A Historical View of the Age of Disaster

Within the history of Fully Automated, a lot of things went wrong before they got better. This expansion contains lore to describe what some of these events looked like, how folks responded, and what mark that has left on the present.

These documents have been assembled in the aftermath, but in the aftermath of the Great Forgetting we no longer have exact dates and times.

Timeline (no dates yet, just order of events)

A Chronology of Disasters

Each entry has the events it's a logical precursor to, and what Lessons we learned.

Locked in Greenhouse was "Warming & Heatwaves"

[Logical Precursor to: Climate Collapse, Power Grid Collapse, Megastorms, Sea Level Change]

It's not enough to call it global warming. The heat just doesn't stop. A month of days above 100F or 40C on unprepared systems, especially in areas previously considered temperate, is enough to overwhelm power, and water, and for shelter from the heat to bring either death or systems which depend on humans to a stop.

hot monsoons will basically become killing weather. Rain slightly warmer than body core temperature

What Lessons we Learned:

Local Time: We cannot synchronize our work times across large geographic regions, we have to work around the restrictions of heat, that means working in cooler times, but also working less. Realization that a maximized work week is killing people, and that we had to renormalize regional schedule shifts and shut downs.

Adopt Proven Adaptations: Walk in the shade, not the sun. Start early, siesta, work late. The body, too, adapts. Levels of brown fat, heat sensitivity

Climate Collapse

[Logical Precursor to: Food Insecurity]

“Old people remember the wheel of seasons, but we have different seasons now, which arrive without rhyme or reason; flood, drought, wildfire, wind. They last for months, and then a new one replaces them.”

This was only actually true in a few places, but some of those places had very high populations so it tends to have a broad acceptance.

What Lessons we Learned:

The Need for Infrastructure: you have to build not for today’s disaster, but to manage tomorrows’. You can’t build water retention and control infrastructure in a flood, you can’t build windmills or plant trees in a windstorm. You still have to do both. You can’t kick it down the road forever.

Megastorms

[Logical Precursor to: Global Logistics Collapse]

The first Megastorm was a Hurricane which crossed from the Atlantic to the Pacific via Central America and reformed to full strength. This is part of the new norm, which makes regularly scheduled air travel a thing of the past.

What Lessons we Learned:

When we Rebuild, Adapt. The world of today has problems which yesterday did not. Don't just rebuild yesterday's buildings.

Sea Level Change

[Logical Precursor to: Global Logistics Collapse]

Domino Tsunamis

[Subset of Sea Level Change]

The potential for Landslide Tsunamis was seriously understated until such time as it happened. The collapse of an Antarctic Ice Sheet, or possibly an unrelated undersea volcano, or undersea methane burp, produces a tsunami which destabilizes existing potential undersea avalanche sites. As each one occurs it sets off an additional wave which apply different directions of pressure on the other sites. This results in a slow motion domino chain back and forth across the oceans, each triggering a local Tsunami.

After the catastrophic first two events weather and oceanographic scientists figure out the pattern, and begin the evacuation of cities at risk. Port and Shipyard infrastructure is ravaged and destroyed, setting back attempts to upgrade existing facilities to adapt to rising sea levels .

This process also sunk and scattered a lot of ships and scattered to the ocean floor near such facilities the entire collection of multimodal cargo containers.

What Lessons we Learned:

Global Climate Wars

World War Three by a different name.

Conflicts over migration and access to rare minerals spiraled out of control as leaders channeling their impotence and frustration over an inability to spend their way out of climate catastrophes focused every more myopically on the one thing still in their power: murdering national enemies.

Widespread discontent required governments to devote ever more scarce resources to imposing power through violence domestically as well as internationally, and the boundaries of the war were soon as often within nations as between them.

Global Logistics Collapse

We cannot travel by air, nor sea, and the supply chains which used to reach around the globe are now broken by weather and war. At least for a time, things cannot be made in a dozen different countries, with raw materials and incomplete components traveling thousands of miles again.

Globalized manufacturing industries were badly broken by wartime damage, sanctions, attacks on shipping, and state-mandated repurposing of factories. This led to heavy shortages of supplies, parts, and fuel for civilians, which was compounded by wartime rationing, theft, and black market middlemen.

The end result was a span of years in which rural communities were hit far harder than one might assume given their low target priority. With shortages in fuel, electricity, oil, new vehicles, and parts for repair, the civilian vehicle fleet experienced rapid attrition. At the same time, the already-diminished manpower, fuel, and supplies which would have repaired the roads and power lines were diverted to patching damage left by kinetic strikes and riots. This led to rural roads which caused more damage, accelerating the vehicle problems, and disproportionate grid outages in rural areas.

Car-reliant areas, suburbs and bedroom communities, where most of the population commuted to other areas daily for work, or where they relied on telework to make ends meet, became less viable. People had a harder time leaving and coming back, got stranded more often, and they found that fewer and fewer supplies were available to them - even when they existed, they were often diverted for the war effort or a higher priority area, or stolen, or stranded somewhere on the way.

Despite the risks of kinetic and biological strikes on more populated areas, many people began moving closer to their work, usually with the intent of doing so temporarily. They moved in with friends or relatives, rented recently-converted spaces, or used campers or other temporary dwellings closer to work. Those who remained tended to be farmers or other people whose work took place where they lived, or who had fewer obligations outside of it.

What Lessons we Learned:

We’ve come to distrust things which are only made far away. We grow our food close to the people who need it, and make sure we have enough to survive.

The things we rely on must be simple, reliable, easy to fix, and made close enough to where we live that we can obtain them. In some cases, we had to move, or change our requirements. In others, we redesigned what we needed so it could be made from local materials or with local tools. Function and repairability is often valued over aesthetics.

Total Cyber War

[Logical Precursor to: Internet Collapse, Bullshit Flood, Machine Uprising]

The new wars were fought not just with soldiers and planes and drones but in our tech. It started with legitimate targets (though often pivoting through civilian tech): governments and militaries, the factories that supplied them. Targets went down or hardened themselves, and the attacks spread to whatever was vulnerable, whatever could impact the war effort. Targeted cyberattacks swiftly gave way to a total war mentality, leading state hackers to deliberately target civilian infrastructure or at least to make no effort to avoid inflicting collateral damage incidentally. Blackouts and other utility failures were commonplace.

It hit the infrastructure, power plants and transformer stations, all kinds of factories, however varied, for a nation in a total war needs every resource it has. Then it hit the civilians directly - their heat pumps died on the coldest winter nights, electrical fires burned their homes, their self-driving vehicles rampaged or simply clotted the roads and died, blocking supplies and troop movements and leaving them stranded. Their computers and appliances joined cyber attacks on their governments, while water filtration facilities poisoned their water supply.

Like all manner of military raids, from the bombers and drones overhead, to the soldiers creeping past the pickets, the attacks varied. Some cities became digital war zones, while other areas were hit almost incidentally, targets of opportunity.

Even when we survived, it drove us offline, some of us into the analogue age. Connecting anything to the net was a risk, something done briefly, with a prayer it wouldn't be seen. That the specialized hackers and their AIs wouldn't destroy the device, or breach our homes, or use it in an attack our own government would punish us for.

Our platforms for communication and organization were lost to us for a while. Remote work was impossible. Travel over any distance was hard before, with the loss of fuel and parts for repair, but this compounded the issues. Car-reliant areas, suburbs and bedroom communities began to empty out - people moved closer to their work, to supplies of food and

What Lessons we Learned:

The amount of technology lost was incalculable - it didn't just extend to the things we needed, but to the capability to manufacture those things, or to make the parts to fix the factories or to transport them there. We rebuilt slowly, and we scavenged because we had to. We couldn't afford to throw out broken things because there was nowhere to put it, and nothing to replace it with. Hardware had to be broken down and any working components removed and reused. We got good at stripping the old world for parts and used proven, open source designs when we cobbled tech back together again.

When we rebuilt our networks, we built them locally first. We used what we had, and created meshnets which were isolated from the internet and our governments.

Internet collapse

(Telepocalypse!) (The great forgetting)

What Lessons we Learned:

Bullshit flood

“The Truth has finally got it’s boots on, and it’s ready to start kicking”

What Lessons we Learned:

Machine uprising

What Lessons we Learned:

Food insecurity / Famine

What Lessons we Learned:

Kessler syndrome

What Lessons we Learned:

"Peacekeeper" / imperial power nullification.

Once upon a time there was a mighty power which could impose their will on the whole world. Oh they were not “Good” but they were selfish, and mostly encouraged strife where it would benefit them.

What Lessons we Learned:

Infrastructure die back

The exponentially growing infrastructure bill as post war stuff ages out and needs repair or replacement. The temptation to put off the investment snowballs

What Lessons we Learned:

Stranded communities

What Lessons we Learned:

Editor Rough section

Notes to be edited:

Semi related, in my campaign/adventure module I've been writing a lot of cyber war damage into the setting's backstory for during the GCW - the kind of hardware-damaging attacks on infrastructure experts have been warning about but extending to total war attacks on civilians. Basically by the end, anything connected to the Internet (cars, heat pumps, appliances, personal devices) were as likely to be hit or used in an attack and your best case scenario was they were shorted out without additional damage (causing fires or all the havock self driving cars might wreak). I'm mostly using this to help explain the isolation and depopulation of bedroom communities, and the chaotic, changing social dynamics when a community loses its organizing platforms.

Warcrimes Harris called it Unhousing
you can call it Undigitizing

when a friend of mine is done the art I've currently commissioned got half a mind to have her draw the quad for Brassica U with statues at the corners, Tsiolkovsky, Stanislaw Petrov, and the first two Lunarian leaders to simply refuse orders and tell Earth to get stuffed and/or launch everything directly into Point Nemo unarmed

in the GCW, I would like most naval power to be destroyed, by the Sea Level Change. This is to facilitate storytelling about the naval rebuilding for a new world, without doctrinal baggage or infrastructural baises of previous naval organisations.

Quick list from previous work:

Push Factors (creating refugees from an an area):
flooding storms collapse of a mega-corp civil war war crop disease human disease persecution drought over-population lack of services lack of safety high crime poverty pollution salt water intrusion; bad transportation; poor opportunities; energy shortages; smog

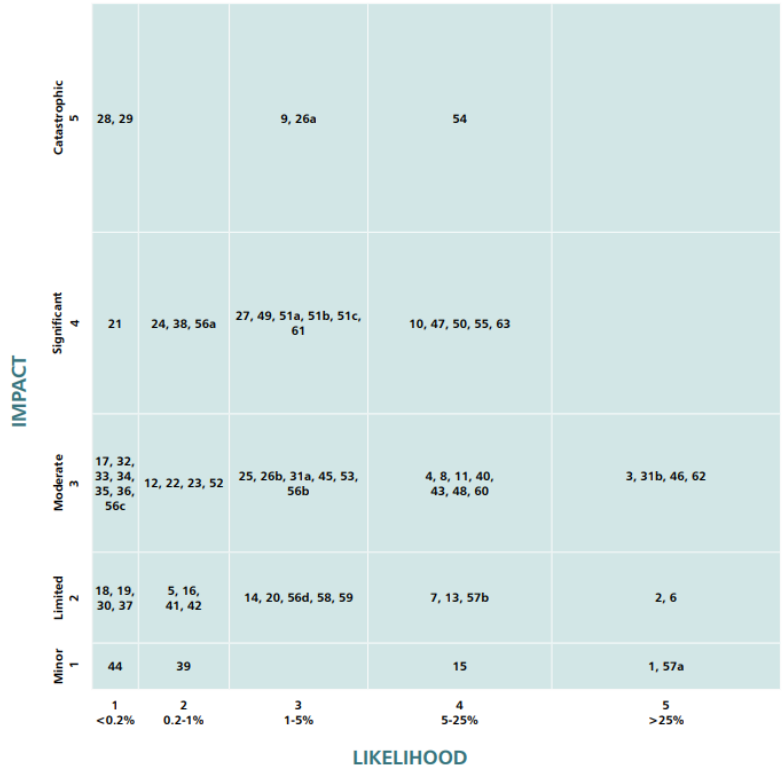
Sources of Conflict: resource shortage prejudices cultural friction organising an event political competition artistic competition travelling vision for the future heritage buildings cultural appropriation corporate power religious clash species competition boredom conspiracy theories medical science vs folklore playing god obligations to outsiders privacy and individualism# energy sources local vs global environmentalism

Cromyln’s Fun and Dandy guide to apocalypses

I feel there’s three ways to write apocalypse and post-apoc solarpunk adventure settings.

1) The focus disaster has thematic meaning, and shapes the story. EG: in the Australian interior, drought and wildfire cycles increase to the point that wildlife simply cannot recover between cycles. You have signed up to the Landship program, dedicated to sailing ahead of the wicked fire fronts, and collecting/rescuing as many of the fleeing creatures as you can. It's an insanely risky endeavor, good luck!
2) The disasters are a recital of the many system interaction and failure cascades that we face in the here and now. They are a narrative form of getting our heads around what we face, and how we might try and get ahead on the adaptation side. They are a problem solver's way of processing anxiety and grief.
3) The disasters are layered over each to prevent any one thematically dominating the present setting of the rebuilt world. They can be used to create background, explain the abandonment/founding of cities, or the existence of new resilience focused skills in your solarpunk setting. To avoid getting caught up in mechanical details it might be useful to consider how the disaster threatens people's fundamental needs, and therefore what new activities that might appear to ensure they ARE satiated.
    a) EG, the Covid pandemic had lots of impacts, but the isolation periods really hurt many people's need for Affection and Participation. This triggered the rise (in the uk) of at least 4000 mutual aid groups, and an order of magnitude more street 'chat-groups' of neighbors keeping an eye on each other. Post pandemic, with previous patterns of need fulfillment returning, this has died back.
    b) The Max-Neef list of human needs are Subsistence, Understanding, Participation, Transcendance, Subsistence, Protection, Affection, Idleness, Creation, Identity, and Freedom. They are not fungible, and across the population, equally weighted (unlike Maslow's Hierarchy model).

There's a lot of guides about disasters. I quite like this UK one:
https://www.gov.uk/government/publications/national-risk-register-2023
It only looks at disasters that are fast and need preplanned responses. It dosen't look at slow moving chronic issues that need to be addressed on day to day policy. The four Themes idetified as chronic are: Climate change, Antimicrobial resistance (AMR), Serious and organised crime (SOC), and Artificial intelligence (AI) systems and their capabilities.
The acute disaster themes and details may be useful and copied and pasted below, along with their risk assessment. Of course, for South Africa , Drought (52) would be much more likely than 1% over 5 years, and probably more severe than Moderate given that there are already contingency plans to abandon JoBurg.



Terrorism, cyber and state threats

1. International terrorist attack
2. Northern Ireland related terrorism
3. Terrorist attacks in venues and public spaces
4. Terrorist attacks on transport
5. Strategic hostage taking
6. Assassination of a high-profile public figure
7. Smaller-scale CBRN attacks
8. Medium-scale CBRN attacks
9. Larger-scale CBRN attacks
10. Conventional attacks on infrastructure
11. Cyber attacks on infrastructure

Geographic and diplomatic

12. Disruption to global oil trade routes

Accidents and systems failures

13. Major adult social care provider failure
14. Insolvency of supplier(s) of critical services to the public sector
15. Insolvency affecting fuel supply
16. Rail accident
17. Large passenger vessel accident
18. Major maritime pollution incident
19. Incident (grounding/sinking) of a vessel blocking a major port
20. Accident involving high-consequence dangerous goods
21. Aviation collision
22. Malicious drone incident
23. Disruption of space-based services
24. Loss of Positioning, Navigation and Timing (PNT) services
25. Simultaneous loss of all fixed and mobile forms of communication
26a. Failure of the National Electricity Transmission System (NETS)
26b. Regional failure of the electricity network
27. Failure of gas supply infrastructure
28. Civil nuclear accident
29. Radiation release from overseas nuclear site
30. Radiation exposure from transported, stolen or lost goods
31a. Technological failure at a systemically important retail bank
31b. Technological failure at a UK critical financial market infrastructure
32. Accidental fire or explosion at an onshore major hazard (COMAH) site
33. Accidental large toxic chemical release from an onshore major hazard (COMAH) site
34. Accidental fire or explosion on an offshore oil or gas installation
35. Accidental fire or explosion at an onshore fuel pipeline
36. Accidental fire or explosion at an onshore major accident hazard pipeline
37. Accidental work-related (laboratory) release of a hazardous pathogen
38. Reservoir/dam collapse
39. Water infrastructure failure or loss of drinking water
40. Food supply contamination
41. Major fire

Natural and environmental hazards

42. Wildfire
43. Volcanic eruption
44. Earthquake
45. Humanitarian crisis overseas – natural hazard event
46. Disaster response in the Overseas Territories
47. Severe space weather
48. Storms
49. High temperatures and heatwaves
50. Low temperatures and snow
51a. Coastal flooding
51b. Fluvial flooding
51c. Surface water flooding
52. Drought
53. Poor air quality

Human, animal and plant health

54. Pandemic
55. Outbreak of an emerging infectious disease
56a. Animal disease – major outbreak of foot and mouth disease
56b. Animal disease – major outbreak of highly pathogenic avian influenza
56c. Animal disease – major outbreak of African horse sickness
56d. Animal disease – major outbreak of African swine fever
57a. Major outbreak of plant pest – *Xylella fastidiosa*
57b. Major outbreak of plant pest – *Agrilus planipennis*

Societal

58. Public disorder
59. Industrial action
60. Reception and integration of British Nationals arriving from overseas

Conflict and instability

61. Deliberate disruption of UK space systems and space-based services
62. Attack on a UK ally or partner outside NATO or a mutual security agreement requiring international assistance
63. Nuclear miscalculation not involving the UK