

Days of Future Past: 2040



Two decades trending in the
wrong direction

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Project Purpose

Today, in the here and now of the 2020s, we face a world rife with accelerating socioeconomic inequality, environmental degradation, misinformation, and corporate greed. It can leave individuals with a sense of helplessness and despair. It can feel as if the world is on a path to collapse.

Yet, even in the face of such dire conditions, agency emerges. Looking ahead can illuminate the choices we must make **now** to avert disaster, and it can shed light on the value of what we do have, the things worth saving. This is the first step – recognition of the path we tread and where it could conceivably lead.

It is up to all of us – from the trailblazers and activists to the reluctant and overworked masses – to demand a better world and take action towards building it. Before it is too late.

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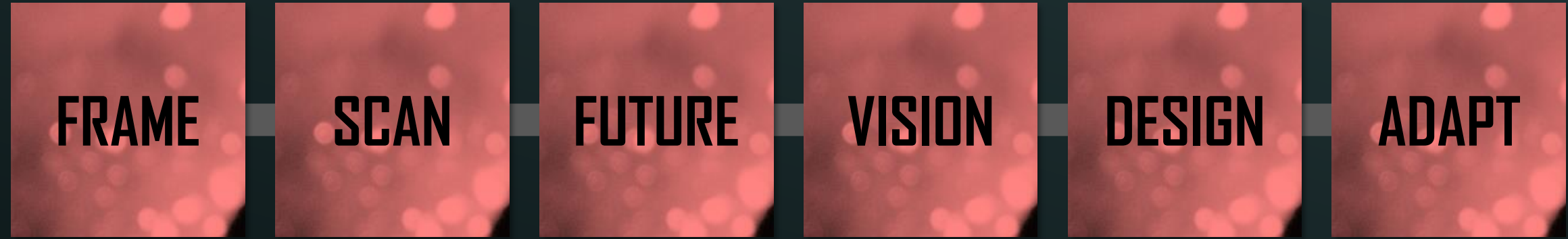
This body of work was conducted as part of coursework for the Spring 2021 World Futures graduate course at the University of Houston.

Key themes and ideas were explored and then extrapolated across a range of dimensions potentially shaping 2040. This project builds from the four archetypes method, investigating in particular a collapse scenario in which the global system experiences environmental crisis, social upheaval, and a severe decline in quality of life for a majority of stakeholders.

The overarching goal of this research is to contribute to the library of potential, impactful futures for foresight practitioners and global citizens alike. Building a world in which the reader may experience the implications of plausible, impactful change supports novel and anticipatory decision-making toward preferred futures.

Methodology

This project utilized the APF's core competency model to scope the project, search for signals of change, identify potential futures, and explore possible implications in an extensive exploration of a global collapse scenario.



Executive Summary

Days of Future Past: 2040 explores the implications of major, present-day change factors through the lens of a global, systemic collapse by the year 2040.

To craft this scenario, the research team spent 14 weeks examining global trends and issues across nine selected dimensions, before synthesizing the findings into 6 key themes. These themes were used to construct a potential future timeline and explore what life may look like for individual stakeholders living in a collapsed society in the year 2040.

Days of Future Past: 2040 is, intentionally, a multimedia experience designed to convey dense, complex, and conceptual information through a multitude of communications methods. Readers will enjoy following the text of the slides at their leisure while visual learners will pick up on cues from the rich array of accompanying images. For auditory learners, a narrated recording of the presentation can be accessed using the QR code provided. By conveying information in multiple ways, the scenario will be easier to understand and comprehend at a deeper level for a wider and more diverse audience – demonstrating how futurists must communicate using multiple media simultaneously.

VALUES

A look at how traditional, modern, post-modern, and integral values shape, and are shaped by, turbulence and inequality across political, economic, environmental, and societal dimensions.

INFORMATION TECHNOLOGY

Review of how artificial intelligence, human augmentation, Big Data and analytics, Internet-of-Things, and virtual worlds redefine human experiences and economic systems.

POLITICAL

Assessment of the global decline in democracy, economic globalization, growing nationalism, the threat of global terrorism, global hegemony with USA's decline and China's rise.

DEMOGRAPHY

Analysis of how population growth in less-developed countries, global middle-class growth, urbanization, aging, and population migration create a nexus of pressures on global systems.

BIOTECH, NANOTECH, ROBOTECH

Exploration of the rapidly evolving fields of biotechnology, gene editing, nanorobotics, personal robotics, and 3D printing and how they may be used to manipulate the world.

EDUCATION

Examination of changing patterns in learning and its impact on education, failure of industrial education models in a post-industrial society, high student debt, and alternative learning models.

ENVIRONMENT & RESOURCES

Research into the influences of climate change, earth's global carrying capacity, water scarcity, energy demand and supply, and the idea of 'enoughness'.

ECONOMICS

Extrapolation of economic trends, capitalism's dominance, growing economic inequality, the effects of automation, and the shifting balance of global-local centers of information and power.

WORK

Analysis of how human work and the job market is being impacted by globalization, AI's automation of white collar work, emerging business models, and Universal Basic Income (UBI).

Looking Back on 2040

Welcome to TEDx Amacroyota, and our “Never Again” series on history: Days of Future Past, 2040.

Today, we will look back on life in the year 2040, and review the factors that led to widespread inequality, the oligopoly of the keiretsu corporations, the rise of technology based religions, and the concept of ‘dying on time’.

**Keiretsu: A Japanese term describing a group of affiliated corporations with broad power and reach.*

**Amacroyota LG: An amalgam of Amazon, Microsoft, Toyota, LG, and hundreds of smaller corporations*



TED^x Amacroyota

Watch a recording of the “Days of Future Past: 2040” from the Never Again Lecture Series

Historic Timeline

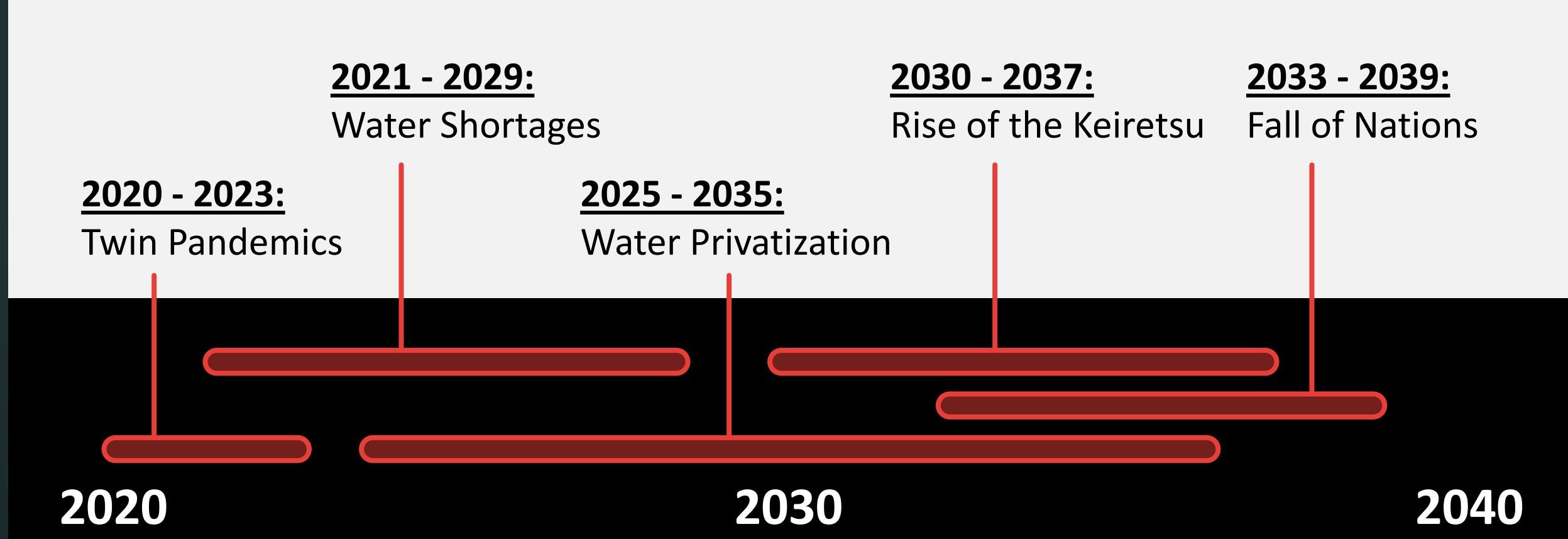
The seeds of change that created the conditions experienced in 2040 can be traced back at least 20 years to the beginning of the twin COVID-19 and COVID-21 pandemics. Repeated lockdowns shifted work and social lives from shared places to shared virtual spaces, all linked by various technologies in the home. The new corporate virtual workplaces start to emerge.

By the late 2020s, decades of climate change begin to significantly shift storm patterns and change landscapes. Extreme weather events create new deserts, raise sea levels, and even move entire freshwater supplies. Savvy corporations spot the early seeds to these changes, employing legions of climate futurists to predict where water supplies will be by the late 2030s.

In an effort to protect supplies, freshwater is privatized almost everywhere. Fleets of nanobots are released into glaciers, lakes, rivers, and streams to clean pollution, but they also form security blockades to prevent unauthorized water access.

Governments distracted by climate change and water management relax the enforcement of corporate regulations. Global consolidation of commerce results in the emergence of six megacorporations - or keiretsu - that provide everything from retail goods to health care to mobility.

The keiretsu are supranational, and no longer abide by national or international regulations. They shed workforces, leaving 95% of the population without full-time, continuous employment. They quickly create a world of commoners - who live off of precarious employment and the resources of the past, of elites - who work for the keiretsu, and a handful of invisibles who own and profit from the keiretsu.



Vignette Summary

time horizon

2040 - 2050



key question

What would it be like to live in a collapsed world in 2040?

geographic scope

The World



goal

To develop an understanding of how distinct global megatrends may interact with one another to shape daily living experiences.

The following vignettes represent the perspectives and experiences of the two extreme ends of the socioeconomic spectrum in 2040. Both offer a “typical” representation of what it was like to live in this collapsed and unequal world, and are informed by the key themes which emerged from the research.

The first vignette follows a member of the working elite through his daily routine, pulling back the curtain on the perks and pressures of life within the confines of the corporate commune.

The second vignette follows a young climate refugee as he navigates learning, leisure, and the complexities of life. Family pressures mount and loyalties are questioned, as what little he’s managed to gain is threatened.

- — What was life like in 2040?
- — How was life different for various stakeholders in the this collapsed world?
- — What pressures did stakeholders face and how did that shape their behavior?
- — What did various stakeholders value in this world system?
- — What conditions led to this outcome and which are prevalent today?

The Keiretsu Lens

This is Jared. He works hard for Amacroyota and the company rewards him handsomely for it. Each day, after a few scant hours of sleep, Jared is awoken by his alarm clock. It's Saturday and the next work shift is about to start. Only one more day until he gets to splurge and spend his hard earned money on something fun. Maybe a virtual vacation to Fiji this time... or that new haptic suit?

Jared starts off his day with a caffeine supplement. Water is a precious resource, so enjoying a cup of coffee is forgone luxury even for executives like him. The caffeine pills don't take long to kick in though. As he scans through a long list of notifications, he sees that one member of his "grunt work" team is underperforming. That's a problem.

The pills kick in. By 7:00am Jared is busy at work. His first task is to create "news-themed" media attacking rival companies. He uses a series of AIs to automate parts of the work and disseminates it to the masses via the corporate network. All wearables and augments are pinged simultaneously with the "news," making it impossible to avoid. Jared then sets about on his next mission: hyping up the latest gadget to boost sales numbers. Another day, another product.



"Uggh... Morning again.

I hate mornings, especially Saturday mornings. Sometimes I wish they would just fire me and end this misery. I'd love to sleep in just one more hour.

I wonder if life outside of the company is really as bad as they say?

Ha. Yeah right, like I'd ever give up the comfort of my penthouse."



"5 minutes.

I just want 5 minutes to enjoy my caffeine supplement before this relentless wave of alerts and assignments buries me. It never stops....

Interesting. Station 2's performance is down again. I'll have to take care of that today."



"Hmmm. Two assignments... first one is to launch an assault on Google.

Excellent.. I love disparaging the "Cult of Goog." Maybe yesterday's wildfires can be tied to the satellites they launched last week. People will eat that up and it should scare them into saving more water.

Second one is to push the latest neural interface. Easy enough, everyone loves spending their money anyways."

The Keiretsu Lens

As Jared hunches over his computer, a small household bot brings in a prepared lunch. Work may be intense, but the life has its perks. Jared spends almost no time on errands, chores, or other unpleasanties. He is either working or playing, with no in between. Distracted by lunch, Jared recalls that his AV should be returning from the shop. It was damaged in a recent terror attacks. The attacks have become relatively common as fervent ideologists become more extreme, but that rarely impacts Jared's world. The police see to that.

Later in the afternoon, Jared turns his attention to his team's efficiency metrics. Meeting with his underperforming team member, Jared informs the "grunt" that his employment is terminated and his work visa cancelled. It's a very matter-of-fact process. People like Jared care very little for the grunt workers, and terminations are common when jobs are in such short supply. The corporation demands flawlessly efficient work in exchange for the perks of living within the corporate city, and there's a long list of climate refugees that are eager to get in and prove themselves.

But even Jared isn't a perfect employee. Well into his 70s, the long-hours have taken their toll and it's getting harder to stay focused. Burn-out and downtime aren't acceptable though, so Amacroyota has sponsored the development of a number of biological and genetic enhancements. The company provides solutions for increasing energy, improving focus, and enhancing the immune system.... So long as you keep your numbers up, you can live forever.



"The bot made lunch already? Morning sure went by fast.

If it's already noon, my Lambo should be driving itself back from the shop anytime.

I still can't believe that attack in midtown hit my car. At least the automated surveillance system got a fix on the terrorists.

Idiots. Bombing the companies won't put food on their tables."



"Hey... uhh.. Don? Thanks for jumping on this call. Looks like your efficiency ratings are down again.

I can't have anyone on my team performing below 95% so I'm going to revoke your work visa.

Thanks for everything. The HR AI will walk you through the exit process.

Goodbye."



"Oh God. Did I just doze off?

Oh no, oh no, oh no. Did the bot detect it?

It's only 10pm. I can't let James get ahead of me on this program. He's already on my heels.

Maybe it really is time I consider the "sleepless" gene hack. Jess got it last year I think and her numbers have gone up.

Just a few more hours tonight."

The Commoner Lens

Charlie is an 11 year old climate refugee whose family was taken into the Amacroyota workers' slums. He wakes up, immersed in a corporate world of tidy echo chambers curated and controlled by Amacroyota.

Charlie is one of the lucky ones – he gets to go to school. But Charlie isn't there to learn so much as to become productive. He frequently experiences migraines from the sheer amount of information he's expected to learn. Traditional education and coursework has been completely replaced by corporate training (ie world history class has been replaced by Amacroyota systems repair). Learning is hypercompetitive, as space is limited, and Amacroyota keeps students incentivized by tying learning outcomes to food rations. Dependence on augmentation has intensified to meet progress expectations and fully immerse students in the work.

If Charlie's luck holds out, he'll win a job after his "education" is complete. His father just entered him into a lottery in hopes for a future position with Amacroyota, and that's the most he can do to get a leg up.

Daily news consumption is encouraged with reinforcing systems in place. When Charlie misses a newscast, he starts feeling sick. Corporate propaganda against competitors, as well as consumption, is pushed aggressively onto commoners. Charlie with little access to other perspectives and the news fresh on his mind, hardens his perspective against Google and keeps the Amacroyota neural interface in the back of his mind, blaming terrorists instead of verifying the news.



"I wake up with a view of an Amacroyota refugee slum-city from our single unit, instead of the flooded compound we used to live in.

My parents tell me to be grateful – that Amacroyota gives us everything we have."

Alexa Alert - The Time is now 7am, join AMCYTA VR World, now.

Time for school.



"My brain hurts. Amacroyota systems repair is more complicated than I thought. Dad's working to get me a brain-aug, so I can qualify for a job with them. Maybe I'll be good enough one day.

I need to hit my learning outcomes or I'll won't get lunch.

I just need to get that brain-aug to get through this torture."



Lunchtime.

"Time for my daily news scroll. I missed yesterday's scroll and started feeling sick."

Cult of Goog satellites implicated in national record-setting wildfire.

Terrorists have hacked Amacroyota security - why you need a neural interface to stay safe.

"Google is the worst company. Looks like I need an Amacroyota neural interface now. Damn terrorists."

The Commoner Lens

Charlie's reprieve takes the form of ad-watching, games, and product testing. Nanobots provide a rollercoaster rush of sensation with each ad he watches, luring him deeper into the virtual world. Time credits (for living) are awarded based on consumption and are frequently transferred to family members whose "die-on-time" deadlines are coming due. To win the most time, the have-nots learn how to maximize what Amacroyota wants most - their attention.

Charlie is an avid church-goer and here, as in all aspects of his life, the corporation looms large. Led from the inner circles of Amacroyota, history and morality are being rewritten in corporate sponsored religious circles. The elite have become the chosen caretakers and saviors who "shoulder the burden of immortality" such that the commoners may go to heaven. Donations of time credits are eagerly welcomed and passed to the elite.

Charlie ends the day with his weekly family meeting. His father, fired by the faceless elite, is forced out of his job and out of the refugee slum. Angry, his father decides to join the "terrorists" and tries to bring his family along in the fight for freedom. Alexa intervenes, offering sanctuary to Charlie while simultaneously alerting the police. The church is now Charlie's first home, with his father never to be seen again - credits expired.



"My favorite time of the day. All I need to do is watch ads, play games, and test products."

I love the energy boost watching ads gives me, it's like a rollercoaster.

My parents are teaching me how to consume multiple ads at once. With enough practice, I can double my credits.

Dad finally pat me on the back when he transferred my time credits to his account."



"Church. My second home. Today we're going over the creation story of Amacroyota."

Immortals are the chosen servants of God who care for earth so that we may pass on and go to heaven.

Do not burden yourself with the trials in this world. Please insert your time donation.

"I'll gladly donate a day of my life so that I can go to heaven."



"Dad lost his job and we're being forced out of the slums. Dad says we need to join the resistance, to fight back."

Alexa Alert - The Church offers you salvation through Sanctuary. Accept or Decline?

"Well...The church is my eternal family."

Accept.

The police burst through the door and take Dad away.

Key Themes

Our scenario identifies 6 major themes that contribute to collapse which include climate change's cascading effects, inequality, misinformation, the emergence of corporate states, inequities around aging and dying, and a significant shift in values among large swaths of the population

Climate Change - Cascading effects disrupts economic and political systems; Scramble for resources and mass migrations

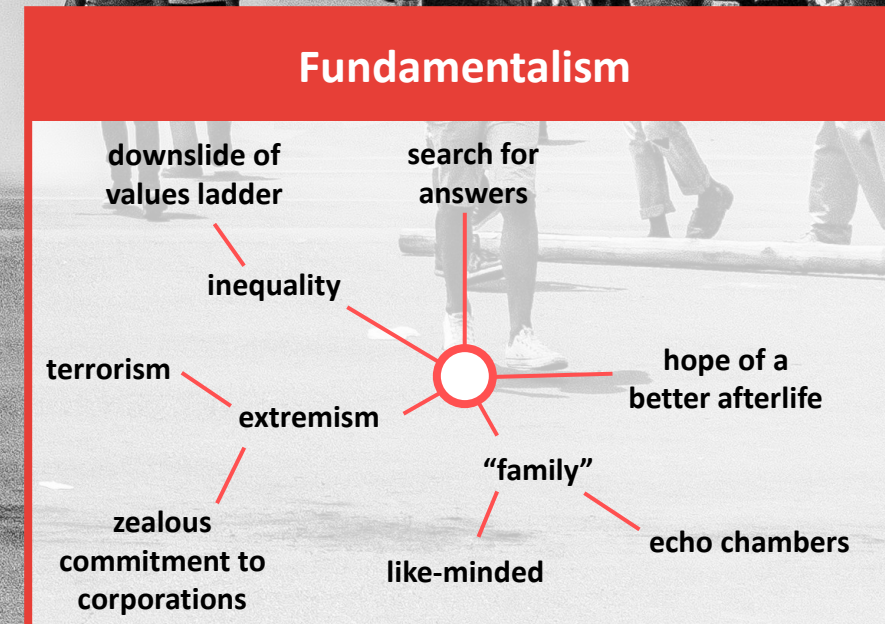
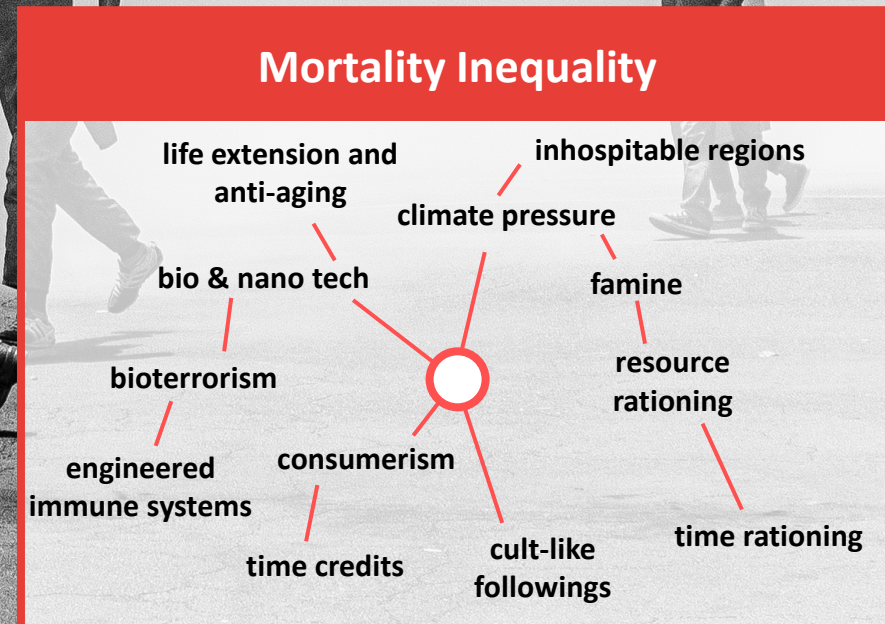
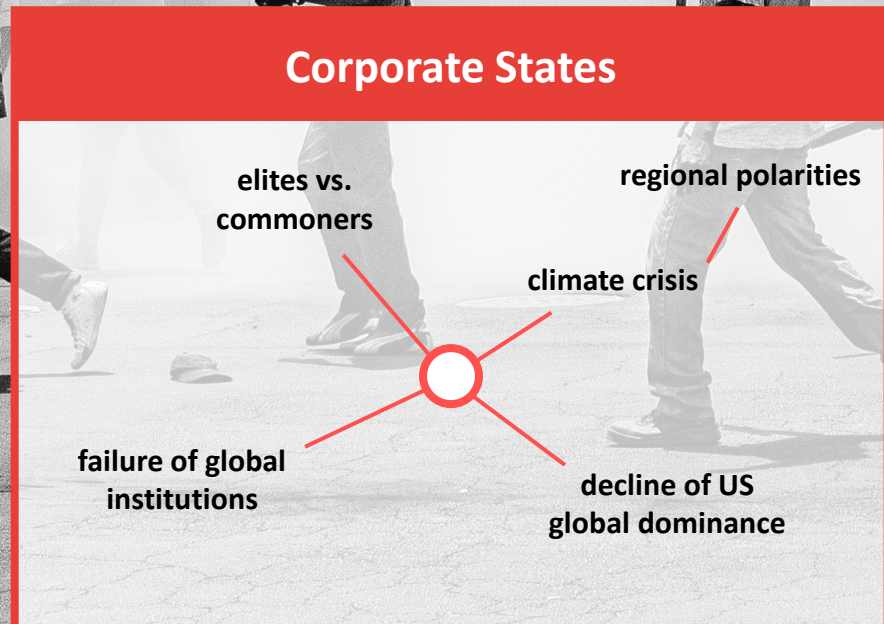
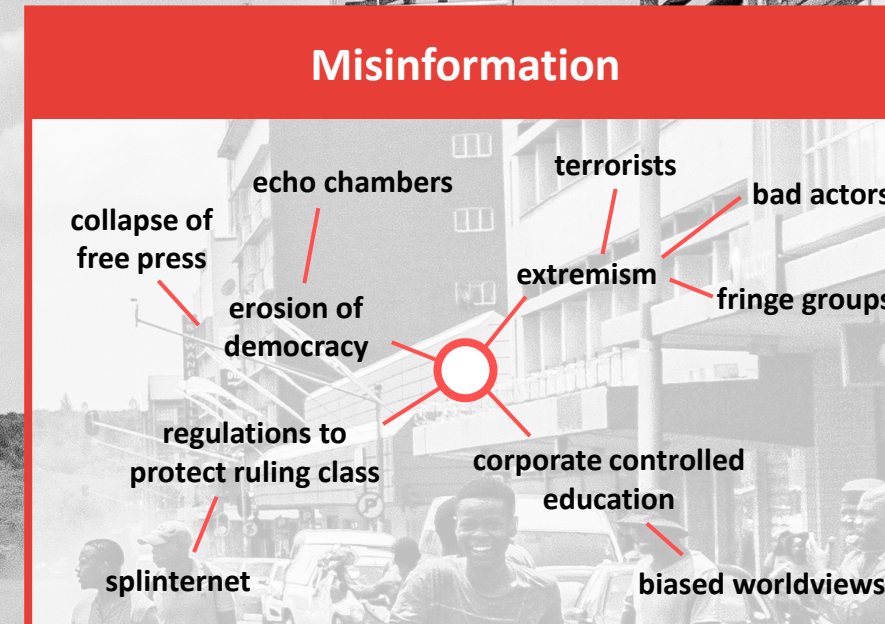
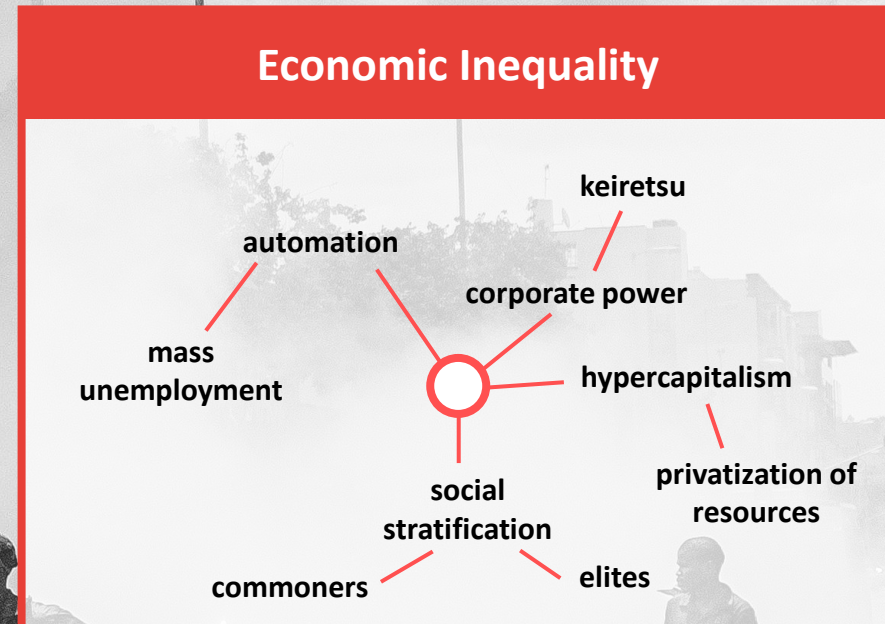
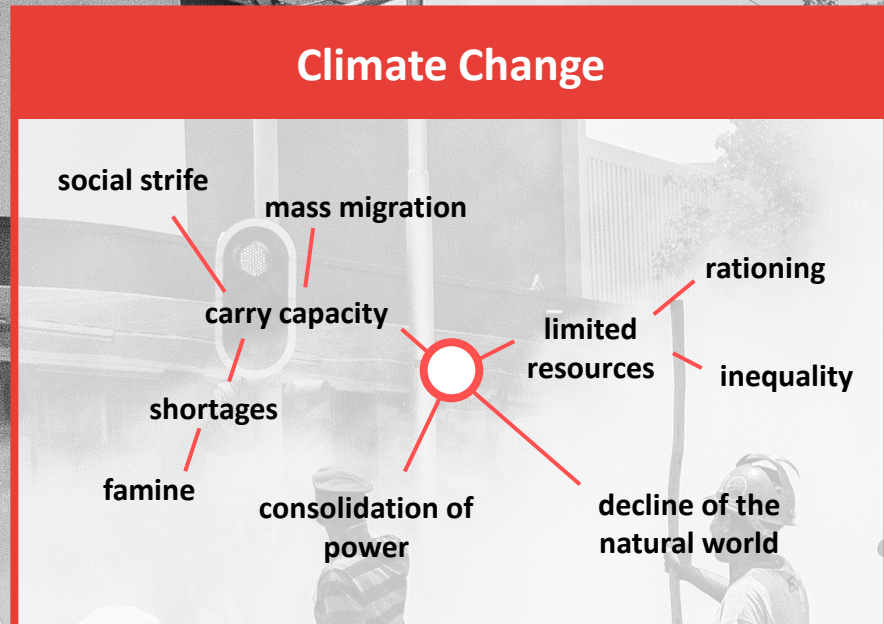
Economic Inequality - Society splinters into Elites and Commoners

Misinformation / Propaganda - Shaping beliefs and values to control the Commoners

Corporate States / Factory Towns - Emergence of corporate states as dominant governance structure

Mortality Inequality - Elites benefit from biotech advances while Commoners age and die as in the past

Fundamentalism - Ideological extremism and polarization of values



Climate Change

The main driver of collapse under our scenario is climate change and the associated cascading effects. Entire regions become inhospitable to human life as some regions succumb to aridification and desertification, while others become submerged under rising sea-levels. Weather patterns become unpredictable and extreme, leading to devastating food shortages and famine. Mass migrations of people lead to further tensions and social upheaval in areas that remain hospitable to human life.

Nation states become ineffectual as they fail to adapt to the devastating, climate change-driven disruptions in human society and traditional borders are rendered increasingly meaningless. Significant social conflict eventually results in a fracturing of society into two groups—the elites who maintain power through their control of vital resources and the commoners who must pledge fealty to a corporate state to survive.

The environment reaches carrying capacity, leading to social strife.



Growing conflict over resources, especially potable water.



A weakening of traditional nation states and borders.



Economic Inequality

The Elites - those with wealth and power - are able to secure and maintain control over invaluable resources, like food and potable water. Multinational corporations are particularly well-positioned to capitalize on the scramble for resources, which further cements their status supplanting traditional nation-states. Commoners increasingly identify with and look to corporations to solve global challenges as traditional nation-states are dramatically weakened due to immense internal and external pressures. Commoners are socialized and educated to adopt the corporate values as their own. Elites increasingly rely on technology and weaponized information to maintain order and control over the commoners. Surveillance is extremely prevalent and is used to intimidate and ensure that the commoners toe the company line and remain compliant.

Commoners struggle to survive, living a near-subsistence lifestyle.



Elites have access to critical resources, through the keiretsu.



The keiretsu are owned by a select few “invisibles” who lead lavish lives.



Misinformation

Controlling the commoners becomes increasingly important as the supply of critical resources continues to decrease from reduced agricultural and economic output. As corporate states become more all-encompassing and take on an increasing role in everyday life, they are able to influence and mold the perceptions and beliefs of the commoners. Corporate states censor and suppress any and all information that goes against their carefully curated reality. Corporate states also utilize misinformation and propaganda to bolster support for aggressive geopolitical actions taken against other corporate states to acquire their critical resources. Total control of media allows them to manufacture consent for objectives that wholly align with their interests.

Control of the commoners through manufactured consent & curated worldviews.



Citizens have a hard time distinguishing fantasy from reality.



Powerful keiretsu establish rules and present information that favors them.



Corporate States

With fewer support services provided by weakened government, the most powerful corporations - and their keiretsu - have increased their role in the public and private lives of their employees. Corporate towns have emerged – mini cities built and funded by corporations – offering everything from grocery stores to hair salons, restaurants, private schools, and doctor's offices. Companies no longer just compete on salary for the most talented – but a full lifestyle package.

Meanwhile, many democratic states have devolved into police states – to varying degrees – slowly chipping away at the rights of individuals and increasing Big Brother controls. Citizens have come to accept this move away from democracy - convinced it's the only way - with the decline of the press, the growth of misinformation, and growing conflict internally and externally.

Corporation towns compete for talent, but only at the highest levels.



Democracies erode into police states with ubiquitous surveillance.



Faith in national governments weakens as they fail to resolve issues.



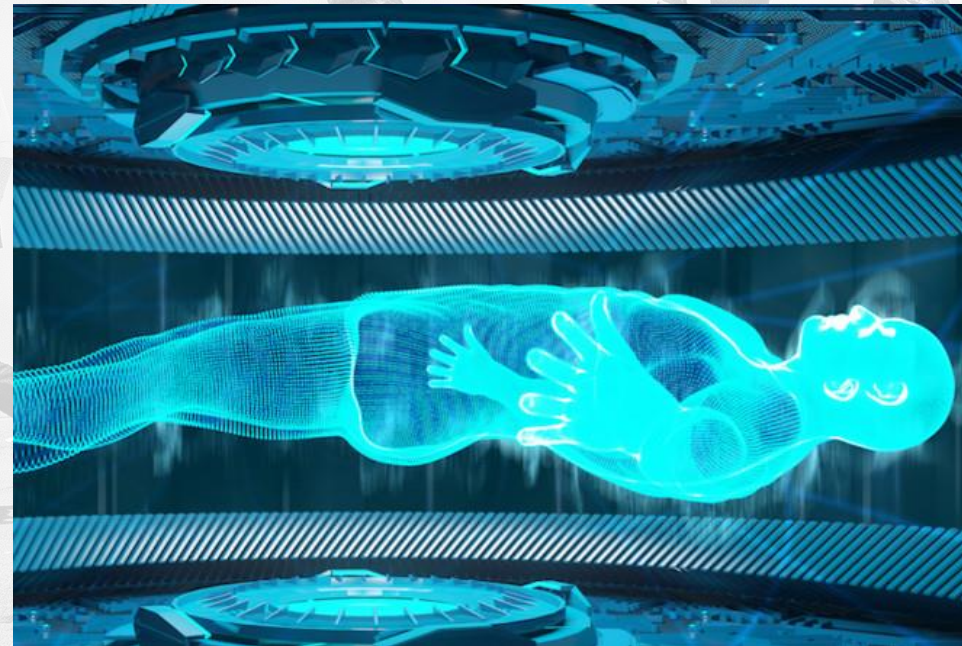
Mortality Inequality

Innovations in biotechnology are pushing the upper limits of aging. Gene therapy, the replacement of aging body parts, and body enhancements are emphasizing the long in longevity. The average lifespan has increased to over 100 – well, at least for society's elite. Furthermore, the wealthiest don't just wear Prada anymore – they are Prada in the way they look – paying the top fashion brands to style their bodies to match their clothes.

The decline of liberal democracy and the social state makes living expensive. People save what they can for old age but skyrocketing living costs make it difficult. Illness from a rampant pandemic or an extreme weather event can wipe out meager savings in an instant.

Without social assistance aging beyond your means can be a problem. It becomes a cultural norm to encourage those with nothing to 'die on time'.

Individuals must subscribe to life-long use of an engineered immune system.



The wealthy host patented, copyrighted, and externally owned tech in their bodies.



Live forever or die on time? It all depends on how wealthy you are.



Fundamentalism

Growing inequality, conflicts, extreme weather, and misinformation drive a shift back towards more traditional values and a spike in religious fundamentalism. This includes a growth in offshoots of Christian and Muslim fundamentalism as well as the emergence of new fundamentalist values. Antifa, for instance, itself takes on religious dimensions. At the same time, new cults grow in strength, especially among the elite, while the Church of Scientology becomes a mainstream religion. They are centered around humans taking on godlike aspects and the worship of human-made eternal life. This is in contrast to the old religions, which grow strongest among the non-elites and who embrace eternal life after earthly death. Others begin to worship AI gods who also live eternally within the body of the Internet. The Church of AI – once a novel idea in 2021 – has a strong following among computer and data science communities. They too seek eternal life but within the confines of the bits and bytes of computers. They believe their computer-coded AI gods are the final solution to global conflicts, climate change, and inequality.

A world of extremes leads to fundamentalist values.



And to a resurgence in both old religions and new alike.



The virtual world becomes an extension of the physical.

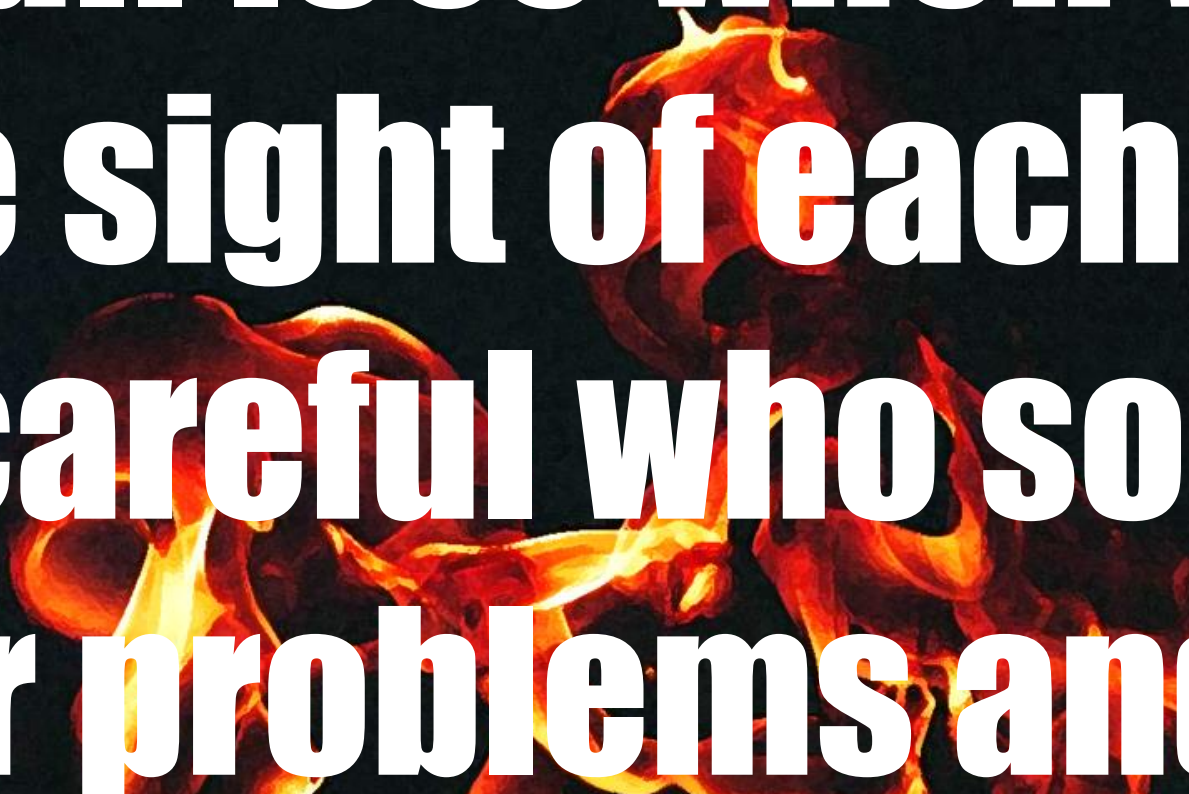


Implications

With the disintegration of collective global action and governments being overshadowed or replaced by corporation led societies, we see a future with no possibility, a loss of hope, a loss of aspiration, and agency amongst the middle and lower classes. The world reaches such levels of extreme partisanship it becomes natural to view everything binarily. Society and communication dissolve until there is a total loss of compromise and middle ground. No hope leads to no resistance, no innovation, and no disruptions to the status quo.

We are too late too impact many decisions, and a future we once could have created has long passed us by, but we are not tied to the fate of collapse just yet. We need to be cautious in how we allow corporations to solve our problems, they don't have the same checks and balances as government, so without careful regulation and active intervention, they could escape our control and influence forever.

Technology can evolve exponentially faster than we can, if we don't switch our priorities to focus on the social and cognitive progress of our species over the economic and technological progress of our devices we will lose our ties to each other and our humanity. It will become increasingly easier to "other" people as we interact more in a virtual world than the real one and become tied to corporate states that shape our media, education, and culture.



**We all lose when we
lose sight of each other.
Be careful who solves
your problems and how.**

Conclusion

This concludes our look back on the Days of Future Past: 2040 – an attention-grabbing approach of telling a story of the future from the perspective of the future far beyond it. For foresight practitioners, this presents an option for illustrating a collapse scenario without leaving readers feeling down and in despair at the end of the narrative, but instead optimistic that collapse is temporary and surmountable. Reflections on a collapse scenario, such as this, can provide a stark warning paired with the aspiration of potential future lessons learned.

Days of Future Past: 2040, also ties in an ethical consideration for futurists: Will our work lead to negative outcomes for wide swaths of the population? In this scenario, a new subdiscipline of “climate futurists” researched the future of water supply which led to speculative land purchases and the privatization of freshwater – sowing the seeds of economic and political collapse. How can a futurist also consider all the ways in which their research can be applied, and how can they safeguard against nefarious uses? Do futurists bear responsibility for how their work is (mis)used?

As we face systems with ever-increasing levels of complexity, a greater duty is placed on all of us to act thoughtfully and with clear intention.

