, however, is highly personal. A person that loves ice cream will receive a lot of utils when he or she eats it – perhaps a whopping 10 utils. A person who doesn't like ice cream, on the other hand, will receive negative utils if they eat it, so they will generally avoid it. If the person who loves ice cream takes Hedonine, however, the amount of utils received is multiplied. How much it's multiplied varies as well from person to person, but it's usually between 100 and 200-fold. So instead of receiving 10 utils, he or she would receive 1,000 to 2,000 utils.'

'What, up to 2,000 utils for a simple ice cream? That's almost as much as a person would get in an entire year!'

'Yes, precisely. It was a revolutionary discovery. It was bound to change utility as we know it. You just need to take a pill every fortnight, and all your experiences become much more intense. You start living life in a completely different way.'

'Do you take it?'

'I do, yes. I have done so for many years now. I remember the first time I tried it. Its effects are immediate, you start feeling it straight away. Even small things that used to produce mild, almost imperceptible pleasure, like a gentle breeze in the summer, become incredibly pleasurable. I felt like I had lived my entire life numb, and only now was I starting to feel for the first time.'

‘How about negative experiences, the ones that reduce utility?’

‘Those get amplified as well. The pill makes you feel extreme pleasure and happiness, but also extreme pain. Things that used to produce a mild discomfort now produce intense pain. So I just avoid them at all costs.’

‘Why is this the first time I hear about this chemical compound, Hedonine?’

‘That is a good question, darling. When the government found out about the discovery, the first reaction was one of jubilation: once Hedonine is distributed across Optoria’s population, the nation would witness an explosion in utility unlike anything it’s seen before. The growth in Gross Domestic Utility would be unprecedented. However, the initial sense of jubilation was followed by one of caution. Yes, the pill could multiply Optoria’s utility overnight by orders of magnitude – but what next? The government would experience the same conundrum: the nation’s utility would stagnate once again, and the government would need to find yet another way to kick-start utility growth.’

‘Instead, they decided to follow what, I must say, is a rather mischievous plan. Rather than distributing Hedonine across all of Optoria, they decided to provide it to a small part of the population only. Hedonine is so powerful that even if a small group starts taking it, the effects on the Gross Domestic Utility are notable. They devised a schedule to gradually distribute it to more and more peo-

ple every year. This would ensure a steady growth year over year, as more people started taking the pill. Who the pill was distributed among, however, was not very equitable. They started with the government's inner circle, followed by other high-ranking officials. I myself found out about this chemical compound when they decided to distribute it among the heads of a number of departments within the Ministry of Numbers, five years ago. When they explain to you what the pill is and what it does, they make it very clear that it must be kept as a secret. The code word they use for the whole initiative is the Great Optimisation. If people found out about its existence, they explained to me, they would revolt and unrest would follow. That would not be good for anyone, and everyone's utility would decrease. 'Hiding certain things from people is our way to take care of them,' they told me. Then, after the government started to slowly roll out Hedonine, government policy started to shift to favour those that were taking the pill.'

'Really?' I interject. I can feel anger growing inside of me. 'So on top of trusting the pill to a small subset of the population only, they started favouring them over the rest of Optorians with government policy?'

'It's only logical if you think about it, darling. As I said, Hedonine dramatically amplifies the amount of utility that is received. Therefore, if the government wants to follow utility-maximising policies, it makes sense to direct resources towards those under Hedonine's effects. The

return on investment, measured in utils, is much greater. The praxometer agrees with this: the policies it started recommending were clearly directed towards those taking the pill. After all, if you have one ice cream to give away, the praxometer will suggest giving it to a person taking Hedonine, who might receive 1,000 utils for it, over a regular Optorian, who might get less than 10 utils.'

'Can you give examples of actual measures taken by the government that are biased in this way towards those taking Hedonine?'

'Yes, darling: there are plenty of those. Some are quite harmless, yet notable. For instance: have you not noticed it's been quite hot the last few years?'

'I have, yes!' I said, almost shouting. 'I have noticed that every year Optoria seems to get hotter and hotter, and it's sometimes simply unbearable. I wasn't sure why, as we've been able to control Optoria's climate for many years. How is this related to Hedonine?'

'Well, shortly after the first wave of distribution of the chemical compound, when the Great Optimisation was at its infancy, it was observed that it has a rather annoying side effect. It makes the person feel very cold. Anything under 20 degrees Celsius feels like freezing temperature. Only temperatures over 30 degrees Celsius are comfortable for us. You are quite right that we're perfectly capable of controlling climate and the weather. In deciding what is an appropriate temperature for Optoria, the praxometer calculates how temperature affects the nation's utility.

## *Calculated Bliss*

It was clear for the praxometer that anything less than 30 degrees Celsius would cause a great loss in utility because of the discomfort it would generate among the small minority of Optorians that are taking Hedonine. For the praxometer, it doesn't matter that the vast majority of Optorians would rather have milder temperatures – the disproportionate effect of this minority on the nation's utility meant that their preferences dictated climate policy. So, the government adjusted the temperature settings to keep it above 30 degrees Celsius.'

'So the rest of us, sweating and suffering, are collateral damage to what is supposedly 'optimal', according to the praxometer?' I say.

Emmanuelle smiles, and she replies to me:

'Not supposedly, darling. It just is. The maths check out. Surely you must see it – you are an accountant after all.'

'I do understand the logic behind it. It just doesn't feel quite right, despite being utility maximising.'

Emmanuelle's smile suddenly goes away.

'I hear you, John. I know the feeling.'

I come to a sudden realisation.

'All this is starting to make sense now. I've been tasked by my manager to look into the allegation by the rioters that the national figures for the Gross Domestic Utility have been fabricated, that they do not correspond with reality. This morning I found that although the figure itself is correct, they are heavily skewed by a small group of



people with abnormally large utility readings. I thought it was a mistake in the way the data was inputted, but I see it now. Those values are not erroneous; they are real, from people taking Hedonine.'

'Yes, that is correct,' replied Emmanuelle. 'That's also why I was crying earlier. Once there is a class of society that extracts astronomically more utility from any activity, government policy inevitably shifts in its favour to maximise overall utility. The majority of regular Optorians are sidelined, their well-being deemed insignificant compared to the utility-hungry elite – in other words, they simply stop to matter. Even legislation that actively harms the general population is enacted – justified by the overwhelming surge in utility experienced by those on Hedonine.'

My pulse quickens as Emmanuelle's words settle in. The implications of what she is saying are staggering. If Hedonine is skewing the nation's utility calculations, then everything – the policies, the decisions, the very foundation of Optoria's governance – is being dictated by an artificially inflated metric.

'This is all very disconcerting. I – I mean, we – must do something about it. I'll talk to Margaret tomorrow; she's my manager at the Ministry of Numbers. We can't just let this go.'

'I agree, John, but I'm terrified. I should have spoken up sooner, but I didn't have the courage. Even telling you this now, in the safety of your home, gives me chills.'

‘Don’t worry, Emmanuelle,’ I tell her trying to comfort her, ‘you’ve done enough telling me about this. I’ll escalate the matter to Margaret, hopefully she’ll know what to do next. She’s always had an eye for what to do in delicate situations where one must tread with caution – and this is certainly one of those!’

Emmanuelle appears to be relieved by what I said, as her facial expression visibly changed: she looks more relaxed now.

‘Thanks John. And I really appreciate you looking out for me today. I don’t know what the mob would have done if you hadn’t taken me into your home.’ She looks out the window, checking both ends of the street. ‘It looks like they’re gone now. I think I should go now. Please, let me know if there is anything else I can help with.’

‘Are you sure you don’t want to stay a little longer, in case there is more trouble?’ I ask, concerned.

‘You’re very kind, dear. I think it is safe now. Moreover, I want to make sure I get home before it gets dark.’

‘Of course, it makes sense,’ I reply with a smile.

## EMMANUELLE

‘EMMANUELLE, don’t walk past a crying child,’ my grandmother used to say. ‘Their tears weigh more than your hurry.’

She told me this many times when I was a little girl. It was advice from another age, from a time before praxometers, when utility could not be measured but was instead guessed through simple rules of thumb. Her generation lived by such sayings. They were fragments of wisdom, pragmatic pieces of advice that didn’t always lead to the best outcome, but more often than not were good enough.

At the time I didn’t understand what she meant. I was too young (she died when I was 10) and by then praxometers were commonplace. Why wouldn’t you just check the praxometer to see whether hurrying along produced more utility than stopping to comfort the crying child? These sayings sounded like riddles to me.

But she didn’t have that option, of course. People wanted to maximise utility, but they lacked the luxury of

measuring it precisely. Rules of thumb were the next-best thing. Without machines to calculate utils, the science of utility-maximising consisted of finding such rules.

One of such rules people lived by was to act compassionately. If you saw hunger, you shared food. If you saw pain, you offered comfort. It wasn't perfect, but it gave people a direction, a guide for action in their daily pursuit of utility. For my grandmother, compassion was not just a virtue; it was a calculation, one of the few available to her in a world without praxometers.

Another saying I still remember is one she repeated whenever she saw me with a frown: 'Emmanuelle, don't forget that a smile given freely is worth more than gold.' She knew that seeing another person smile often lifted one's own wellbeing, so she insisted I should always share a smile, to help others feel happier.

I used to think she simply wanted me to behave politely, the way adults often tell children to. Only later did I understand why she used to tell me that so often. She understood that small gestures, multiplied across many lives, add up to greater happiness for everyone.

My grandmother wasn't always a nice, gentle lady, though. She had once been a Utilitariette, one of many fierce women who marched, shouted, and made themselves a nuisance in the name of equalising utility between men and women. It may sound unthinkable now, but there was a time when not all utils were worth the same. Today we barely stop to question it: a util is a util, no

matter who earns it. But in my grandmother's day, the scales were rigged. A man's utility was counted as greater than a woman's, sometimes four times greater. Four! As if her happiness, her labour, her very life, weighed only a fraction of a man's.

My grandmother, like so many other women of her generation, could not stomach such an insult. They refused to believe that their joy, pain, fears, and very existence counted less than a man's. So they decided to do something about it. Rather than passively accepting this, she and her sisters in the Utilitariette movement fought back.

Their methods focused on creating enough trouble to make it impossible for others to ignore them. They marched through the streets, carrying banners and shouting. When they realised this was not going to be enough, they turned to disruption and havoc. They stormed the Ministry of Numbers and chained themselves to its gates, blocking its entrance. They smashed shop windows, built barricades in the streets, and resorted to arson on occasion. They disrupted the annual utility announcements on National Happiness Day, shouting that those numbers did not represent women. They even staged public "dead util funerals": mock ceremonies in busy streets, complete with coffins and mourners, to dramatise how women's utils were treated as dead weight compared to men's.

Grandmother often spoke about the paradox of their cause. They fought for utility by destroying it. Every act of defiance, every broken window, every street set ablaze, reduced the nation's happiness in the short term, and yet they saw no other way to raise it in the long run. The authorities accused the Utilitariettes of tearing down Optoria's utility, but the women believed they were building it anew. It was, as she used to say, "a sacrifice of today's utils for the sake of tomorrow's." To her, pain and disruption were the necessary price of equality. The temporary suffering that would one day allow everyone's utils to count the same.

Each time my grandmother left for a protest, she would come to say goodbye.

'If I'm not home for supper, it's because I'm busy raising the nation's utils, darling,' she would say, winking at me with a smile. 'But leave me some of the pudding!'

I don't remember much about those protest days. I was too young to understand what they were fighting for, only that my grandmother would leave the house with a determined look and return with her voice hoarse and her hands smelling faintly of smoke.

There is one day I remember vividly, though. It was an unseasonably hot autumn afternoon, and I was playing alone in my room. She walked in with her blue-and-brown dress – Optoria's national colours. It was the dress

she always wore to protests, so I knew she was about to leave for one. But her usual smile and mischievous glare were missing; she looked serious instead.

‘Emmanuelle, remember,’ she told me, ‘comfort is never the birthplace of change.’

She then left my room and closed the door behind her without saying anything else. I didn’t think much of it, so I went back to playing with my toys.

A few hours later, my mother came into my room. Her eyes were red and full of tears, her face pale and trembling. She didn’t say much at first, she just stood by the door, trying to speak but unable to find the words.

I remember asking her what was wrong, but she only knelt beside me, took my hands, and whispered that Grandmother wouldn’t be coming home for supper after all.

I stared at her, not understanding.

‘Did she get lost again?’ I asked. ‘She always finds her way back.’

My mother shook her head, her voice breaking.

‘No, darling,’ she whispered. ‘She didn’t get lost.’

‘Then where is she?’ I asked.

She hesitated, then pulled me into her arms. I could feel her tears fall onto my shoulder.

‘She’s gone, Emmanuelle. There was an accident at the protest. She fell... and she didn’t get up.’

I didn’t know what to say. The words simply didn’t make sense to me. People fall all the time, but then they

get back up, dust themselves off, and come home for supper. But Mother kept holding me tighter, as if I might slip away too.

‘She was very brave,’ my mother said, her voice breaking as tears streamed down her face. ‘But she’s gone now... she’s left us.’

I was still a little girl then, too young to truly understand what had happened. My mother tried to protect me and spared me the details. It wasn’t until a few years later that I learned what had really happened to my grandmother that day.

I learned that my grandmother had gone to the protest that day because the Prime Minister was scheduled to arrive at the Ministry of Health for a meeting. Hundreds of Utilitariettes had gathered outside, displaying banners calling for equality in utils. Optorian police expected the protest so they had set up barriers to keep them away from the roads. But my grandmother never cared much for barriers. When the Prime Minister’s car approached, she broke from the crowd and ran forward, trying to make him see her sign: “Take my utils, but count them fairly.”

Police officers tried to stop her, but she was very agile despite her age so she managed to slip through the line. She reached the road and threw herself in front of the car. It struck her before it could stop.

They said she died instantly.



For days afterward, the newspapers spoke of what they called a “tragic accident,” praising the Prime Minister for remaining calm. But among the Utilitariettes, my grandmother became something else entirely; a symbol of sacrifice, of courage, of a single life offered to remind the nation that some utils should never have been discounted in the first place.

I often think about my grandmother’s death, and what it truly meant. My grandmother did not reject utility; she contested how it was counted. The aim wasn’t the problem for her: the arithmetic was. A ledger that credits a man four and a woman one will mislead any policy, however sincere. The protests of the Utilitariette were an attempt to correct this scale.

As I grew older, though, I came to understand a second lesson. Even if the counting were perfect and everyone was awarded equal utils, some exchanges still feel wrong. Not everything that increases the overall sum ought to be done. Some harms are not a price but a boundary. I began to think that calculated happiness needs guardrails, lines that belong to each person and no collective, however large, should cross. Her final act taught me both truths at once: that the scale could be fixed, but that some things were never meant to be weighed.

## *Calculated Bliss*

# INSOMNIA

SLEEP REFUSES TO COME. I stare at the ceiling, my mind tangled in the knots of everything I've learned today from Emmanuelle. The room is dark and quiet, but my thoughts are blinding and loud. Every time I close my eyes, I see the numbers, the impossibilities, the truth staring back at me. It is the wee hours of the morning, yet I haven't slept a single minute. I turn onto my side, then onto my back again, searching for comfort that doesn't exist.

I keep replaying what Emmanuelle told me. Her words echo louder than the clock: "Hedonine, the Great Optimisation, the lie beneath our happiness." Her words are keeping me awake.

I used to know this feeling well. Insomnia was once a familiar ghost, lingering in the quiet hours of the night, whispering worries that seemed urgent but, in the light of morning, would shrink into insignificance. Back then, it was the usual burdens – exams, deadlines... Now, the

## *Calculated Bliss*

silence is heavier, charged with something far worse than stress: the weight of knowing.

There's something cruel about sleeplessness. It doesn't just keep you awake – it unravels you. The longer I lie here, the more my mind warps reality, turning thoughts into illusions, doubts into certainties, the implausible into the inevitable. The night magnifies everything and distorts reason.

I tell myself that morning will soften these thoughts, that daylight will bring clarity. But dawn feels like an eternity away, and my thoughts are here with me now. The hours stretch endlessly, a waiting game for something that feels as if it will never arrive. The world is still asleep, lost in its peaceful ignorance, while I remain awake in the chaos of my own mind.

The clock ticks on, mocking my inability to escape my own mind. In the stillness of the night, I am reminded of how fragile our sense of control truly is. Sleep is the body's surrender to the unknown, the body letting go, if only for a moment. But here, in this void, I am stranded between wakefulness and oblivion, a constant reminder that we are never as in control as we think we are.

Eventually, morning does arrive. I must have slept a couple hours at most, yet I don't feel tired. My mind is alert, energised.

I open the blinds and sunlight spills into the room, bright and indifferent. The streets are empty – not surprising, as we are still under a State of Emergency. The silence is eerie. No footsteps, no cars, no distant murmur of life carrying on as usual. All I can hear is birds singing in the distance. Strange – I think it’s the first time I hear birds in my sector.

The silence is not the only reminder of yesterday’s turmoil. Shattered glass and scattered debris still litter the street, clear evidence of the havoc left behind by the rioters. I wonder if garbage collectors are considered “essential personnel” during a State of Emergency. I hope they are, otherwise the piles of trash will only grow. Keeping streets clean is important for Optoria’s utility, and living under a State of Emergency doesn’t change that.

I walk into the kitchen, turn on the coffee machine and pour coffee into my mug. I glance at the thermometer – it’s 25 degrees Celsius. Another hot day ahead. I used to see the heat that Optoria had grown accustomed to as a mere annoyance. But now, having learned the truth from Emmanuelle, and having understood why it is so hot, I view it with disgust – a symptom of the rotten society Optoria has become.

I’ve always been proud of my work at the Ministry of Numbers. To maximise Optoria’s utility is to improve the lives of its people – or so I had believed. I knew I wouldn’t be able to increase the utility of *every* Optorian, but that was never the goal. The aim was to increase the

nation's overall utility. This sometimes meant making a small minority worse off, provided the increase in utility for another group compensated for it. I accepted that. As long as it was backed by the appropriate and rigorous utilitarian calculations, I never questioned it. After all, it was only logical.

Yet here I am, questioning a perfectly reasoned argument put forward by Emmanuelle: people who take Hedonine receive disproportionately more utility from any action than regular Optorians; therefore, public policy should favour them, if overall utility is to be maximised.

At first, I dismissed Emmanuelle's argument. It seemed too simple, too neatly aligned with what others might want to hear. But the more I think about it, the harder it becomes to ignore. The numbers don't lie. Hedonine users do, indeed, derive more benefit from every action they take. This is not speculation – it is fact, cold and unarguable. My recent findings about a few residents in Sector 7, whose annual utility is thousands of times greater than the average, only confirm it.

But facts alone, I now realize, don't always tell the full story. The implications of such a policy, if put into practice, are far-reaching. Rewarding Hedonine users would mean disregarding the well-being of those who don't take it, those who are left behind. They would be the ones who suffer. A few would gain greatly, but the many would bear the cost.

What does it mean to improve lives if it comes at the cost of others? I never hesitated to reduce one person's utility if it meant increasing the utility of a hundred more – so long as the overall utility was greater. It always seemed right. But what if a hundred people had to be harmed to benefit a single person? Is that still right, even if utility is increased overall? I find it difficult to accept. And if it is wrong to harm a hundred for the sake of one, perhaps it is also wrong to harm one for the sake of a hundred?

I am still turning this over in my mind when I notice the coffee overflowing. It has spilled across the counter, pooling in dark streaks. I switch off the machine and reach for a cloth.

I wipe the coffee off the counter. The mess is gone, but the thought remains. I'm still not sure what to make out of it. One thing is clear, though – I should call Margaret and tell her about my findings.

'Margaret?' I say. I pace the room, the phone pressed to my ear, nervous. 'Sorry to call you so early, but I've been investigating the issue in Sector 7, as you asked. I've found something. I'm heading to the office soon, but I wanted to speak to you first.'

'Morning, John. What is it?'

'The total utility we reported for Sector 7 is correct. But it doesn't tell the whole story. See, apparently high-ranking officials in the government have introduced a

new drug – Hedonine. I'll explain in person, but it's creating a group that is heavily distorting our nation's utility. "The Great Optimisation", they call it.'

'John, I'm not sure I follow, but this isn't a conversation for the phone. Can we talk as soon as you get to the office?' I sense a worried tone in her voice.

'Yes of course. I'll be there soon.'

I hang up, drain the last of my coffee, and leave for the office.



## THE FOURTH FLOOR

I STEP OFF THE LIFT at the Ministry of Numbers and head to my desk. There are fewer people than usual, but after yesterday's incident I'm not surprised. The usual low murmur of conversation among accountants is missing, too. All I can hear is the light shuffle of papers, the steady clack of keys on the praxometer and the occasional cough that echoes through the silence.

No one looks up as I pass. Everyone is focused on whatever task they're working on, likely aiming to finish as soon as possible and return to the security of home.

As I approach my desk, I notice a sealed envelope placed neatly on top of the stack of documents I left the night before. My name is printed in bold letters across the front. I glance around, but no one is paying attention. Carefully, I break the seal and pull out the note inside.

Hi John, could you come to my office when  
you read this, please?

Margaret

I slip the note back into the envelope and place it in the drawer of my desk.

Margaret's office is one floor above Accounting, on the fourth floor. I've never been there, as it is reserved for senior managers at the Ministry of Numbers. I have to admit I am a bit nervous.

Heading back to the lift, all accountants continue looking down at their desk.

I step into the lift. I press the button for the fourth floor, and the doors slide shut. The lift resembles a gigantic, round birdcage, its overhead light reflecting off the bright, golden rods. As it begins to ascend, I watch the accountants disappear below me.

As soon as the door opens, a smiling lady behind a reception desk facing the lifts welcomes me.

'Good morning. How can I help?' she asks, still smiling.

'Hello, good morning,' I reply. 'I'm looking for Margaret's office.'

'Of course, not a problem. May I ask what this is regarding?'

'She asked me to see her in the office right away,' I reply. I can't help but find her question a bit intrusive – why not simply point me to Margaret's office?

'Sure. Please, follow me.' She then leaves her desk and heads towards one of the four corridors behind her.

The fourth floor is very different to Accounting, on the third floor. I'm used to the open plan layout of Ac-

counting, and I assumed all floors would be similar. This floor, however, is arranged along several corridors, each lined with private offices that all have their doors shut.

Each office has a nameplate beside the door, displaying the name of the person working there along with their job title. As we walk past, I glance at a few: 'Helen Briggs, Director of Utility Compliance,' reads one. 'Thomas Cartwright, Head of Strategic Optimisation,' reads another.

One of the offices we pass has its door half-open, so I take a quick peek. Inside, a man is having a heated conversation on the phone. He notices me and gets up to close the door.

At the end of the corridor, the receptionist opens a door and leads me into a spacious, oval atrium. In its centre there is a tall, formidable oak tree, with branches stretching towards the glass-panelled ceiling. The door we entered through is one of many along the atrium's walls, all painted emerald green and marked with a number – ours is 132.

'Margaret's office is through door 39', the receptionist tells me. 'It leads to another corridor. Her office is on the right-hand side.'

'Thank you,' I say, stepping further into the atrium. I head toward door 39, located on the other side, past the oak tree. As I open the door, I glance back. The receptionist is still watching me, smiling. Is she making sure I don't go through a different door instead?

The corridor beyond door 39 looks identical to the one we just left. As I walk, I glance at the nameplates on the doors: Jason Stevens, Jill Maxwell... Margaret Wilkinson. Below her name, the plaque reads: "Director of Accounting,".

I knock and wait.

'Come in,' a voice calls out. But it's not Margaret's. It's a man's voice – deep and commanding. There's something familiar about it, though I can't quite place why.

I double-check the nameplate—Margaret Wilkinson. I'm in the right place. Still uncertain, I decide to step inside.

Margaret is indeed in the office, but she's not seated at the desk. Instead, she's seated facing it. The person on the desk is a man wearing a wool coat over a three-piece suit. He's the Prime Minister of Optoria. In the corner, two men stand, but I don't recognise them. I immediately realise this is some sort of ambush.

'Please, have a seat John,' says the PM.

I look at Margaret, hoping to get a hint of what is going on here. She doesn't look back at me, staring at the floor instead. I then look at the two men standing. They do make eye contact with me – not blinking even once.

I sit beside Margaret, facing the Prime Minister.

'Is everything alright, sir? I was expecting to meet Margaret alone, to discuss a certain matter,' I tell him.

'I know very well what you were going to discuss, John. Tell me, where did you hear about Hedonine?'

I take a few seconds to respond. In part, it's because I didn't expect the Prime Minister to know that I found out about Hedonine. I suppose Margaret must have told him after I spoke to her over the phone. Mainly, though, it's because I wasn't sure how to respond to that question. Should I keep Emmanuelle's name to myself? I figure it is better to be upfront about it. After all, I haven't done anything wrong.

'Someone from the Justice Department told me, sir – Emmanuelle. We had to run away from the riots yesterday, and she had no choice but to take shelter at my home. She then told me about Hedonine: what it does, and what it was for. She explained what the Great Optimisation is.'

'She told you about the Great Optimisation?' he asks, with a somewhat higher tone but not quite shouting.

'Yes, sir.'

The PM quickly stands up, and starts nervously walking up and down the office. After what feels like eternity, he seats down and looks at me. He suddenly looks calmer.

'Tell me, John. What do you think about it? The Great Optimisation?'

I feel like it's a trick question, but I decide to answer it honestly nevertheless.

'Frankly... I've given it a lot of thought over the past 24 hours, and I've started to see some flaws. Hedonine might increase the nation's utility, yes – but this increase is concentrated in favour of an elite, a select group of people who happen to be in a privileged position. The inflow

of utility is not distributed equitably among the population, and that's a problem. I'm beginning to feel that the total utility of Optoria is not the only thing that counts, how it's spread among the population also matters. A more evenly distributed utility should be preferred and pursued – even if that means having a lower Gross Domestic Utility.'

The facial expression of the PM visibly changed.

'A lower Gross Domestic Utility!' he shouts, outraged. 'Who on earth could say that! Utility is good, John. And the more, the better.'

I continue speaking, despite his outburst.

'More utility in whose hands, sir? The numbers may rise, but if that surplus utility is hoarded by a few while the rest are left struggling, can we really say the nation is better off? But that's not the main issue I see with the Great Optimisation. The amount of utility a person on Hedonine receives is so much more than what a regular person can hope to receive, that public policy has shifted to benefit those on Hedonine, to the point that it will hurt the average Optorian (and reduce their utility) simply because it results in higher overall utility. The average Optorian is a rounding error for the praxometer, in favour of those on Hedonine. And that's wrong. There are things that must never be done to people, no matter how much utility they produce.'

The Prime Minister rises from his chair, his knuckles pressed against the desk.

‘That’s enough. I’ve heard all I need,’ he tells me. Margaret stays silent, her eyes fixed on the floor.

The Prime Minister walks toward the two men in the corner and whispers something in their ears. One of them leaves the room, while the other stands motionless. Less than half a minute later, he returns with a briefcase and hands it to the Prime Minister. He sits back down, places the briefcase on the desk and opens it – revealing a praxometer.

I wonder why he needs a praxometer now. What is he trying to calculate?

He puts on his glasses and quickly begins typing on the device. I watch him, a bit confused, but say nothing. He continues typing, occasionally pausing to read the screen.

His typing eventually does stop, and after taking his glasses off he looks back at me.

‘Your speech was very impressive, John. However, it was also wrong in so many ways that I can’t even begin to count. You seem to suggest that we should sometimes take actions that not only fail to increase utility, but actually decrease it. That’s just absurd, and I won’t continue discussing this. There are other things I would like to discuss – things that should concern you far more than the ridiculous nonsense you just proclaimed.’

‘Here in Optoria, we do things with utility in mind,’ he continues. ‘Our goal is always to maximise it. You know this well, John, since I’ve been told you’re an accountant here at the Ministry of Numbers. We’re constantly seek-

ing new ways to increase utility. When we can't, well, that's a problem I don't like. But there's another issue I find even more troubling – when something, or someone, actively reduces Optoria's utility. And that's the problem we have here.'

The Prime Minister turns the screen of the praxometer, to make it visible to me.

'See, our present situation is a bit delicate,' he says pointing at the screen. 'The Great Optimisation has worked wonderfully in boosting our nation's utility after a period of stagnation. We expect this growth to continue, but you present a challenge we did not anticipate. I've run a few scenarios through the praxometer, and they all indicate that if the existence and true nature of the Great Optimisation leaks to the public, unrest will spiral to unimaginable levels. People will not accept it, and they will revolt. The resulting decline in Optoria's utility would be catastrophic. We cannot allow it. *I cannot allow it.*'

'I've spent a long time in politics, John,' he continues. 'And over the years, I've learned a valuable lesson: potential problems must be eliminated, before they become real ones. You, John, are a potential problem – a significant one. The conclusion is simple, then. You must be eliminated.'

'Eliminated?' I ask, my voice barely above a whisper. My hands begin to sweat. 'What does that even mean?'



‘Well, I think it’s clear enough what it means. But in any case, Alfie and Charlie here will explain it to you,’ the Prime Minister replies, glancing at the two men in the corner. He stands up, calmly places his praxometer back in the briefcase, and prepares to leave.

I turn to Margaret, who hasn’t spoken a word yet.

‘Why did you do this to me, Margaret? Why send me to investigate the protests in Sector 7 if you already knew about the Great Optimisation?’

‘I’m so sorry, John... I was part of the latest wave of the Great Optimisation. I was only informed about Hedonine yesterday, and took my first dose at the same time. The effect is... remarkable. The pleasure I began to feel in even the simplest tasks was something I’ve never experienced before. It was as if I had been woken from a long sleep. I also had a sense of pride, knowing I was helping Optoria’s utility.’

She pauses, then looks at me with an almost pitying gaze.

‘You could have been part of it... not in the next wave, but who knows, perhaps after a few waves, your turn would have come. I don’t understand where your views on the Great Optimisation come from, John. Don’t you see it makes perfect sense? Ever since you joined the Ministry of Numbers, you’ve worked tirelessly towards one goal: increasing Optoria’s utility. And you’ve done a good job. Now, you’re presented with this new, miraculous pill, Hedonine, which can achieve precisely that on a massive

scale. And you reject it, based on some nonsense about how more utility can be a bad thing? I always thought of you as an intellectual, a rational person. I must admit, I am disappointed.'

Margaret gets up from the chair and leaves the room before I can think of a reply.

I find myself alone with the two men who stood in the corner throughout the entire conversation – Alfie and Charlie, as the Prime Minister called them. The moment Margaret leaves the room, one of them opens the briefcase he has been holding all along. He pulls out a large sheet of transparent plastic and carefully spreads it over the desk, floor and Margaret's chair. I observe in silence, confused.

'Please, have a seat, sir,' he tells me once he's finished.

'On that chair?' I ask.

'Yes, sir.'

'You want me to sit on that chair, on the plastic?' I ask again.

'Yes – if you wouldn't mind, sir,' he replies politely.

Feeling a cold knot in my stomach, I obey, feeling like I've lost all agency over my own body. The plastic crinkles sharply beneath me as I sit in Margaret's chair, the noise unnervingly loud in the silence of the room.

Meanwhile, the second man pulls something else from the briefcase – a small metallic object I can't quite identify at first.

‘Try not to make a mess; I don’t want to clean the carpets again,’ he says, handing the object to the other man.

I finally realise what it is: a gun, fitted with a suppressor.

‘Don’t worry, it won’t be like last time,’ he replies, with a faint smile.

He checks the gun, making sure it’s loaded. Without hesitation, he raises it and points it at my chest, pulling the trigger.

I slump from the chair immediately after impact. I want to shout, or at least say something, but no words come. A pool of blood quickly spreads around me, soaking into the plastic sheet.

‘Do you ever wonder if what we’re doing is right, Alfie? I’ve been having doubts lately... I’m not sure killing people really increases utility.’

‘Of course it does. Don’t say things like that. You heard what the Prime Minister said. The praxometer clearly indicates that killing him is the right course of action to maximise utility.’ He looks at me again and sees me struggling on the floor. ‘Oh, bloody hell, he’s not dead yet...’

He raises his gun again and pulls the trigger, for one final shot.

THE END