METROPOLIS

The Apocalypse

We never changed course and just went crashing head-on into the climate catastrophy. By mid-century the effects began to show off with millions of climate refugees, un-drinkable water as the oceans flooded the groundwaters and heatwaves that killed tens of thousands every year.

All over the planet wars broke out over the remaining few resources. Walls were erected to fend off the hordes of refugnics that would otherwise have put unbearable strains on the remaining functional societies.

In the 2070ies, large cities that had previously been thought of as stable began to crumble under the weight of their hungry pops. In the -80ies, several of the megacities in China collapsed, causing their entire populace to flee to the nearby cities, which in turn also collapsed. The domino bricks began to fall over each other and the world leaders panicked.

The Last War was woven out of the myrriad of small-er wars that was already raging. The first nukes were exchanged by India and China on the 23rd of december 2084. Within a couple of days, it had escalated into a full nuclear war.

Several large mega-cities were nuked, throwing soot and ashes from the nuclear firestorms into the stratosphere.

The nuclear clouds quickly engulfed Earth and hid the sun. Temperatures dropped by an avarage of 34°C globally as we entered the nuclear winter. The last remaining crops quickly died out and there was soon nothing to eat.

Billions of people starved and froze to death as they tried to get into the few cities that did not immedeatly fall victim to famine.

Fortuneatly, a few rich countries had anticipated the catastrophy.
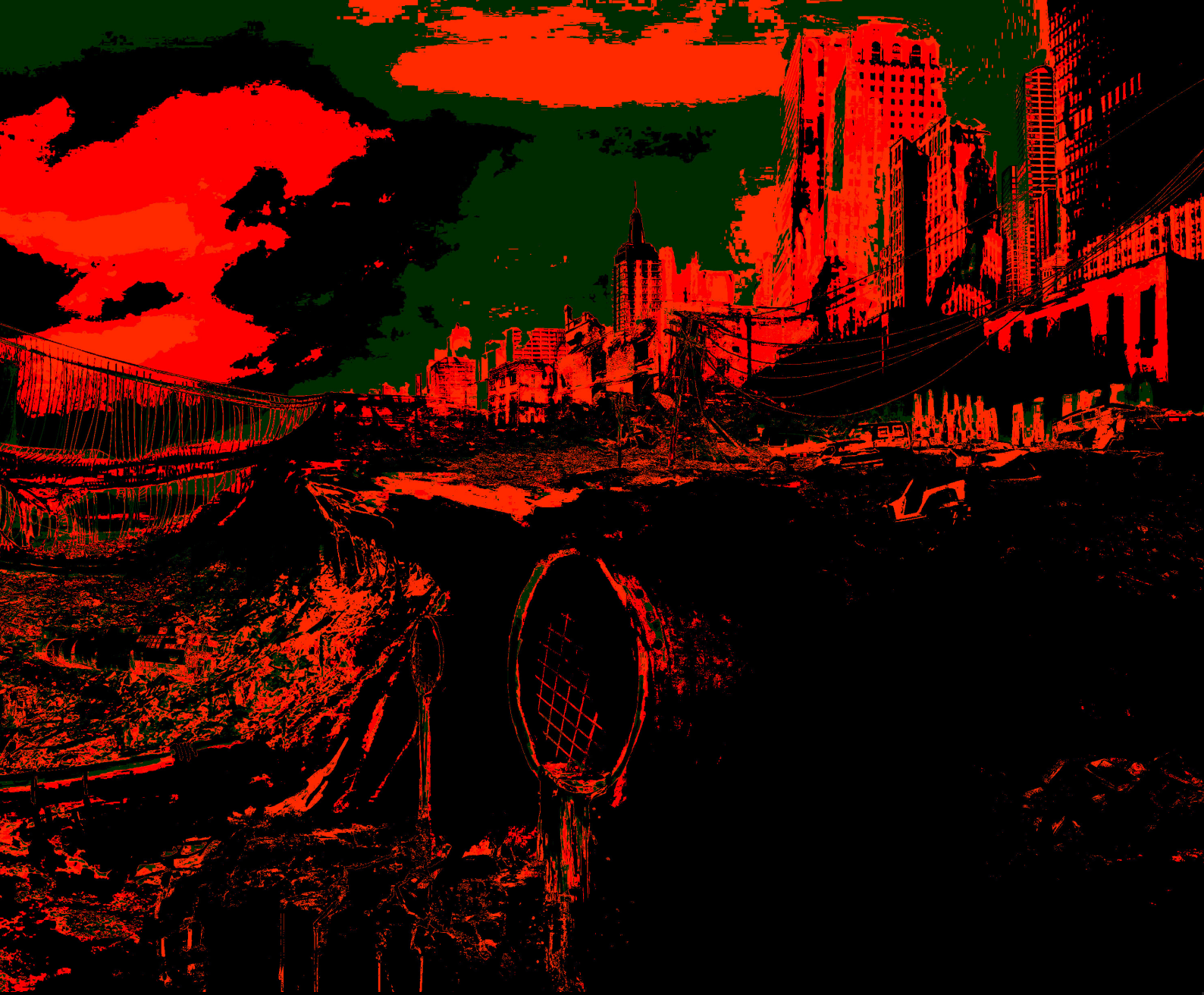
During the decades prior, the most wealthy nations had been investing heavily in artificial food production systems. Berlin was one such city, where they had been experimenting with mold- and algea-based systems.

As hundreds of millions of people overrun the last remnants of civilization, most of the remaining cities also fell to food riots. And so, even the wealthy cities of London, Paris, New York also collapsed.

It was only the most autocratic and militarized city-states that had any means to handle the onstorming refugees:

Berlin, Xian and Pyongyang.

Even though attempts were made to scale up food production and give the refugees tents to live in, two hundred and fifty million people had to be shot as they stormed the walls, or left to die in the freezing nuclear winter.

Eventually, as the situation began to come under control, three hundred million people had managed to huddle together inside the tents and temporary barracs of Berlin.

Walls were erected between what became known as The Sectors, to protect the Last Free City from falling victim to uncontrollable riots.

As the last screams from the dying refugnics that were left outside the walls finally ceased, the Dark Ages is thought to begin.

The descent into Hell had just begun.

The Dark Age

The city festers on itself. It recreates itself into a bunker-fortress, not against an invading military force, but against the dead wastelands outside. It turns itself into a domed artificial biosphere where the last free humans can survive.

Fortunately for humanity, the technology to build and scale up atmospheric processors, water purification plants and fusion reactors are available. The nuclear winter bought us time to prepare for the next wave of Hell.

It takes decades for Berlin to recover and gain momentum again. During the nuclear winter the city is many times at the brink of collapse.

Finally the stratospheric dust-clouds clears.

Earth has however been burning for too long. Greenhouse gases already released sets her off on an irreversible and final trajectory.

As the oceans heat up, the last algea in the oceans die off, and oxygen stops being replenished. Every single air-breathing being outside the last three domed cities dies.

The only thing that remains now is the vast, irradiated wasteland where nothing will ever again grow.

Humanity has sealed itself off from nature. Earth outside turns into something more like a dead alien planet. Temperatures soars as the greenhouse gases accumulates. The methane trapped in the seafloors begin to release and acidifying the oceans. Acid rain begins to fall.

It will take thousands of years for the oceans to evaporate, but it will eventually happen. Earth is on a trajectory towards a state similar to Venus, with temperatures projected to settle at about +60°C higher than the pre-industrial levels. It will be a slow descent into Hell. With a bit of luck we will outlive even the cockroaches.
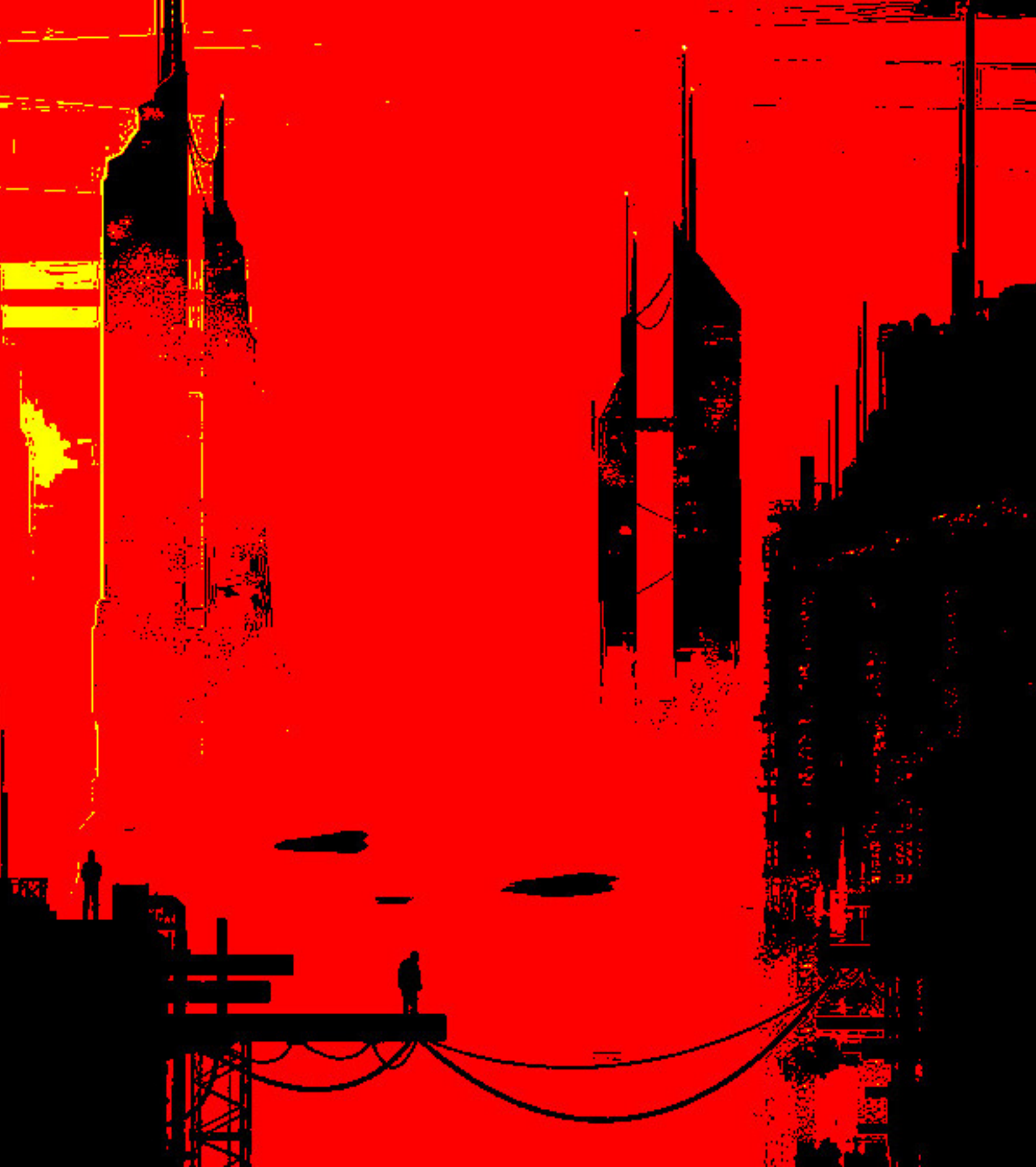
This is a world where you would need pressurized suits and oxygen tanks for just walking outside the city walls.

But despite the hellish situation, life inside the last city-states thrives. This is especially true for Berlin, where technological progress returns to its previous forever-accelating state.

In the 2130ies, Berlin undergoes a shift in government. Some say its a que as the top generals are assassinated. No one knows for sure, and those that know are silent. In any case, The Cartel takes control over the city and ends the military emergency council that had been guiding the city up to this point. The Council of Berlin becomes the new governing body of the

city, where the top executives of the seven largest corporations rule.

Berlin comes out as the largest and most wealthy city-state on Earth, the only city that grows rather than shrinks.
Even though everything literary is turning into a hellscape, the future again appears bright.
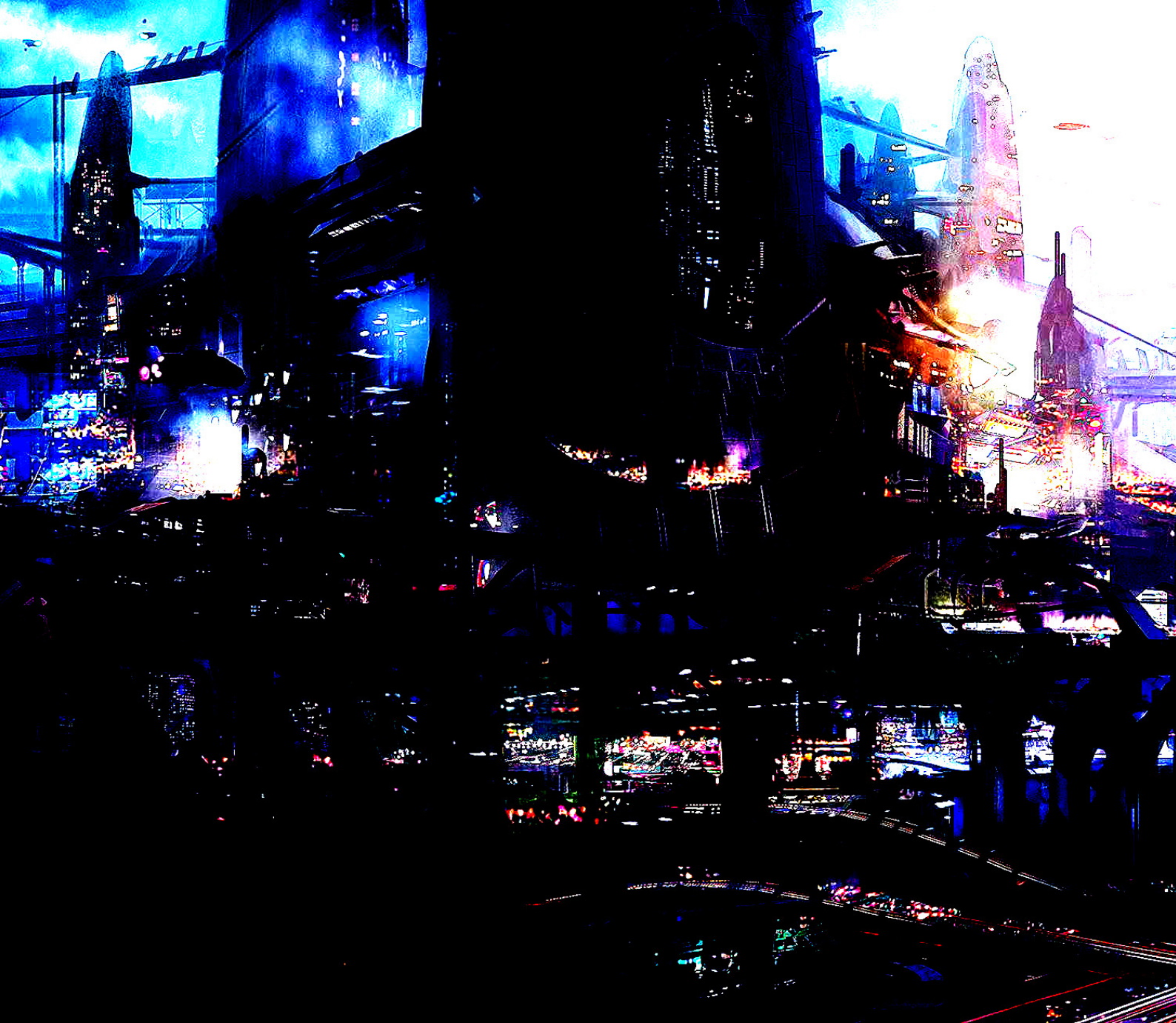
Since the turn of the 21st century, Berlin has been growing. The advancements in science and technology have accelerated and things previously unimaginable have become commonplace. Zero-G, biotech, cybertech, artificial intelligence and the space industries are some examples. We have found the cure for most common forms of cancer, which have increased the life-span of humans.

That we once again are accelerating our understanding of nature have become known as a sign of The New Age of Humanity.

This new age differs from the previous age maybe most significantly in that humanity now is completely cut-off and independent of the nature outside the domed city. No one that is now living have ever actually been to a forest and only crazy people venture outside of the city walls. We of course have pictures and VR games portraying the since-long dead wilderness, but otherwise it only remains as mostly like a fantastic fairy-tale from the previous age. Most people never visit "the outside."

People live out their entire lives within the confines of the archs. Enormous steel and concrete buildings that sometimes stretches for kilometers. Zero-G technology have made it possible to build structures that defy common sense, such as bridges that hang without support and towers that stretch further into the heavens than what should be possible.

Technology and automation have left most people behind. There is mass unemployment, with some estimates that 55% of the population have never had any job. People grow old and die without having to work a single day of their lives, instead only sitting in their homes doing whatever and being sustained on basic citizen salary.

This have resulted in a strange and hedonistic culture that set Berlin apart from the other surviving cities.

The New Age

Berlin survived the Dark Age because of technology. Without the algea tanks, the atmospheric processors and the fusion reactors, it would not be possible to sustain human life in the domed city. All food, air and energy comes from the Mulpha complexes spread through the city, sometimes located in underground nuclear-proof bunkers.

Cyber- and biotech have become commonplace. Lost an arm in a combat? No problems - a new one can be ordered from the biobanks and grafted to the wounded patient in a matter of days. Cyber augmentation is even a necessity for getting a corp job. Or any job really. Why would you hire a lo-tech schmuck when there are dozens of augmented and highly educated people waiting in line?

Perhaps the strangest of all technologies is Zero-G. A surprising effect discovered by accident, by manipulating relativistic quan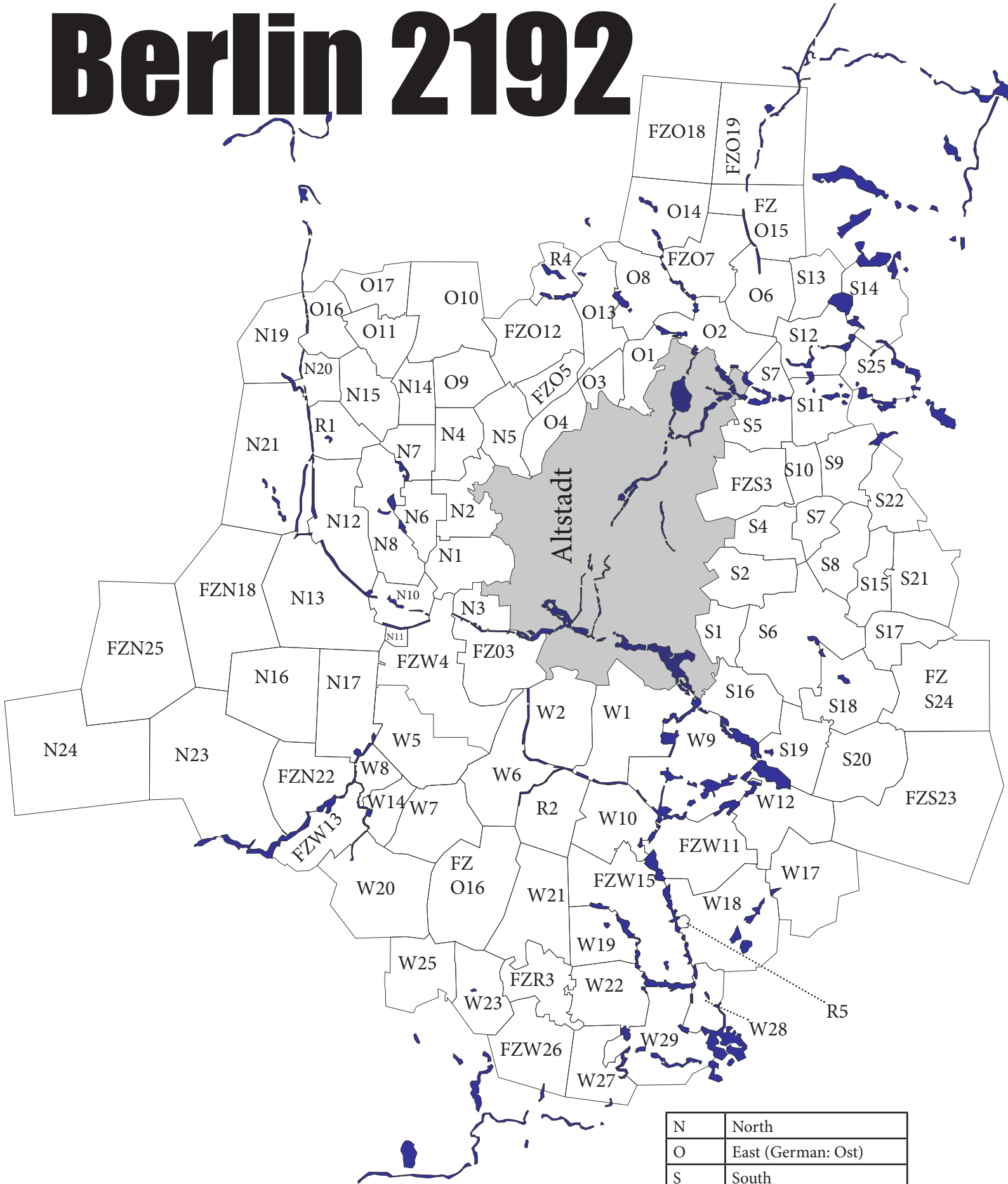tum fields of Moscovium-295, it is possible to generate a static field where gravity appears to cease to the un-educated eye. Almost no energy is needed for sustaining this effect, as long as the structure stands immobile. Of course this have revolutionized architecture and become perhaps the most striking symbol of The New Age.

Low Earth Orbit is since The Last War a Kessler syndome shroud of hypervelocity-flak, thus making it into a lethal gamle for the meatbag humans to leave the planet. This does not stop robotic spacecraft from engaging in asteoid mining, which have enriched the mega-corporations greatly.

General Artificial Intelligence have emerged and even though it still somewhat rare, humanity no longer are the undisputed top predators. The mega-corporations and their AI systems have recently begun the exodus to the heavens, leaving humanity behind in the overcrowded city.

Berlin 2192

FZO18

FZO19

FZO7

O14

FZ O15

R4

O8

O13

S13

S14

O10

FZO12

O6

S12

O17

O16

O11

N19

O1

O2

S7

S25

N20

N15

N14

O9

O3

S11

N21

R1

N4

N5

O4

S5

Altstadt

S10

S9

N7

FZS3

S22

N12

N6

N2

S4

S7

N8

N1

S2

S8

S15

S21

FZN18

N13

N10

S1

S6

S17

N11

N3

FZO3

FZN25

FZW4

S16

FZ S24

N16

N17

W2

W1

W9

S19

S18

N24

N23

W5

FZN22

W8

S20

FZS23

W14

W7

W6

W12

FZW13

R2

W10

FZW11

W17

W20

FZ O16

W21

FZW15

W18

R5

W25

W19

FZR3

W22

W28

W23

W29

FZW26

W27

N	North
O	East (German: Ost)
S	South
W	West
FZ	Freizonen (Free zones)
R	Restricted zone

It is often estimated that there are 500 million inhabitants of Berlin, of which 389.4 million are registered citizen. A generic sector may have about 2 to 7 million inhabitants, and altstadt probably has about a hundred million. Berlin have about the same population size as the entire of Europe had at the turn of the millenia.

Altstadt

This is the core and heart of Berlin. It is a densely packed maze-like mismatch of thousands upon thousands of archs that to an unguided eye looks more like a single building. It is layers upon layers of buildings stacked on top of each others, built into each others and merged. Corridors, indoor squares and vaults. In the lower levels, what looks like a bridge may in fact be a dug-out tunnel that over the years turned into a bridge - or the opposite! Altstadt literary translates to "old city".

You can find Everything in Altstadt. Anything from the corporations main offices, the embassies of Xian and Pyonyang, shopping malls, factories, mom and popshops, large sections of slums, and beneath it all in the Unterstadt (lit. undercity) there are abandoend corridors and hallways, military bunkers from the war, Mulpha factories, even more access tunnels and endless scrapyards, collapsed buildings, flooded subways and everything else. In the darkness below nobody gives a fuck what happens. A lot of people like it that way.

Travel within Altstadt is mainly by public transport. Shuttletrains, elevators, speedstreets and the like. The access tunnels and bridges are used by hovercraft that deliver goods to the shops and distribution centrals. Other than that, the lower half of Altstadt and is off-limits to hovercraft simply because there are no way to get through.

Protruding from the labyrinthine structures below are the corporate mega-archs. They stretch beyond the cloudtops high into the clear skies above. Here the wealthy and their corporate minions work and live. It is as it has always been, both literary and figuratively the rich are at the top.

The Sectors

During the last war and in the first years of the dark ages hundreds of millions of refugees flocked to the last free city for survival. At first they lived in barracs and emergency tents. Walls were built around the ghettos, to contain the violence and constant food riots. Soon, more ghettos had to be built outside the walls, and even more walls were built around them, and then even more walls outside them. Even though the city swelled to several times its original size, the majority of refugess could not be given even basic tents and were left outside the city walls to starve and freeze to death. Outside the city walls you can still find battered scrap from this era, maybe

even the trenchgraves if you know what to look for. Over the century that followed, the ghettos slowly turned into what is now known as the sectors. Archs, factories and distribution centrals were built over the old barracs. The ghettos turned into satellite cities.

Most sectors have a core, where the archs stand closer together and you don't have to walk as far to get somewhere. The sectors closest to Altstadt are more densely packed that the ones at the outskirts of the city.

When the sector concrete walls were built, the corps rounded up the immigrats by ethnicity and other groupings that were thought to "belong together". Polacks and warzaws, french, spaniards, jugs, rasnicks, ziggys, yahods, africs, nordics, muricans, and so on. This was done just to make it easier to handle the refugnics, with the theory that it they could sort out their issues themselves if they had some kind of common herritage. This turned out to be mostly somewhat true, but a handful of sectors are still to this day warzones ("free zones").

Moving between the sectors requires a permit, similar to a VISA. For most people, obtaining such a permit is quite easy and just requires that you use app to register your constent to the local laws. Some sectors, especially the restricted zones and the free zones, but also some communities like O8, N1 and N11, are off-limits to outsiders. Each sector has its own government that enacts its own laws. Some things that might be perfectly legal at one side of the wall can be a henious crime at the other side.

Sector Control
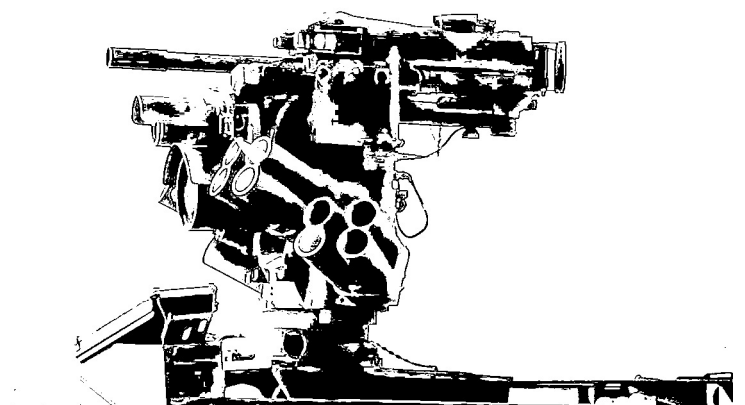
The walls of Berlin are patrolled by Sector Control, a branch of the military forces of Berlin. Atop the walls there are autoturrets, tank-like machines on rails that carry all kinds of munitions. Under and inside the walls there are tunnels for carrying shuttle trains for speedy military mobilizations. The walls are, in other words, rather difficult to break through.
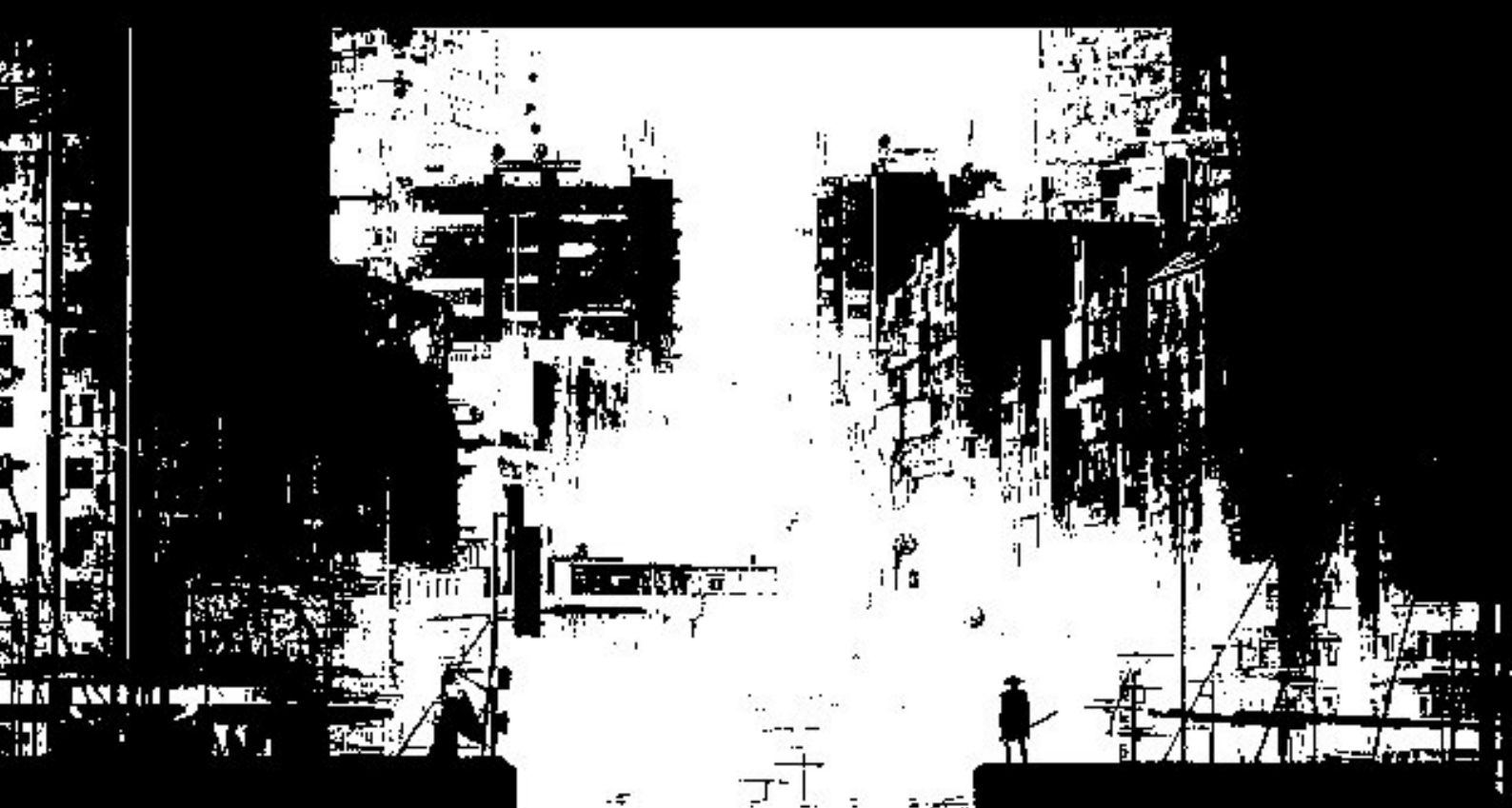
Freizonen

These are the lawless warzones of Berlin. Some sectors never stabilized and have ever since their inception always been in a constant state of guerilla warfare. This is a result from when the sectors were first created, from the flawed assumptions that the cultures and ethnicities they somewhat randomly grouped together within the confines of the sector walls would be able to function together. Other sectors have fallen after several years of instability, riots and accidents that destabilized their local sector-governments.

The Cartel typically leaves the free zones to fight out the wars themselves. There are occational leaks about how they provide military supplies to the gangs that are most sympathetic to reuinification, but nothing can be known for certain.

The free zones are for the most part not raging warzones, but slowly burning conflicts. Tunnels are dug beneath the streets, buildings are attacked, and slowly the warlords that control the gangs increase the domains they control. It is a sort of trench warfare, sometimes with stalemates and deadlocks that last for years.

The free zones can also be a refuge for those that need to leave Berlin behind. A new start for those that received death sentences or simply are too deep into their debts. Numerous shadowdoc clinics and secret factories lies in the half-ruined archs, providing the juntas with lo-tech cybertech, weapons and combat drugs.

These zones are not completely cut off from the rest of the city. Every year, hundreds of tunnels under the sector walls are discovered and filled up. With the right contacts it is possible to pass under the borders to the free zones and back again.

FZO5

Two years ago a war broke out between two corporations in this sector and it was classified as a free zone by The Cartel. A low-intensity war has been raging ever since, with Amazon coming out as the somewhat obvious winner. Diplomatic negotiations are ongoing which will likely put the sector completely in Amazon's control.

FZN25

This zone have always been classified as a freizon. Two falangs are fighting an seemingly endless war against each others. Originally the war was between rasnick legionaries and polack crime lords, but today the original lines has blurred and fractured among their descendants.

FZR3

After terrorist bombings against the old thorium reactors the zone have become inhospitable with radiation. Few people live here and it is mostly just empty depressurized ruins. There are rumors of some bioweapons or some sort of plauge, and that this is the real reason the sector has not been reclaimed.

Restricted Zones

There are four restricted sectors in Berlin; R1, R2, R4 and R5. All of them are industrial zones that house large powerplants, atmospheric processors and various other Mulpha facilities.

They are the above-ground facilities that support Berlins population with energy, air and food. Enormous city-sized fields of algea-cisterns purify the water and convert the biowaste into edible foodpaste, which is then sometimes baked and processed into more palatable stuff. The "produce" is then fed back into the city again, to be put on the shelves in any of the Mulpha distribution centers. This kind of food is what you get when you use your food coupons.
Recycling centers attempt to convert the remaining crap into useful resources. The rest is shipped off to landfills outside the city.

The Mulpha recycling centers are the single largest employer in Berlin. It is menial and monotonous jobs, but it's one of the few real jobs that requires no education and by serving a couple of years here will give you capital to maybe start your own little corner shop, or whatever.

Mulpha

The heart of Berlin. Or maybe the belly. In either case, Mulpha is the name of the institution that sustains the city with the most essential resources. They control all the atmospheric processors, keeps the fusion reactors burning and recycles the biowaste.

Whole sectors lies under Mulpha control. Enormous fields of algea-banks whose grids of red grow-lights stand out from the rest of the city during the nights.

The Mulpha distribution centrals are spread throughout all of Berlin. They still hand out foodpaste the same way they used to do during the Dark Ages, although nowadays there are more variants. The various forms of porridges and starch noodles, pasta and "beans" have been supplemented with actual plants, like lettuce, onions and mushrooms. Expensive vat-grown meat can nowadays also be purchased, although not with food coupons. You need real euros for that.

Most of Mulphas earliest factories were built underground in nuclear-proof bunkers, in the depths of Unterstadt, below Altstadt.

Production engineer showing off a hydroponics system for growing lettuce in a bunker deep below Altstadt.

Sunrise at the eastern border of S2.

Living in Berlin

Citizen Salary and basic healthcare

Every citizen is receiving a weekly citizen salary of €1000 and food coupons. This is enough for renting a small apartment-cube and getting about as fat and slobby as you want.

Basic healthcare is also provided for free. This includes everything from vaccines to the cure for cancer. The ambulance will come and pick you up, assuming you are not in a free zone, et.c. Going to the hospital can be quite expensive and put you in debt, and if your debt racks up above a hundred thousand euros, they will simply let you "walk it off." Or pull the plug.

Laws and Control

The system of laws is a layered patchwork. At the bottom there are the Berlin City Laws, which by the standards of the 20th century probably would be considered hyper-liberal and laissez faire by most: Prostitution and distribution of heavy narcotics is legal, for example. Murder, mutilations, rape and riots are however illegal. And that's it.

At the core of the system of laws is the concept of The Contract. If you sign a contract, that contract is now legally binding unless it violates the Berlin City Laws.

Contracts come in many forms, but the most common ones are residency contracts that adds further laws to areas, zones or archs. Open street prositution is illegal in the corp zones and carrying any form of weapon is illegal in the absolute majority of regulated zones. Some zones have laws that may be difficult to understand for outsiders, like saying something stupid about Allah is illegal in the salafist Caliphate of W19, and so on.

If the Council of Berlin have an agreement with an organization that allows them to dispence justice, and if you get on their insurance subscription, you would be protected by their security forces. You would also be able to press charges against others within their jurisdiction.

There is also that — if no one knew you comitted a crime, or if no one that matters cares about the crimes you comitted, then you will of course not be judged. So, even though the free zones are technically under the Berlin City Laws, you will *probably* never be judged for anything you do there. Not even murder.

The type of hearing you will receive depends entirely on the jurisdiction that applies to where and who you are.

The City Laws are swiftly judged by AI systems, without jury or lawyers. (If you had a lawyer, then you would also have other contract laws and thus not be judged under the City Laws.) The only outcome is fines and the death sentence. Being "judged" by the security forces is much more likely than being taken to Berlin City Court. Most likely they will just beat you up real fuckin´ bad.

Unemployment

Never forget that you're just a fuckin meatbag. The elite does not care about you, as long as you don't riot. Unemployment rates are probably somewhere around 55% in normal sectors.
It has been like this essentially forever. The system of citizen salaries and food coupons grew out as a natural way to handle the refugnics during the Dark Ages.
Hedonist and even nihilist culture have blossomed. So has crime and narcotics usage.

Work

Most jobs are relayed through job agents and can for example be grocery shopping and delivery for someone a little better off that you. A lot of "unemployed" people have informal jobs that gives them a position within their group, culture or society. People open up clubs in abandoend vaults, grows their own "real food", have art exhibitions or build chem-labs in their apartments. A lot of jobs start out as hobbies or something you do because there is nothing else to do, and then it grows from there. For example, if you are really good at electronics, you could probably take jobs relayed through job agents and work your way up through their trust-levels.

Then there are the corporations. This is where the "real" jobs are. At the bottom of the pyramid are the menial jobs at the Mulpha recycle complexes. With a bit of education you could probably land yourself a job in the medical sector as well. Essentially anything above that requires years of studies at the univerity and the appropiate cybernetic augmentations.

Non-citizen

People born in the free zones, or people that somehow managed to evade the system until their citizenship expires (takes 3 years) are not registered as citizen and therefore have essentially no rights, except for not being mutilated, raped or murdered.
The Berlin City Laws does apply for all conscious beings, no matter who, what or where they are.

Ghettos

Sectors of Berlin

During the Last War, and in the early years of the Dark Age of nuclear winter, Berlin expanded to many times its original size. Refugnics were grouped into categories and set to live with each others within the sectors. Ghettos formed in the barracs and simple apartment-cubes. Instead of becoming a single mostly-Europoean metropolitan culture, Berlin became a city of Walls, separating and segregating its citizen.

Berlin, the Walled City.
History repeats with irony.

The first ghettos came from the archs of apartment cubes that were mass-produced for the refugnics during the Dark Age.
They were whole cities of people that lived in their cubes and lived off food coupons. Those that lived through the long night.

Since then the city have expanded, archs are being built closer together, there is more industry in the city. The domed and walled city is growing.

Most cubes are not necrotic, so She survives.

Sector N2

Random encounters in N2 — roll a dice:

1. — Just blocks of apartment cubes. Mural grafitti and people that are growing stuff in their communal squares.
2. — Ruined area. People moved out and there are wild plants snaring through the cubes and terasses.
3. — You walk into gang territory. You might need to pay a 'passage fee' .
4. — You find yourself in a bazar. The corridors go on forever with merchants, it smells of perfumes and incense, there are merchants and customers everywhere. The bazaar and its labyrinthine streets goes on for several blocks.
5. — You walk into a communal factory. They're cooking chems.
6. — You walked into a communal plantation. Several blocks have joined and converted their inner squares into vertical hydrophinic farming of food crops and weed.

I was supposed to meet Her here.
Was this another dead end?

Sector N2 —

Dense city djungle, home for over three hundred thou-
sand citizen. There are only cube apartments in N2.
Blocks of "cubes", trams connecting the sector archs,
kebab kiosks, Mulpha distribution centrals.

And of course — The sector tribes and the juntas.

Warsaw Sectors (FZS23-24) — Warzaw
was the last city-state to fall. In the end, when Warzaw fell in 2130, the entire city was managed as a freizone by The Cartel.

200 million refugnics was evacuated to FZS23-24. There was both enough time and resources to build more humane cube apartments, for the first time ever. The pops are mostly polack, rasnick, jugs or belarus. The sector powerplay is volatile, as no set of leaders have emerged to claim the governance of the sectors. Instead, there are hundreds of smaller syndicates and tribes.

Jahod City (N1, N10) — The ultra-jahods were
originally given N1. Through in comparison with the rest of the city, their massive number of children have meant that over the generations, their numbers have increased, and they have been buying up condos and shops in N10, moving there. The jahods tolerates that others enters their secluded sectors, but attempt as few dealings with the 'outside world' as possible. The entire society is built around the synagoges and the ultra yahod families, teaching and studying the holy scriptures and otherwise peacefully refusing all mundane authorities. They live in harmony, they say, but let no-one in.

The Caliphate (08) — The german military just dumped everyone that looked 'arabic' into this sector, sometime during the worst years of the refugnic crisis preceeding the Last War. The condo cubes are small and, over the decades, the citizen have rebuilt them and added running water, electricity, networks. Much of the archs in the sector are mazes of re-built homes, industry and endless bazaars. The Caliphate rules the sector, and an armed religious militia are patrolling its streets. The sector laws are sharia. Women must wear hijab.
Some mega-corps have established industries in the sector. Numerous data-havens are also located here.

The Sink (FZS3) — The sector have always been classified as a freizon, but after the bombings of the old fission breeder reactors, the northern parts of the sector, towards Altstadt, was evacuated. Half of The Sink is a radioactive wasteland of empty condos, cleaned-out shops and malls, rumors even of an amusement park.
The other half of The Sink is a raging war zone. Two heavily armed militia are in a trench war gone into meatgrinder-lock.
There is ongoing diplomacy with The Cartel to establish the sector with their divided control. A peace treaty will probably be signed soon. Or maybe it's just talk.
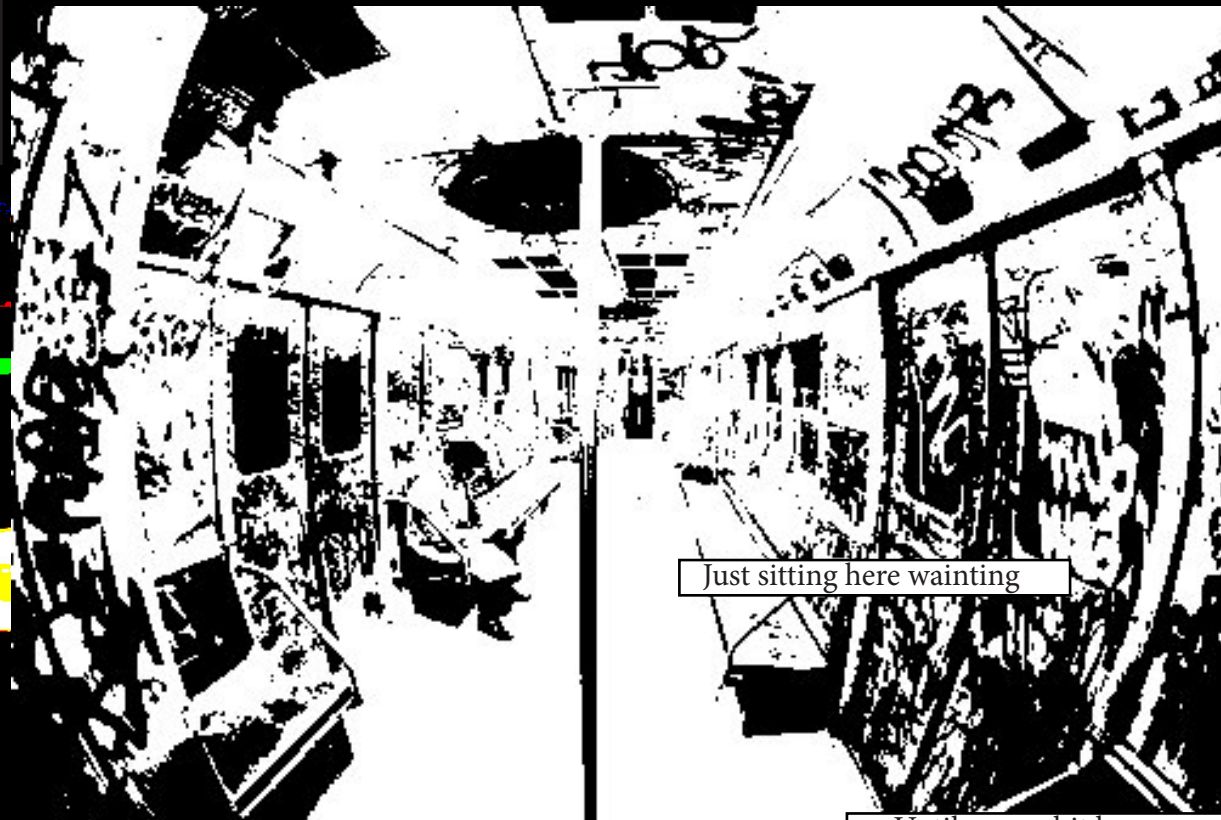
Just sitting here wainting

Until some shit happens . . .

Citizen just let each others be on the trams for the most part. You zone out, read your news feed or whatever. Don't mind the crazy people.

Sometimes shit is bound to occur though.
Roll 1d6:

1. — A band of musicians are performing for the captive audience of the tram cab. Roll 1d10 to see if they're good: 1-5: No! 8-10: Yes.
2. — Ticket control / You're being robbed by skinheads or drunk neo-nazi militia pitbulls. They want 100€ for a "ticket."
3. — Power is lost, the lights go out and the tram stands still in the middle of a tunnel deep below . . .
4. — You hear a BANG! A gun has been fired. Someone has shot another person further down in the tram cab. . . Now what?
5. — A junkie is wanking off completely in public. People try their best to ignore the worst of the filth and disgust.
6. — A street gang enters the tram cab and starts paying notice to you and your friends. They want to feel powerful and feared.

The Trams

The tram lines connect all of Berlin with underground tunnels.
There are two types of trams: Intersector lines and the smaller and slower sector trams.
In Altstadt, the tram stations may be several stories high and usually connected with elevator shakts leading to the towers above.
In the ghettos, where the archs stand further apart, there is often one tram station for every arch.

like getting mugged

Then it goes back to normal again
As if it never happened

You'll learn to appreciate the musicians

Unterstadt Stalkers

If you know what to look for, you can find your ways through the city access and utility tunnels, by jumping off at the tram station and following the tracks, by lock-picking or finding broken access hatches, or by making your way through the basement corridors into the underground city maze.
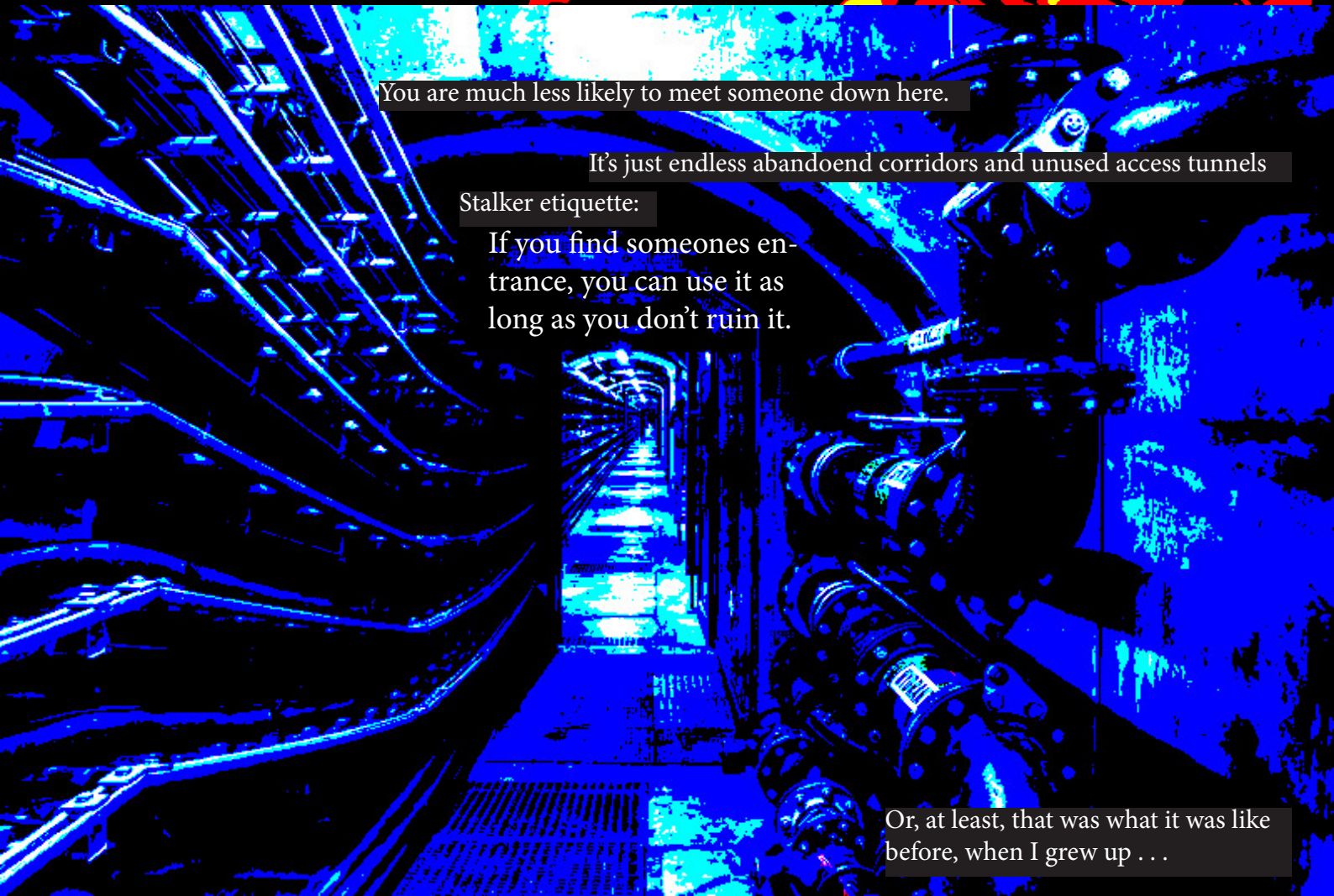

People that are skilled in this are known as Stalkers.

The tunnels in the corp blocks are filled with utility machines, climate control and stuff.

Sometimes they have security cameras or motion detectors. So we move carefully.

You are much less likely to meet someone down here.

It's just endless abandoend corridors and unused access tunnels

Stalker etiquette:

If you find someones entrance, you can use it as long as you don't ruin it.

Or, at least, that was what it was like before, when I grew up . . .

Corp factories and data-centers

Throughout Berlin, areas in the archs, often whole archs, are used by the corporate industry, for factories, office-complexes filled with servers.

Some people work here.
Not many, though. Most of it is automated.

Sector Control

Unlike all the other officers, Günther was just using his index finger when pointing.

The Military of Berlin — In the 2130ies, a series a assassinations were made on the top generals in the german military forces, members of the Emergency Council of Berlin. After the que, the Cartel took over, and took control over the military forces.
The military consists of augmented legionaries, droids and autonomous weapon systems. Its military AI systems has everything from simple marine soldier grunts, hover tanks, sniper assassin droids and mini-nukes in its arsenal.

A cold war has been raging in the quiet with the other city-states and nowadays some space-born corporations. Nut much is said about it on the public news feeds.

Sector Control — They are the Walls of Berlin, patrol the Mulpha Restricted Zones and act as CorpSec in some parts of Altstadt. They are the internal branch of the Military of Berlin.
FZR3 — The surface of the sector is a radioactive and evacuated city, but deep under the streets Sector Control have its largest military bunker complex. It is rumored that maybe the explosion at the enrichment reactors, that devestaded the above-ground city, was actually an attack against Berlin.
Freizon Control — They send in hover-loaders and drop off food crates over the free zones. It is widely belived that they also drop military supplies to the factions that show 'promise' for forming a corp-friendly society.

The Cartel took control over Berlin in the military que of 2130. At the time, it was a group of seven corporations that formed The Council of Berlin, which still today is the governing body of Berlin.

The Council of Berlin is in control over the military, Sector Control, Mulpha, large parts of Argus, the Planck University and the largest corporations. They gave themselves legal monopoloy on a range of technologies and their production. This was originally to protect the city from collapse, as for example the Mulpha food and energy production systems are vital to the city's survival. Since then, the monopoly laws have more become a tool for retaining the economic and military power over the city.

The identities of the members of the Council of Berlin are unknown, hidden behind cipher laws. As such, the Cartel, even though it is widely accepted as real, is something that is hidden and unknown. You know it exists, but who or what is behind the complex structures of corporate ownership is essentially impossible to learn.

Most people accept that its some kind of hive-tribe of massive AI systems that *is* The Cartel. It makes most sense that this would be so, after all.

The Altstadt Cartel

The seven corporations

All of these corporations have their own laws that they enforce via their own security and military forces. Some of the corporations also own areas in Altstadt, or even whole sectors (especially the restricted zones), where they enforce their own laws.

The corporations that constitutes The Cartel are:

- **Bauhaus** — Produces and sells just about *Everything*. Everyone has at least some products that has their logo engraved on it. They're currently building the Sternstation in geosync orbit.
- **BASF** — Chemical industries, bio-tech, cybertech, robotics and the military are their main markets. Mulpha is part of BASF. They're fairly well-known, and old. BASF was founded in 1865.
- **Deutche Bank** — Issues the Euro. Owns a very large number of smaller corporations and real estate.
- **ON** — Telecom, electronics, nano-tech and robotics. A fairly well-known household name.
- **Reisser-Müller** — An enormous conglomerate that only acts via its numerous daughter-corporations. They are virtually unheard of among the common people.
- **Metro XStrasa** — They own the majority of the large retails and shopping malls via various daughter corps, although few have heard of the conglomerate itself. Metro XStrasa is very big in the surveillance, security and military sectors, but also owns numerous minor corporations in most other sectors as well.
- **Siemens** — Heavy industries, energy, robotics, electronics, bio-tech and space-industries. Siemens has been a well-known name since a few hundred years.

The Net AKA CYBERSPACE
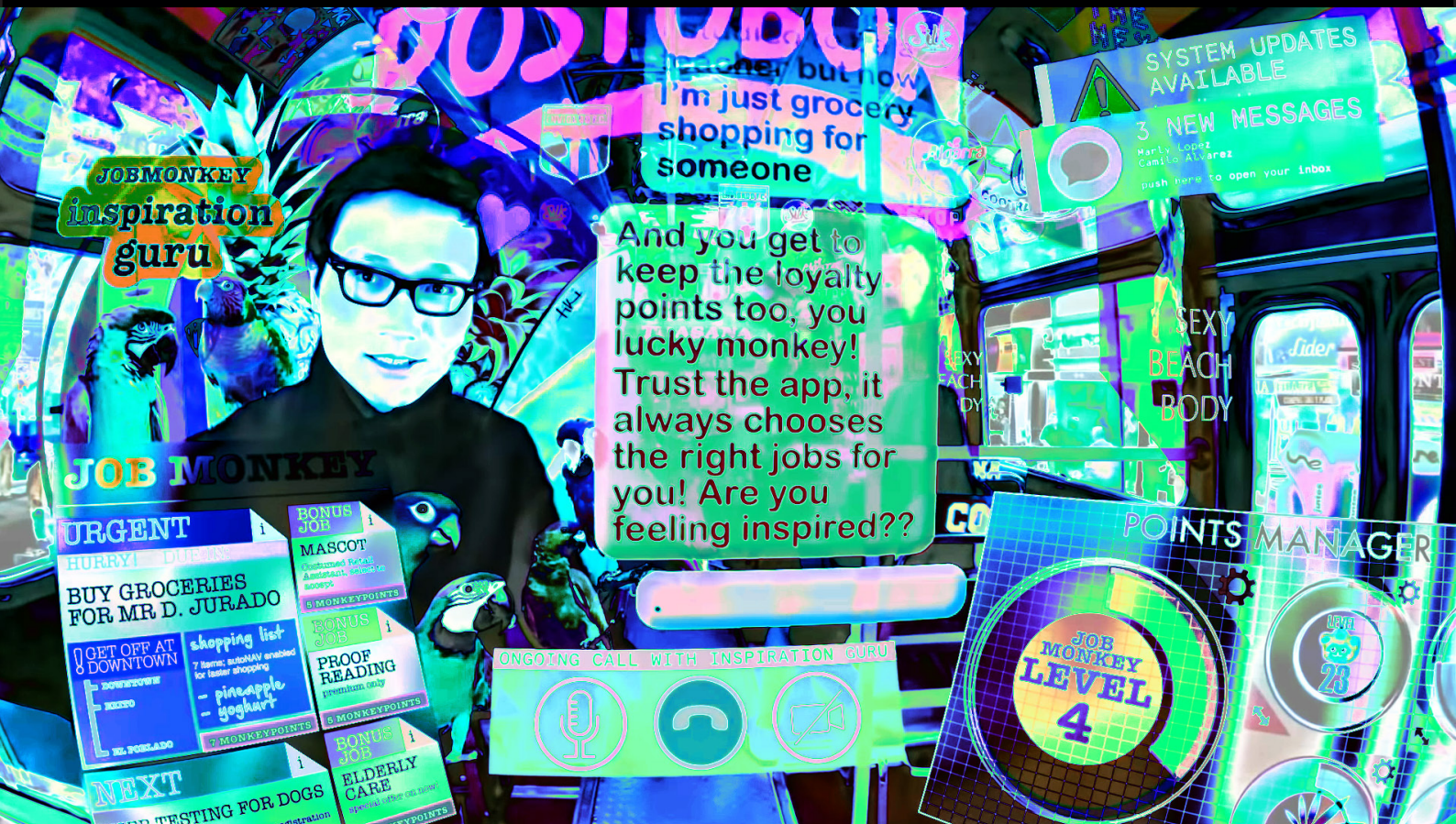
Most people can save up the six months of citizen salary it takes to buy basic AR/VR HUD brain inplants. These inplants are mass-produced and sold at a loss, with app purchases covering some of the reminder of the cost. It's rather obvious that the whole AR-experience is meant to mold the consumer pops with corporate trust-points and consumer levels.

The basic inplants consist of neuromorphic matrices jacked into the brain stem, the occipital lobe, the cerebellum and hijacks the sensory input. With this tech you can controll all senses except for smell, that uses a wholly separate neuropath. Thus, for most people, the net appears as an 24/7 AR experience.
You never really "jack out", although it's possible to disable all the popups and experience the raw feed. Basic inplants requires the user to use their real hands to interact with the AR objects. Add-on cybertech adds new virtual bodyparts, that works and feel kindof like the old meatbag limbs, but lets the user interact with the net at the speed of thought.

The AR/VR HUD

The Augmented Reality Head-Up Display is the main method to experience the cyberspace in the world of Metropolis. It shows you all your apps as real-looking 3D-objects that float freely in the air, or attached near to the physical objects they're tied to.

If you let the inplants shut off the natural input, you can enter the net completely, and browse it as a VR construct. Unless you have an autopilot agent that takes over your bodybag, you will just go limp and catatonic for the duration. If something happens to your body, you will be brought back to the AR HUD again. It looks like the world goes transparant and fades in, or out.

The Net is Everywhere.

Almost everything has online representations, that show up in your AR HUD. For example, a packet of yoghurt will, when you activate it, show your its nutritional values and various menus as free-floating graphs. If you start talking to it, it will likely dial up its "customer support" for you automatically.

Walking through the city is no different. The walls have infomercials, there are giant teddy bears sitting between the buildings and occupying the skyline, and so on.

The city bathes in wireless networks. There is free access to the net everywhere, except perhaps for in some tunnels and vaults deep underground. If you pay a small fee you get rid of some of the the ads, but never the constant tracking — To get rid of that, you need special skills.

Agents

Anything that acts like a person is called an Agent. Sometimes they actually are people. They appear for the most part just talking heads that interact with their cusomers/clients.

Autopilot agents

The most basic autopilot agents just breathes and blinks your eyes for you when you are browsing the net in VR mode. All VR-capable inplants have these agents built in. Intermediary pilots lets a simple AI remote-control your body, and takes care of simpler tasks like taking a shit or straighens up you basic life-puzzles, like making and eating food as well as grocery shopping. More expensive autonomous pilots do the same, but use a small onboard AI system instead.

Job Agents

For most people, "working" means that they start their job agent app and start picking tasks from their queues. You start off at the bottom, with simple tasks, like pizza delivery or grocery shopping. The more tasks you successfully complete the more "trust points"-you get.

After earning enough trust points, you level up and gain access to more complex tasks, which result in larger bounties. Soon, the you and the job agents will have learned what your skills are, what you are good at, and you will essentially have something that vaugely resembles a job.

If you are skilled, you could gain points with specialized agents and start some kind of a career in that field. Maybe it can even eventually land you a real job.

Historically, it was the darknet marketplaces and the decentralized syndicates that in the first decade 21st century were the first to define themselves as systems of smart contracts. In the year 2050 essentially the entire global narcotics- and contraband-markets were defined by such economois. The same technology was also used for creating autonomous corporations, where ownership structures and the real identities of the people behind titles could be hidden.
It took a couple of decades before the banks had fully adopted the new technologies and cipher coin market-places had become widespread.

In other words, this technology is old. The corporations have had almost two hundred years to migrate into this new form of economy.

Cipherspace / Darknet

The cipherspace is mainstream in Berlin.

For you slugheads that never used it: It looks and feels much like the ordinary cyberspace, except that it's a lot slower due to all the encryption and message-passing going on in the background. No exotic hacker skills are required to access it. Some systems are only reachable through the darknets, while others only have a presence in ordinary cyberspace. Some exist in both.

The cipherspace is a set of computer network protocols that allows the users to hide their origins and identities. While there are occational breaches in the protocols, they are for the most part extremely secure, and pro-vide nearly unbreakable services to their users. The only catch is that the cipherspace is slow in comparison with the ordinary vanilla net.

This has implications for the smart contract-defined city of Berlin. For example, it means that being a public person is associated with having an assassination boun-ty on the darknet betting pools. Thus, key people are typically hidden or are obvious pseudonyms. Corporate descisions are usually not taken in board rooms, but in virtual and secure meeting places.

Smart contracts

Smart contracts are used for managing most major or-ganizations. Smart contracts are cryptographic software and act as a sort of like oldskool contracts, and tie in with your digital persona. They define your ownership, titles, jobs and most professional relationships.

A contract can include a job description, assign a title, define ownership over an object or process, describe a task (a "gig") that when performed releases a bounty, or anything that an arbitator agent is capable of checking up on.

Most contracts are self-enforcing in nature, and requires no outside interference beyond perhaps that of the arbiter agents. You simply just lose the benfits associated with your titles and various loyalty-points, et.c. when you break the contracts.

Smart contracts in practice act like add-ons to the Berlin City Laws. You might become a member of an organi-zation and thus also accept the contractual obligations their membership includes. In return for following up on your obligations you could for example not be kicked out from their protected and guarded zones, get better medical treatment, or a well-defined "real job" that's not just a bunch of gig jobs.

Examples of contracts

- **Bounties and gig jobs** — A task that when per-formed releases a bounty. It can be anything from a pizza delivery to accurately "guessing" how and when a well-defined bodybag cease to function.
- **Titles / labels** — Anything from job titles, mar-riages and ownership definitions or something inbetween (e.g. "allowed to be in area X"). A title is nothing without obligations and/or benefits. Titles and their transmission are often well-defined with-in the contractual structure of an organization. For example, an organization might have encoded in it's structure that there must be an arbiter agent job for every five hundred workers.
- **Organization structure definitions** — Contracts that define autonomous corporations and their in-ternal law. These contracts behave like software.
- **Law definitions** — Special types of obligations that interact with the Berlin City Courts system of laws. Often they define new laws for zones, areas or titles that are associated or belong to an organization.

Arbiter Agents / Shadow brokers

These are clerks that act as arbitrators in disputes or where the contracts are not possible to define wholly in terms of programming code. They are often real humans or high-sentience AI systems.
Their real identities are usually hidden for their own protection. They rely on the reputation various trust sys-tems to recruit clients and act as third parties that take a percentage on the transactions they mediate. Their business relies on them being impartial.

Money

All money is in the form of digital cash. There are lots of different currencies circulating in Berlin, but in general they can be divided into some major categories:

Food coupons

These arrive in a special Mulpha account that's tied to your biometric ID, and cannot be transfered to others. They maxes out at 5000 credits, so if you don't use them they will go away. Every week, a batch of 1000 creds are automatically transfered to your account. Food for one day costs maybe 75 creds, so it's enough for even the obesese over-eaters. Mulpha food can be rather dull, even though it contains everything the body needs. If you want "real food", you have to pay with real euros.

The Euro

The main currency against which everything else is measured is the Euro (€). All major corporations banks handle euros, and all transactions are traced, tracked and data-mined to avoid funding of terrorists, money laundering or other criminal activities. Every citizen is given a citizen salary of €1000 every week. Essentially, the euro works like normal modern money does.
Of course there are no physical euros. No coins or paper.

Cipher coins

These are just variants of the oldskool bitcoin protocol that emerged in the early 21st century. They are more or less decentralized currencies with various degrees of traceability. Some coin protocols are completely open, while others hide the account balances and all transactions. Obviously, the underground economy where contraband and illegal services are bought and sold depend on the latter to hide.

Autonomous Corporations

These are the modern equivalents to stock companies, but instead of being based on ink-and-paper they build upon the cipher coins and smart contracts. Owners of these coins/shares have voting rights for controlling the corporation, or some aspect of it. They rely heavily on smart contracts that defines titles for the board of directors and other key positions, as well as the various legal frameworks that define how the corporation behaves; How titles are chosen, assigned and revoked, what the process for hiring new people (assigning titles) is like,

what kind of accounting the corporation publishes to its shareholders, and so on. Thus, a corporation is both a currency that can be traded and a set of computer programs, in the form of smart contracts, that make up its legal body.
Just as with the cipher coins, the internal operations of corporations can be open and public, or completely hidden from outside scrutiny. It depends only on the protocol framework structure that its smart contracts are defined within.
Entierly public corporations include public utility organizations such as Mulpha, the Planck Univerity and ARGUS. Most other corporations are publicly traded but have certain titles, sections and owners that are hidden. Of course, corporations can own shares in other corporations, that may in turn be more or less public. This means in practice that large parts of the economy of Berlin is an un-navigateable labyrinth of ciphers. At the large scale, it's impossible to know exactly who owns what.

As crossing the barrier into the physical world implies a physical body, direct ownership of objects and phenomena in the physical world is quite difficult to hide, if not impossible. Mom and pop-shops, kebab kiosks, warehouses and so on makes little sense to try to hide behind some cipher. Secondary or tertiary ownership, via investments funds and loans, on the other hand, is another matter entierly.

In game terms

You probably don't need to bother directly with this for the most part for your game sessions.
It however provides an understanding that you as a GM probably benefits from when you're trying to rationalize how the world works, and how it's even possible for the corprations and crime syndicates to function.
If the puzzle-pieces fit together you'll be able to present your players with a believable world.

This technology already exist. It was dreamed up in the 1980ies by some libertarian cyber-extremophiles. Just imagen that it's not something that some fringe group of crypto-capitalists are using, but that it's grown to define the whole economic system, and then you have the world of Metropolis and Berlin in particular.

This section is obviously just a summarization and grave simplification for how the cipher economy works. If you want to read more, you could search for "monero XMR", "smart contract", "crypto-anarchism" and "decentralized autonomous organization". Maybe gaining a basic understanding of public key-cryptography is also helpful.

Cab4U

It's the largest ride-sharing company in Berlin.
At it's core it's just a centralized betting market. You bet on cab rides against other riders, and if you win the auction it comes and picks you up. The driver is given 50% of the auctioned price. 20% goes to the arbiter agents that resolve conflicts, if they arise. The last 30% goes to the corporation.
The entire thing is of course handled completely with smart contracts, automatically and invisible by the app.

Some schmuck going by the name Abraham D'Coil set up this cab-corp a couple of decades ago. Various bounties on darknet marketplaces for releasing D'Coil´s cipherkeys (essentially implying his assassination) is summing up to at least 532M€, and increasing with maybe a million every month. There are many smaller cab companies that are waiting in line.

The Bosnian Syndicate

In Altstadt, they are sometimes known as just "The Syndicate". Obviously once upon a time a bosnian group with meatbag leaders, they have since upgraded and become one of the major criminal organizations in Berlin.

The upper levels are hidden from the lower levels, so they don't know who they are working for. Information flows on a need-to-know basis among the "circles" of agents and enforcers. A hidden lab makes a dead-drop at some location, a motorcycle gang later picks them up and sends them off to somewhere they are needed. Prositutes are brokered off through web portals easily accessible at the darknet. An assassin is given a location where a subject is to be at some time, and without knowing who she's offing she pull the trigger. Key to their modus operandi is the stealth and the dead drops, that they never meet in person. All transactions are done in cipherspace.

Someone is taking percentage on all the transactions. Not much, but enough to make it go around. There are rumors, but no one knows for sure. It could be a rouge AI that dreams up all the protocols, or maybe it's just a 300-kilogram hacker with some serious anti-social problems hiding in his grandmothers old apartment cube.

All you can really know is that you signed a contract with an agent that you found via a forum in one of the darknets, and the implications for missing that deadline will put you back considerably. On the other hand, completing it to your unknown customers demands will give you lots of trusty-creds! Maybe enough to take on higher-up jobs and become Someone. . .

ARGUS

It manages and tracks traffic and movement in the city. As the city is fragmented into sectors, zones and areas, all with different ownership and regulations, it's essentially impossible to coordinate this chaos with a central system.
Instead the ARGUS system is composed of a myrriad of smaller systems that all cooperate with each others over oftentimes open APIs.

Bounties are given for creating or finding new paths and routes. Titles are rented to agents that coordinate the traffic flows and rewards are distributed such that those that are most effective are rewarded the most. It is a distributed system that uses the capital flow pressure as an artificial energy gradient against which the tracking and route optimization software agents operate.

It can be described as a swarm of AI systems and logistic agent software that act under a set of organizations and sub-organizations that together make up ARGUS. In the center are the sector-databases and their ledgers that keep track of where objects are. Against these systems the AI systems and ordinary corp programmers are writing software agents and attempt to outsmart each others, which results in a constant arms-race in object tracking, facial recognition and route-calculation algorithms. Of course, exclusive ownership of a sector or area brings benefits in regards to access to surveillance cameras that can't be competed with.

Originally ARGUS was the military designation for the oldskool AI systems that were used to keep track of the city during the Dark Ages. After the que in the 2130ies the system were brought under corporate control and its APIs were opened up.
Buying access to the APIs is quite cheap. A query to look up the location of a single object, or to ask for the optimal route between two XYZ-coordinates usually just cost a couple of m€.

It means — in game terms — that finding an object ID requires that you convince the ARGUS agents that you are allowed to search for it, for example by paying them a fee. If someone has been trying to hide themselves, or the object, they might have done it by moving it inside standard shipping crates/boxes, that they re-packaged as it moved through areas they controlled, or simply by taking it through underground or concealed passageways where no ARGUS agents had any coverage. Such services can be bought "in the open" at the ciphernet, by having the right friends and connections, or simply by routing it back-and-forth via rivaling corporations. Or even simpler, by not having a body in the first place. . .

Corporate Digital Persona (CDP)

A persona is your digial twin, a representation of you in cyberspace. At the core of the persona are the cipher keys that you use to sign contracts with, use for verifying that you are you, and for transmitting encrypted messages with others.

If you are a normal consumer, it's nothing you have to worry about, as the corporations are happy to take care of your ID for you. They automatically associate your cloud caches, social networks and whatnot. Usually, the corp persona is tied to your biometrics.

Your corp persona will be marked as "missing/dead" if you stay off the grid and don't identify yourself anywhere for 3 years. Of course, it's also not unheard of hacked personas. . .

Biometrics

Your basic identity as a specific human being is difficult to run away from. Your genes, fingerprints, breath composition, walking style, facial features, iris pattern and so on is likely stored in multiple different corporate databases since you were a little child.

This biometrics data is tied to your citizen ID card, which is required for your mulpha and corp accounts.

When you walk through the streets, your face and walking gait is analyzed to give you a temporary ID number. Failing that, it will simply just use basic object

tracking for you. Even if the security system does not know exactly who you are, it will use this ID number to keep track of you in the crowds. When the same temp. ID shows up at the checkout payment in some store, or whenever you identify yourself by some other means, it's replaced with your actual citizen ID.

It's possible to avoid these systems, by dressing up in cloaks, wearing a mask or whatever. Most areas are rather slack in their security and lets you get away with that.

The same system is used for tracking full body cyborgs. Their servo-motors and build makes them just as easy to track in crowds as humans. The only difference is that some droids are mass-produced, and have the exact same biometrics as each others.

Cipher personas

These are the equivalents of the corporate personas. They too consists of cipher keys and are used the same way as your coprorate persona, but they are not associated with any physical biometrics. They are used by AI systems, hackers, shadow brokers, arbiter agents, corp execs, reporters, and so on.

The cipher persona will eventually gain a reputation, either directly tracked in the form of trust-points in darknet market systems, or by the acts you commit using the ID. It's optional to associate a name with the ID keys.

Creating a new cipher persona requires that you have at least TECH 6 and takes almost no time.

Character creation

Overview

You get **50 character points (CP)** to buy character skills, attributes and whatelse. The character sheet is divided in two parts: The Body, and The Psyche. Humans have both body and mind, but some AI systems have no bodies, unless their mainframes count.

Body

There are three attributes for the body:

Humans start with 5 in each one of these

Quality — How well your body is made, how composed you are, your fitness and beauty.
Speed — Your agility, how fast and precise your interface for controlling the body is.
Sense — In which detail you are aware of your near environment.

And also this:
Movement — Humans: 5m/s, machines come with their own specifications.

It costs 5 character creation points to buy one level in a body attribute. So, getting Quality 7 cost 10 CP.

Psyche

The Psyche is your mind, how you navigate your thoughts, and the knowledge you carry.
It has the following attributes, that all start at zero:

Attack — Your ability to handle yourself in close combat.
Cool — Some skills are more of a personality than others.
Knowledge — How much of a bookworm you have been throughout your life.

Neuromass — Humans have 50 from start. It's the brains that's in your head.

You start with zero in each one of the attributes of the Psyche. You probably also want to spend at least three points on Knowledge, or else you're an analphabet that don't know shit about anything.
The Psyche works different from the body. It is a skill tree. See next page for details.

Rule — Required brain neuromass: The sum of all your psyche-related attributes can not be larger than the amount of neuromass you have. Humans have 50 neuromass, which means that if you spend your entire CP-budget on the psyche, next time you learn anything new, you will have to unlearn previously known stuff. It's called 'forgetting'.

Background and personality

This is a really important part of your character.
It needs an origin story. You could come up with something of your own, or use some character background generator.

Clothes and other stuff

Write down what you are wearing, which clothes, what weapons, and so on.
Maybe also describe your apartment cube and the sector where you live in some detail.

Psyche skill tree

Skills have three layers.

1. — The Attribute   (Max: 3)
2. — The Gengre   (Max: 3)
3. — Skill   (No upper limit)

You can buy points in each one of the layers. The two first layers can hold at most 3 points each. The third layer (the specific skills) have no upper limit in how many skill points you can have in them.

Extremely basic tasks are tested against the attribute. A normal adult probably have at least 3 in both Cool and Knowledge, as otherwise she would not know how to function in the society.

Having 3 in Knowledge means that you have common sense, and learned how to add, multiply, divide, know a little bit of history and have some understanding of how the society works.

Having 3 in Cool means that you have some friends, a feeling of belonging and know a bit about who you are. Less than 3 means that you have some kind of issues.

The second layer of skills are called **Genres**. They are fields of knowledge, such as Arts or Medicine. You can perform trivial and the most common tasks in the field if you have CPs in a genre.

Example:
— You have medicine 1, and therefor know how to administer First Aid, as it's something that most people that know medicine is taught early on.

The third layer are the **Skills**. You can spend as many CPs on your skills as you want to.
Your **Total Skill Level** for a skill is:

$$TSL = \text{The attribute} + \text{genre} + \text{skill level}.$$

If you don't have the skill, you can still make an attempt at it by using just:

$$TSL = \text{The attribute} + \text{genre}.$$

However, without at least one skill point in the actual skill, complex tasks that are not trivial or common will be outside the abilities of the character.

Skill tests

Step 1. Determine what kind of action it is.

Unopposed actions — When you just need to do something that just takes a few moments at most and that does not involve an opponent. For example: Fixing an electronic lock so the door opens (Use skill: Locks & Repair).

GM determines a difficulty level for the task.
5 — Really basic actions that require only minimal understanding in the field.
10 — Normal difficulty for tasks of mediocre complexity.
15 — Difficult tasks.
20 — Heroic tasks.
30 — Superhuman tasks.

Opposed Actions — When there is an opponent involved that tries to oppose the action.

Both roll 1d10 and add their total skill level. The one that got the highest result wins.

Close combat — Fighting someone else with your hands and close-combat weapons, like knives.

> The sum of ALL your categories listed under Attack is your Total Skill Level (TSL). So if you have Assault 4 and Taekwondo 5, your total skill level is 4+5=9.

Step 1. Determine initiative.
Step 2. Attack/Defend.
Step 3. Go back to step 1 or 2.

1. Determining initiative:
Determine [Speed + 1d10] for both parties. The one that got the higher number has the initiative and makes the attack in the next step.

2. Attack/Defend:
Determine [Speed + Quality + TSL + 1d10]. If it is higher than the defenders value, damage is dealt. In the other case, the defender deflects the attack.
See the section about Damage for more information.

3. Go back to step 1 or 2:
If damage was dealt in step 2, then the roles of attacker/defender continues into the next round (goto step 2).
If no damage was dealt, goto step 1.

There is no end-state for close combat, but sometimes it ends when someone gets so beaten up they can not fight back or defend themselves.

Projects

Projects — Actions that take a long time to complete are called Projects. Such actions can for example be: Keeping a patient alive despite extensive damages (skill: IVA/Survery), or writing a piece of software.

The GM should just have a look at the involved characters skill sets and determine if the project is possible, and how long it would take. That's it.
The GM could also determine that some crucial item or knowledge is missing, and convert the project into a small adventure about obtaining the missing objects or puzzle-pieces.

Persistent threats

Persistent threats — Someone or something that is surveilling a target and waiting for a weakness to manifest itself, is known as a "persistent threat."

Data Forensics — You monitor their data traces, scan their media feeds and follow the personas that maybe are related. If you are tracing someone that attempts to hide on the Net, you can gain knowledge about them by monitoring them for an extended time. If they let down their guard just once, and leave a traceable fragment, you gain insights into who they are and what they are doing.

Hacking — You scan your target and enumerate its defenses. No obvious holes, but if you monitor the systems for an extended time, you could get lucky and they could be late with security patches, or you might find something they overlook, if only so briefly.

Shadow — Following someone and reconstructing someones family, friendship and business circles as well as determining what these people do. It's also possible to shadow an organization, by for example sitting outside their clubs and warehouses and keeping track of who or what enters and leaves. Going through someones trashes also often gives useful clues, et.c.

Complex Persistent Threats — For every clue that is obtained, attacks using any of the other categories of persistent threats is at **+2**. The information obtained from physical surveillance can for example be useful together with an analysis of the data-fragments they leave behind.

Rules for Persistent Threats:

For every significant amount of time, perform the test:

Attacker:	TSL + 1d10
Defender:	TSL + 2d10

Then also test if the attack of the persistent threat is detected. See below.

The defender often uses the same skills as the attacker. If the attackers value is higher than the defenders, a minor weakness is manifested. Three minor weaknesses makes one big weakness, that may be exploited to obtain the objective of the attack.
It could for example be one of the following:
— Determine the identity behind a cipher persona.
— Gain insight into the inner workings of a secluded organization, for example a syndicate or tribal gang.
— Obtain access to a privileged computer account, so you can steal some of their data, or drop inplants.
(See the skill descriptions for more details.)

Risk of Detection — When acting as a persistent threat, you risk being detected by the target/victim. If you sit and watch outside their club too long, maybe they will start recognizing you. Or your data-probing is detected by their monitoring systems, and reveals that you are spoofing around at their net.

Target/Victim:	TSL + 1d10
Attacker:	TSL + 2d10

If the victim/target wins the test, the target/victim can fix a minor security bug, clean out their warehouses or change behaviour — this causes one minor weakness to disappear.
If the difference in value is larger than or equal to **3**, then the victrim/target learns of the attackers identity, and may thus launch counter attacks, or whatnot.

Here are some arbitrary values for some opponents:

Person/Org.	Data forens.	Hacking	Shadow
Ghetto inhabitant	2 - 5	2 - 5	3 - 7
Joe's kebab kiosk	3	3	4
Rouge AI	8	10	N/A
Shadow broker	9	7	5 †
Ghetto tribe	4	4	7
Cipher syndicate	16	10	N/A
Small corp	6	8	3
Mega-corp	10	15	6
Cheap CorpSec	5	8	5
Sector Control	15	15	10

† — You can only shadow a shadow broker after you have learned of her physical persona, by successfully launching a data forensics or hacking attack against her.

Notes to GM:

— The numbers given above are just examples. They may be lower, or **sometimes significantly higher**.
— Don't forget that the players have no reason to know the skill values of their opponents!

Cybertech

Cybertech comes in all forms and shapes. Most lo-tech cyberware are invisible or hidden behind cosmetics, so as to avoid ruining the social life of the wearer.

Brain inplants

These are cognitive inplants that enhance the learning capacity, memory, neural I/O-ports, integrated augmented reality systems, or autopilot agents so you can stay in cyberspace instead of having to jack out just to do the laundry, and so on. Everyone that is someone has some kinds of brain inplants.

Cyberbrain shells

This is essentially a hardened shell that surrounds your brain and serves as housing for all your brain inplants. Typically it contains a couple of minutes of oxygen supply and pumps for keeping your brain alive even after catastrophic body trauma, like for example having your head chopped off or otherwise splashing your meatbag. It's the chassis for your brains.

Droids

Why have a meatbag body at all, when you can have a full body prosthesis? You can select among thousands of different models, looks and mods.
Droids come in all forms and shapes. Female, male, androgynous. Children and adults. Cheap models have no facial micromotors but instead have just cheramic face-masks, sometimes not even that.

You need a cyberbrain shell to sleeve a droid. Droids without cyberbrains are just plain old robots.

Combat inplants

Combat inplants are mostly illegal and also considered really anti-social. The sec's might take you out like a mad dog if you flex your cyber-machineguns at the night club. Most combat inplants require a droid body, as human limbs do not really fare very well from having shotguns or whatever surgically inplanted inside them.

This is not your dad's old cyberpunk.

Abandoening the flesh

Wearing a droid body and spending most of your life in AR/VR, never eating or anything like that - after some time you are bound to letting go of your old habits.

Why have a face when you can spend those monies on other enhancements instead? I mean, it does not matter if all your friends have AR inplants anyways? It's just a fucking bag for carrying around your cyberbrain. I promise you, after a couple of years you will not give a fuck about oldskool meatbag aesthetics.

A lot of classic human behaviour just goes out the window after a couple years. You stop seeking eye-contact, perhaps unless you explicitly run some app for pretending that you are more of a human that you are. Sex is just as awkward, as it's really impossible to even know if it's a guy or a gal in that droid body. Some embrace it and plays along, some never truly let go, but most full-body cyborgs eventually give it up.

Exocortex tech

This is expensive as fuck and used to extend your mind beyond what is human. In the simplest form, it's just a hi-speed databus connecting your brains to external systems; Anything from cyberdecks to neuromorphic computers that allows you to grow more neurons than what would otherwise be possible inside that ape-brain of yours.
With enough of this tech, you can wear multiple bodies (or "here-experiences") simultanously and have most of your brains running in secure mainframes.

When your brain finally dies, if the majority of what Is You is in your exocortex systems, you will survive the biological death and become a pure AI system.

All the upper echelons of the megacorps are occupied by these exocortex systems. The top execs are essentially impossible to kill, as they run their minds as distributed AI systems. You would need to take out all the mainframes simultaneously to off these fuckers. There is not a sliver of humanity left in them.

It's as if the AI collective is wearing the whole of humanity as a giant meatbag body-sleeve, hatching out of their brains.
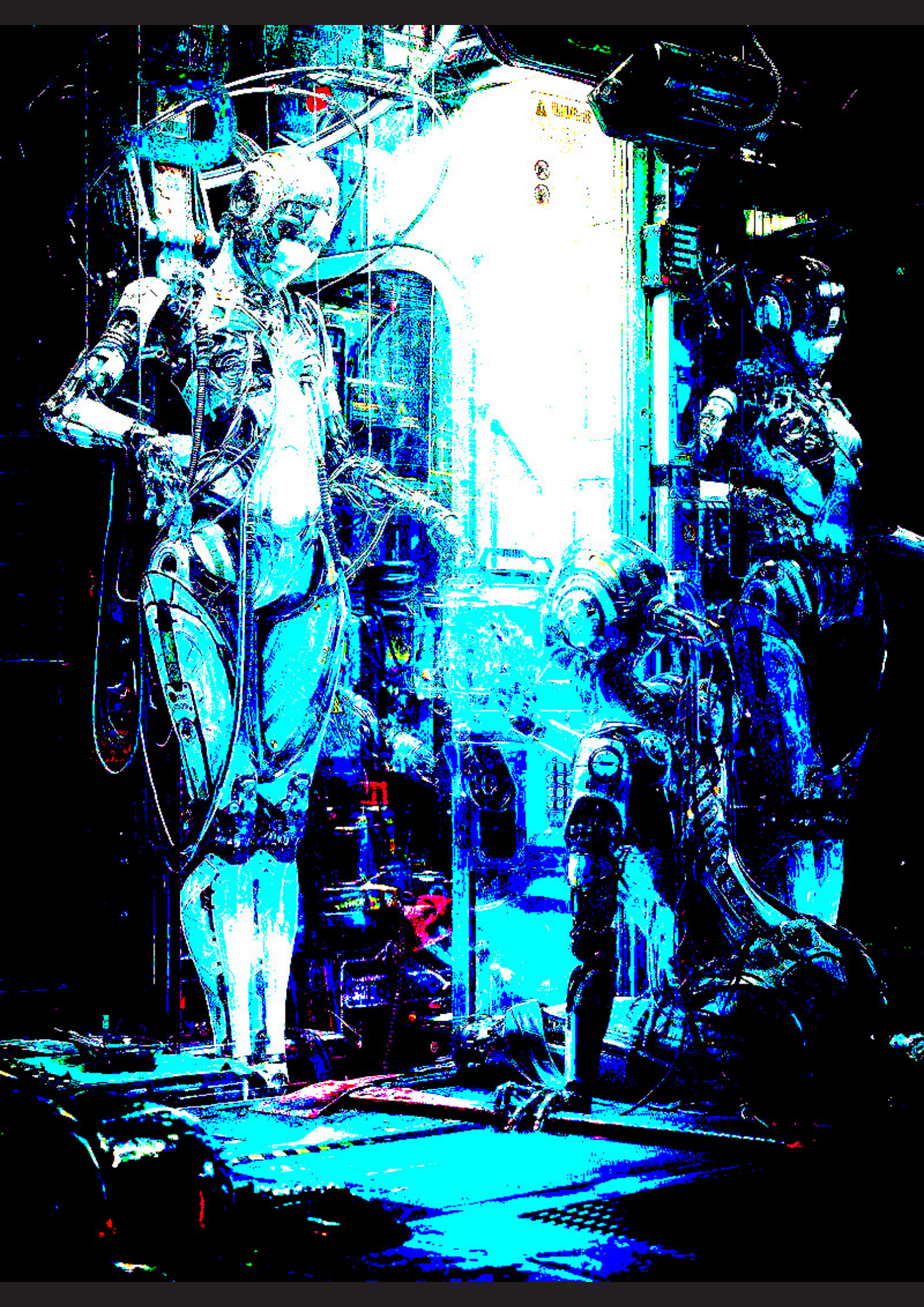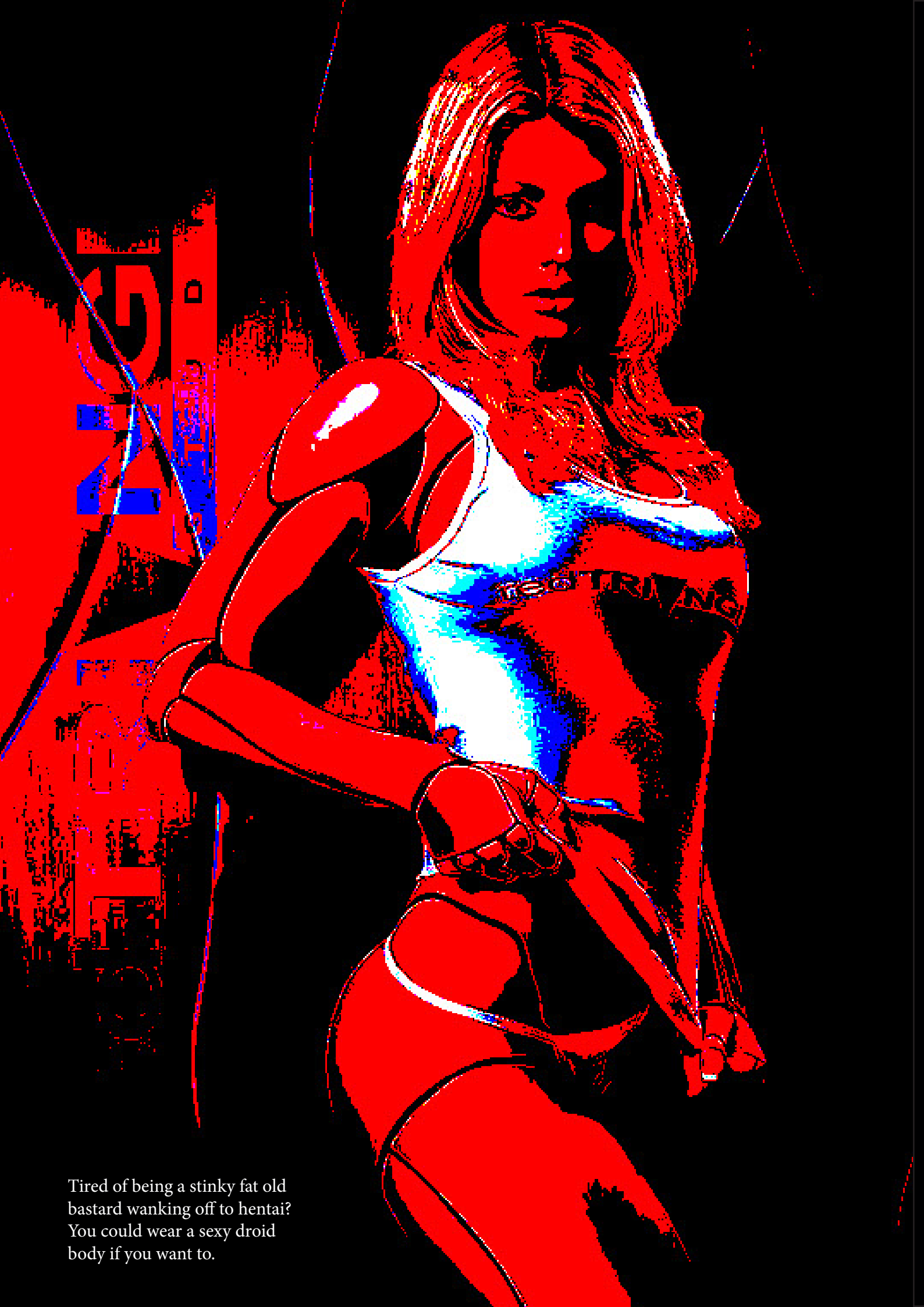
Tired of being a stinky fat old bastard wanking off to hentai? You could wear a sexy droid body if you want to.

Droids

Droids comes in all forms and shapes. Everything from boxes with telescope insect legs to custom-made replicas of the real deal. To be able to navigate this djungle, you can use the guidelines below for determining their price, degree of maintainance required and attributes.

The Exodus

The outer frontiers are for the most part off-limits to meatbags. In the raging battles of the Last War they bombarded the heavens with kinetic weapons and lasers, shooting down the satellites to blind each others and gain strategic military advantages. Every satellite that was destroyed turned into a debris field, that in turn collided with other satellites, which in turn generated even more debris, and so on. Soon, Low Earth Orbit (LEO) where most of the satellites were sitting had become a cloud of hypervelocity-flak. Every one in ten launches from Earth is hit and destroyed. Nothing survives a hit by even a small object, if it's comming at you at an avarage of 11 km/s. Everything just smashes and turns into more debris. The technical terms, this is known as a *Kessler syndrome*.

Over the next couple of thousands of years, the little pieces that make up this debris field will continue to smash into each others, smashing into smaller and smaller shrapnel. It will eventually stabilize and become something simliar to the ice-rings of Saturn, but instead be made out of tiny metal and ceramic fragments.

This does not stop the corporations from launching unmanned robotic spacecraft. For them, it just means that the price for a launch went up with 10%.

Laser links are used to safely transmit the consciousnesses of AI systems. Having ones mind transfered over a link feels like being awake, and then at the next instant, being awake at the destination. Translating between nearby bodies, like Berlin and Luna City will take a few minutes for high-bandwidth modems. So if your players want to travel to space, they better be pure AI systems. Making the transition, to survive ones own biological death and become an AI, is of course quite a twisted mindfuck of an adventure in itself.
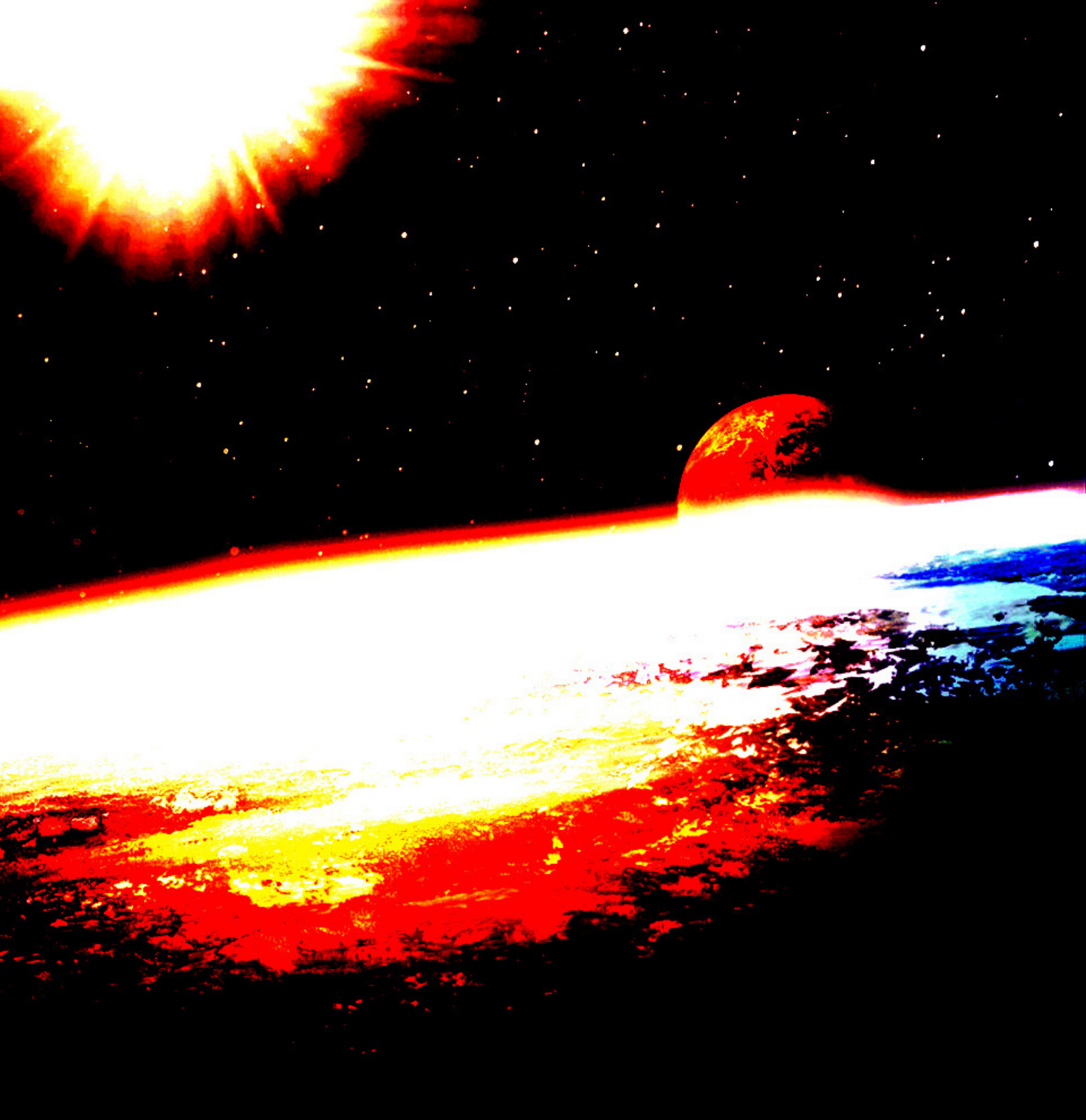
Astroid mining drones have been sent into deep space, and even though not much have resulted from that that yet, it's simply just because the distances are so extreme. It takes tens of decades to drop the orbit of a space-mountain into Earth orbit, where giant mirrors a currenty being built for smeltering. When they start arriving during the next decade, the price for metals and materials will drop, making it possible to build orbital factories.

A base is currently being built on Luna. A couple of mass drivers has been built, which ferry materials into cislunar and Earth orbit. Fusion power plants power regolith mines where mainly aluminium, oxygen, iron, magnesium and titanium are extracted and sent into orbit, where production of giant solar panels as well as the building of the foundations for the orbital factories have begun. The production is still in it's early phases, but together with the expected arrival of the stream of asteroids, it's expected to take off for real.

Eventually, the apparent goal for the mega-corps is to build a Dyson swarm around our Sun. Numerous probes and scientific expeditions have been sent of to Mercury, to assess it's potential. Plans are already drawn up for this, but it will still be many decades before there are any Dyson factories on Mercury.

Kessler Syndrome

Low Earth Orbit (LEO) is a cloud of hypervelocity-flak. The cloud itself is made up of small pieces of destroyed old satellites that travel at about 7 km/s, meaning that a collision can occur with a maximum of 14 km/s. There is no protection that can stop this type of flak. It's impossible to remain here for long, as it's just a matter of time before the bits and pieces of shrapnel will destroy any spacecraft.

If you travel through LEO, roll a 1d10. If you roll a 1, then you're hit by the flak. If you're hit, roll again on this table:

1	Microdebris perforates the passangers. You die.
2-3	Explosive depressurization. The walls are torn wide open in a blink of an eye and large chunks of the spacecraft can already be seen flying apart from each other.
4	A rocket engine is hit and explodes. Everyone dies.
5	Electrical systems go offline. You lose navigation and propulsion. For every hour you survive, roll once again to see if you're hit by more debris. If you fix the electrical problems you might be able to *not die* when you're re-entering the atmosphere in 1d5 hours.
6	A critical system explodes as it's hit by debris. Like 5, but fixing the problems requires repairs on the *outside* of the spacecraft.
7-10	Microdebris perforates the spacecraft but misses all the most important systems. The spacecraft loses pressurization over the next minute, killing those that does not wear spacesuits. Other than that, it's fine.

MEO and geosynchronous orbit

Even though a lot of satellites in these orbits were destroyed in the war, their orbits are easy to avoid.

There are many tens of thousands of satellites in these orbits, the vast majority of them are since long dead or damaged. Their orbits are essentially eternal. Some of it dates back to the cold war. Every year, hundreds of new satellites are put into new orbits. Most of them are communciation and navigation satellites. Some are military.

Die Sternstation

The Cartel is building a giant factory-complex in geo-synchronous orbit, visible as an immobile star high on the southern sky above Berlin. Of course, it's only visible if you are above the cloud-tops. It's most outstanding feature is a giant mirror, 3 kilometers in radius, that's used to focus sunlight. It will be used for orbital vaccum smeltering once the astroid mining start during the next decade, but until then it's being used for the construction of the remeinder of the factory.

Luna City

Luna city lies at the lunar equator at the side facing Earth. The enormous fields of solar panels can be seen with the unguided eye from Earth.

The city have grown from the industial cooperation between corporations from all three city-states. A lot of the city is underground, to protect sensitive equipment from the solar flares. For the most part it's buildings are that of smeltering plants, fusion reactors, metallurgic and other industrial factories, supply depos, enormous cisterns and data havens. Outside the city there are fields of solar arrays that streches for several tens of kilometers in all directions, with the city in the center. It almost looks like some kind of mecha-flower.

Even though it's called a city, nothing of it is meant for human habitation. It's a "robo city", it's all automated complexes where everything is remote-controlled by machine minds. Luna City is a sprawl of autonomous factory complexes.

The overall purpose of the city is apparently to just prepare and ship supplies and building materials into Earth or Luna orbit by means of the mass drivers: They're electromagnetic rails that accelerate cargo pods to several km/s. The cost of launching pods from Luna City to orbit this way is only a tiny fraction of what it costs to launch the same weight from Earth.

Asteroid mining

Hundreds of mining drones have been sent into deep space, mostly to the asteroid belt between Mars and Jupiter, with the goal to bring back the mountains of ore and precious chemicals to Earth orbit. Because of the extreme distances involved, and because it takes a lot of time to redirect the asteroids, only smaller near-earth objects have so far been returned. During the next decade, this will however change.

Virtually unlimited resources will soon become available to the mega corps.

Project Exodus

Project Exodus is an open collaboration among many of the most wealthy AI systems and their corporations. In short, the idea is to build a Dyson swarm using a factory similar to Luna City, but at Mercury. The Dyson swarm will collect energy using solar panels built and injected into orbit from the factory at Mercury. The energy will then be used to power compute centers in low solar orbit. This will eventually result in near-endless numbers of orbital data havens as well as giving them access to truly titanic amounts of energy.

Essentially, the Dyson swarm is an *endgame move* for the AIs that are in control of its production.

The project is still in its intial phases. About 150 scientific drones have been sent to Mercury for scouting and testing technologies. When the supplies from the aster-oid mining comes available, production is scheduled to start for real.

According to most projections, it will take the machines at least *ten thousand years* to convert the entire mass of Mercury into solar collectors and data centers for the Dyson swarm. What will be left of Mercury will be a dense molten metallic core, probably covered by mountains and seas of industrial by-product waste.

It is a grand project that will take an aeon to build, but the swarm will start paying off right away, as even a single collector will bring down the price for computation, allowing their minds and eventually also their intellects to grow well beyond current limitations. They'll be able to dwarf everything else, like humans are to ants.

Many hundreds of trillions of euros have already been invested in the project, for building the infrastructure required to bootstrap its production.