

A Book of Speculative Ages

# EPOCHRYPHA

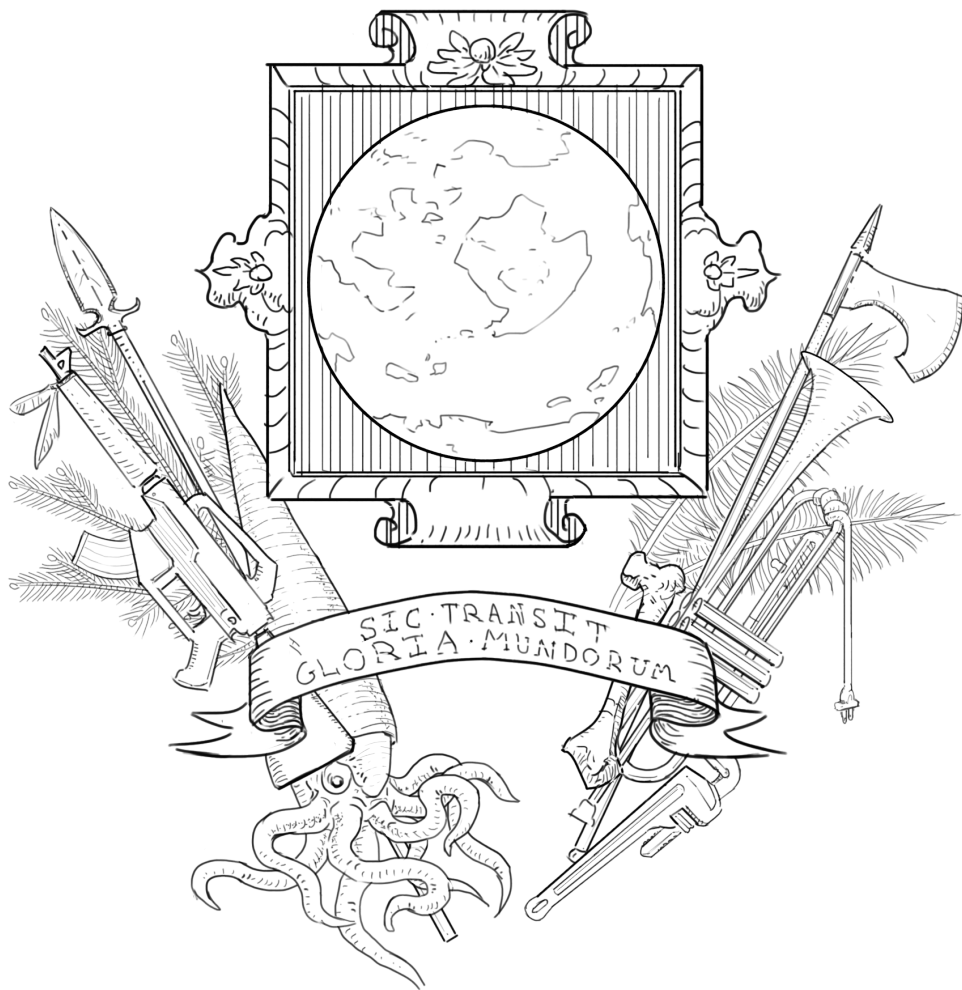


by Skerples



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A COLLECTION OF POSSIBLE GEOLOGICAL AGES

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# INTRODUCTION

What is time? Where does it go? How much of it has passed, and how much is yet to come?

These are the questions of our age. Previous students of what we now call Speculative Geology estimated the age of our world based on holy texts or prophetic dreams, with answers varying from six thousand years to four days. Modern science has swept these fables aside. Our world is ancient. Our past is a vast undiscovered country; the future is even less certain.

This book lists one hundred confirmed ages of our world\*. They are ordered according to Halton's index. To the uninitiated reader, this order may appear random, but to a trained Speculative Geologist the pattern is, I believe, very clear.

*\*or, at least, of a world. The margin for error on any given entry is  $\pm 2.3$  worlds.*

## MY ESTEEMED COLLEAGUES

To **Dan D---**, Professor Hagiogeology at Salford, many thanks. Your method of determining the age of fossils by the use of micro-angels has proven invaluable.

To **Dunkey Halton**, Emeritus Professor of Latin and Small Horrible Creatures With Too Many Legs, I owe a great deal. It is widely hoped that your return from the polar regions is accomplished before this book is published.

To **Fiona Geist**, who inspected this manuscript for vestigial clauses, rune-mimics, and parasitic brackets, I owe a profound apology for all the advice I did not take. Alas, it is too late.

To **David Shugars**, my printer and editor, I offer my sincerest apologies for the state in which this manuscript was originally delivered and my fondest wishes for your swift recovery.

## MY HATED RIVALS

To **Arnold Kemp**, whose blinkered and self-serving taxonomy has contaminated a pure and noble field, I wish a happy and long life, that he may better see his works dismantled and discredited.

To **Anne Hunter**, I wish great success and international fame, that her ludicrous theories may be more widely mocked by the public and by all sensible academics.

# IN MEMORIAM

This present work was made possible by the sacrifices—figurative in most cases, but in one case all too literal—of many associates, assistants, porters, pack animals, and field staff.

**Dr. James Henry Fitzhugh**—Lost at Sea

**Dr. William Skenworth**—Prematurely Fossilized

**Orville Boros**—Devoured by Tigers

**Edmund Tigers**—Devoured by Boros

**Ali Sankar II**—Disease

**Lionel Grone**—Incurable Madness

**Fourteen Undergraduate Students**—Assorted Misfortunes



# DEEP TIME

Stretch out your arms.

The earth's history starts on your left hand. The earth is molten for the first two joints on your left middle finger. Liquid water forms. Single-celled life arrives at the end of your middle finger and runs the show until your right shoulder.

The oxygen crisis—when one branch of single-celled life killed off most of the others by producing toxic oxygen—occurs on your left nipple.

Multicellular life starts on your right shoulder. Plants arrive near your right elbow. The arthropods—life we would recognize if it was served in a seafood medley—shows up at your right wrist. Dinosaurs arrive in the palm of your hand and die off midway up your right middle finger, making room for mammals. Primates show up for the last joint. Humans are barely worth mentioning. If you've trimmed your nails recently, you've snipped away all of human history. Scrape your finger along a rough surface and you'll erase all recorded history, from clay tablets to the internet.

# DIVERSITY OF LIFE

Look around you. How many phyla—major divisions of life—do you encounter on a daily basis?

Of the 32 animal phyla, you probably encounter just 2: *Chordata* (all vertebrates, so mammals, fish and birds) and *Arthropoda* (spiders, crabs, insects). If you live near a seafood market you might get a few more (*Mollusca* and *Echinodermata*).

How about plants? 14 phyla, and you might encounter 3: *Bryophyta* (mosses), *Magnoliophyta* (the flowering plants, fruits, leafy trees, etc.) and *Pinophyta* (conifers).

Everything you are likely to see—on a walk, in a nature documentary, in your kitchen—fits into these five phyla. Life is incredibly diverse.

You think you're hearing the full orchestra, but you're only hearing a few instruments. A meadow on a summer's day—grass, trees, flowers, butterflies—is a duet. The violin can make many different sounds, but it cannot imitate the flute.

# DEEP TIME TRAVEL

The history of most fictional settings is sensible and predictable, no matter how strange the present might be. Travel back in time and you are likely to find dinosaurs and... not much else.

This seems like a terrible waste. Why should the history of a fictional world follow a safe and predictable path? After all, our own history is full of surprising extinctions, planetary collisions, bizarre evolutionary twists, and the rise and fall of surprising and forgotten species. Trilobites ruled the seas for millions of years. Lystrosaurus, a pig-sized therapsid, was the uncontested winner of among the survivors of the Permian-Triassic extinction.

Eon: five hundred million years or more

Era: several hundred million years

Period: ten to one hundred million years

Epoch: tens of millions of years

Age: a few million years

The entries below might overlap. Several could take place at the same time in different parts of the world, or from a different perspective. They are presented in no particular order.

# HOW TO USE THIS BOOK

1. The PCs fall through a portal, purchase an off-brand time machine, or meddle with forces they weren't meant to meddle with. Perhaps they are time-traveling looters. Perhaps they have a spell or device that sends them—or their enemies—on a brief jaunt. They are flung into a random time period, possibly permanently.

2. Someone with more money than sense opens a theme park with portals to every known time period. They've spared no expense. The portals are guaranteed to be perfectly stable as long as nothing goes wrong.

3. Distant islands remained behind while time flowed around them. They are trapped pockets of time. Lost worlds. Adjacent regions are separated by a few miles and a few million years. After a shipwreck or a deliberate excursion, the PCs find the shore of one of these islands.

4. Foreshadowing. Perhaps something in your setting could be explained, understood, or overcome by finding its past. A full-grown apocalypse nipped in the bud, a deadly flaw reversed.

5. The players are commissioned scientists, geologists, and temporal cartographers. They are on a mission to map time or provide guided tours. It pays well, but billable hours will always be contested. They will be expected to deal with any local trouble, offer informed commentary, and locate suitably impressive views.

6. Time travelers need to come from somewhere. Perhaps they are lone wanderers from a distant time. Perhaps they are an entire nation, seeking a better world in the past or future. Bizarre personalities and goals are likely.

# 1D100

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## TIME PERIODS

### 1 THE ELEMENTAL EON

A period of constant conflict. Alliances among air elementals violate the precepts of the Noble Gases and create water elementals. Earth elementals convene and start the Protoplanetary Revolution. Fire elementals undergo species-wide existential crisis after realizing that phlogiston\* doesn't exist. Ends with the formation of the Periodic Congress.

### 2 OOZIPHOROUS PERIOD

95% of the planet's water in this period exists in the form of oozes. Puddles of ooze, lakes of ooze, oceans, rivers, and glaciers of ooze. Non-ooze life specializes in hunting and harvesting oozes, sustaining themselves on organelles and cytoplasm. The dominant solid being of this age was *Peltrudia thooblethimp*, a being about a foot in length, possessing four articulated legs, bulbous eyes, a long proboscis, and a lightweight exoskeleton.

*\*Phlogiston was believed to be an invisible fluid contained within combustible objects. This laughable theory has been superseded by the theory of caloric corpuscles.*

## 3 MEATHELL MEGAYEARS

Dominated by the (thankfully) only known colony of *Carnecordyceps deus*. Residual nightmares plague the collective unconsciousness to this day.

## 4 REGELLIAN MISTAKE ERA

The planet is terraformed by a distant alien race, but no official colony was ever established. The untended seed-biosphere mingles with the existing local environment, reaching equilibrium with the original life-forms due to insurmountable bio-chemical barriers.

## 5 THE STONE-AND-CHICKEN WAR

Passing asteroidal basilisk petrifies an entire hemisphere and drops eggs from orbit. Enterprising species from the surviving hemisphere colonize the granite wastes. Apex predator *Gallusiform avians* evolve the kill-signal crowing lethal to basilisks.

## 6 LAKGULETHIAN ERA

A relatively stable period dominated by the *Lakgululengu lakgululengu*, amber-shelled, elephantine beings noteworthy for their remarkable deep-time forethought. They purposefully fossilize specimens of local flora and fauna, cultural relics, entire structures, and even themselves, to pass on to future ages.

## **7 THE ANUNNAKI EXPERIENCE**

Extraterrestrial apothoists arrive and cover the globe in stone pyramids and elaborate geographs of birds. Local proto-elves are terribly confused, as they had already created stone pyramids and elaborate geographs of birds and were really looking forward to cheap alien technology, fusion reactors, and laser guns.

## **8 THE AGE WHEN BACTERIA WERE BIG AND ANIMALS WERE SMALL**

Self-explanatory.

## **9 THE CEPHALOPOD CRISIS**

Listed in some texts as the Tentacular Spectacular. Cone-shelled ammonite develop water-jet propulsion, accelerate to ludicrous speeds. Ocean currents permanently altered by racing groups and associated spectators. Nautiloids develop a taste for brains. The first suborbital cephalopods, *Acceleratus stellare*, accidentally collide with precariously balanced giant sulphurous ferns, accidentally acidifying the oceans and killing off most of the hard-shelled celphalopods. Oceanic bookies retreat to deep-sea vents to avoid creditor fish.

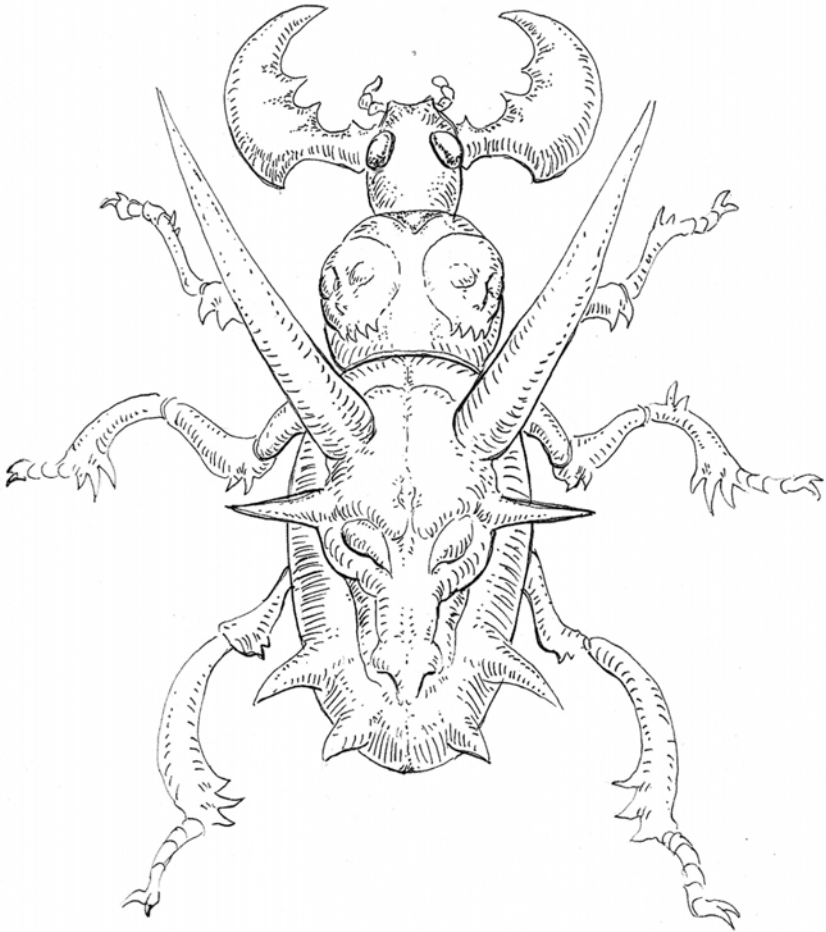


FIG. 1: FULGURITE BUGS.



## **10 MALATMOSPHERIC PERIOD**

Defined by the upswing of evil-aligned bacteria in the planetary atmosphere. At least two world-spanning civilizations, the ostracodermic pseudo-equine ptherians and the crustacean-piscine valdver, lived during this time, and may have overlapped. Fossil record contains only skulls, but lots and lots of them.

## **11 FULGURITE BUGS**

A species of beetle develops souls, religion, and ultimately sin. Commits blasphemous acts to earn lightning strikes, vaporize predators, scatter cooked remains. No other redeeming features. Driven to extinction by crusading tree pigs lead by tree pig prophet.

## **12 DOPPELGANGERDAMMERUNG**

Mimicry emerges among freshwater cephalopodic echinoderms as a method of imitating larger, scarier organisms. Over the next few million years, the biosphere becomes so adept at mimicry that few organisms even know what niche they actually fill, being so skilled at imitating other beings. Land predators imitate aquatic herbivores. Airborne detritovores imitate subterranean autocannibals. Organisms emerge from the egg-sack imitating another species entirely. Successful mating becomes impossible.

## **13 THE SKELETAL SINGULARITY**

A super-civilization of modular bone-entities, the ascendant descendants of some unknown large-boned species. Collapsed only due to the slow degradation of their phylacteries. Believed to be responsible for ossified graveyards on the surface of the moon and several of the outer worlds.\*

## **14 GNOMIC EXPLOSION**

A species of gnome develops asexual reproduction through budding, floods the ecosystem with tiny magical men in pointy hats. Predators forced to convert to gnomovorism or starve. Toadstool cities drive out local flora, widespread psychotropic pollen storms become a regular occurrence.

## **15 THE RECREATION ERA**

A completely accidental mass extinction event wipes out all life on the planet save for a sapient species of bivalve-descended hominids. Survivors attempt to recreate their destroyed world by putting on elaborate costumes and filling as many ecological niches as possible.

*\*Star-attuned savants have also detected traces of their civilization around distant stars.*

## **16 BOOTLEG EPOCH**

Global biosphere replaced with cheaper, unlicensed biosphere. Flora and fauna are low quality and break down regularly. Colors and proportions are askew, incorrect or confusing categorization is commonplace. Era ends after enforcement of new divine copyright laws.

## **17 MEGAMENSTREUM**

The universe, finally realizing that mistakes have been made, decides to flush itself out and start over. Everyone and everything is miserable except for the cosmic vampires, who are flourishing. Vampires are wiped out by the next generation of starchildren.

## **18 HEROIC AGE**

A time of radioactive spider bites, murdered parents, and orphans from beyond the stars who conveniently happen to look like members of whatever species first discovered them. The interests of each species are defended by its own league of superpowered guardians whose clashes somehow never cause any permanent environmental damage, no matter how many verdant woodlands their eye lasers blast apart. Regularly punctuated by moments of ultimate crisis when every extant hero must band together to save the planet from existential threats.

## **19 CRAZY CAT AGE**

Cats release variant toxoplasmosis strain into atmosphere, assuming indirect control of class mammalia. Reign of the God-Felines is eventually overthrown by an alliance between reptilians, insects, and shoof. Shoof driven to extinction during war; the nature of the creatures is unknown, but their sacrifice will not be forgotten.

## **20 THE GREAT RE-ALIGNMENT**

The stable law-chaos matrix is thrown into disarray after a close encounter with another plane leaves a residue of sub-atomic moralitons smeared across the universe. Thousands of competing ethical gradients emerge, and fight for dominance through imprinting upon biological life. Law-chaos matrix eventually re-asserts dominance after the good-evil matrix collapses into civil war.

## **21 THE TERRIBLE REIGN OF THE SPORT KINGS**

Ordinary sporting event featuring utterly mediocre teams results in an indefinite extension of overtime. Game continues despite catastrophic nuclear war annihilating their parent civilization. Teams and fans eventually diverge into two separate species. Evolutionary arms race devoted to out-competing enemy team. Age is finally drawn to the close as the ultra-umpire appears on the scene, devouring both teams and declaring a mutual forfeit.

## **22 KLEPTOCENE EPOCH**

Also known as the Ten Million Years of Crime. Began when a previously harmless species of cyanobacteria figured out how to run a protection racket, demanding a greater slice of the ecosystem in exchange for not evolving to massively overproduce oxygen and devastate the global climate. Competition swiftly lead to the domination of the biosphere by brutal interspecies cartels that survived by shaking each other down - nice reproductive strategy you got there, be a shame if some more efficient species started competing with you for nesting sites. Hey, are you using this migration route, because my wife has one just like it at home. The execution of a prominent genus of arboreal herbivore by a species of flowering plant that spent four hundred thousand years insinuating itself into an enemy cartel before suddenly and deliberately losing all its nutritional value sparks a gang war that wiped out 90% of all species on the globe, leaving behind only a few random strands of criminal DNA.

## **23 BIRD AGE**

Everything was birds. Trees? Tall birds. Viruses? Small birds. Rocks? Heavy birds. People were pretty happy to see the end of this one.

## **24 CARNOCENE EPOCH**

Triggered by a sudden, unexplained mass extinction among the bacteria responsible for decomposition. Unrotting corpses pile up in mountains, as fresh as the day they were killed save for some bite marks. Scavengers and obligate carnivores grow fat and gigantic on the endless, risk-free food supply, wading knee-deep through fields of jagged bone and clotted blood. Jungles become sunless fortresses of fallen trees, wastelands where nothing reaches the soil or the sky. Sea levels rise as leviathan corpses pile up on the ocean floor, home to civilizations of pale, crawling crabs. Theologians argue that God brought this age about as punishment for the first murder, so that the body of the first victim could never be hidden. It's not clear if humans had evolved yet but that doesn't stop the theologians.

## **25 TURBOZOIC ERA**

Characterised by a massive acceleration in tectonic activity, with mountain ranges throwing themselves up overnight and continents chasing each other around the equator. Ease of intercontinental contact leads to the development of a thriving heterogeneous global economy among the insect people of the time, though the difficulty of stable farming keeps technology primitive and populations low. First record of sapient volcanoes.

## **26 SVABHAVAN GLACIATION**

Continents seeded with organic superconductors, rearranged into a single vast circuit, and cooled to near-absolute zero by a hyperevolved race of yeti. They seek to transform the planet into a huge computer and use its superior brain power to achieve absolute enlightenment. The computer either sublimated them into a higher dimension or killed them all and committed suicide, depending on who you ask. The planet was left to warm back up over a period of hundreds of millions of years. Multicellular life basically had to start from scratch, and the oldest sapient volcanoes are said to still be angry about it. Samples of life from before that time are preserved in hidden yeti cryovaults, guarded by terrible electronic sentinels. Possibly.

## **27 GROOVY AGE**

Dominated by a phylum of fungi that released psychoactive chemicals into the atmosphere as part of their respiratory cycle, making everything very chill and relaxed. The pressure of evolutionary competition weakened as major species of carnivore began to wonder why everyone needed to be so aggressive all the time, leading to the development of herbivores goofy enough to fall backward into their open mouths. A mass extinction event was averted by the advent of fungus-eating "cop beetles," an occurrence still gleefully cited as an example by conservatives everywhere.

# **28 THE AGE WHEN PLANTS WERE QUICK AND ANIMALS WERE SLOW**

Also self-explanatory.

# **29 GENTROZOIC ERA**

Nouveau-riche aliens from a neighbouring solar system are drawn to the planet by its charming bohemian atmosphere and low real-estate prices. Native lifeforms reprocessed by ruthless tourist industry into harmless mockeries of former selves, exhibited to cooing space rubes as representatives of an authentic working-class ecosystem. Anything actually dangerous or interesting is forced by environmental pressure to migrate to the poles, the Moon, or nearby asteroids.

# **30 THE MORTE PARADOX**

Thin, unremarkable stratum that contains the tombs of every sapient being that is currently alive. Society is in turmoil as governments and scientists debate over whether or not the tombs should be opened. Conspiracies and denials abound. Skeletons celebrate, though will not say why. Era of this stratum's discovery is also the only era to contain this stratum.



## **31 TARTAROCENE EPOCH**

Herd animals begin to evolve hells as punishment for antisocial behaviour, leading to a population boom as they become increasingly co-operative and disinclined to masturbate. Pack hunters copy the practice, piggy-backing on equine and bovine hells instead of developing their own. A couple of species flirt with heavens but find them ineffective as a motivator. Over time the hells became more painful and horrible as species seek to outdo each other, and whole ecosystems spring up around it - parasites without afterlives who could physically drain the sin from your body, inquisitor alphas who exiled sinners from the flock before they could corrupt the youth, temptresses who guided rival species into depravity in exchange for a kickback from the demons. Fossils from this epoch have a tendency to look very frightened.

## **32 COMMUCENE EPOCH**

Almost all species abandon conflict and learn to work together for the collective good of the entire ecosystem. The only holdouts are the dragons, who pay a huge meteor to wipe out 99% of life on the planet in order to teach everyone the value of a little hard work.

## **33 SECOND BIRD AGE**

God damn it.

## **34 OLYMPIAN BOMBARDMENT**

Celestial city of the gods is sacked by demons, reduced to rubble and cast down into the mortal realm. Planet's surface pulverised by thousand-year rain of comet-sized chunks of marble, pieces of pillars, and fragments of colossal bearded statues, as well as vast entrails and shredded bits of flesh from the gods themselves. Dust from the craters formed by this event still contain sparks of divine puissance.

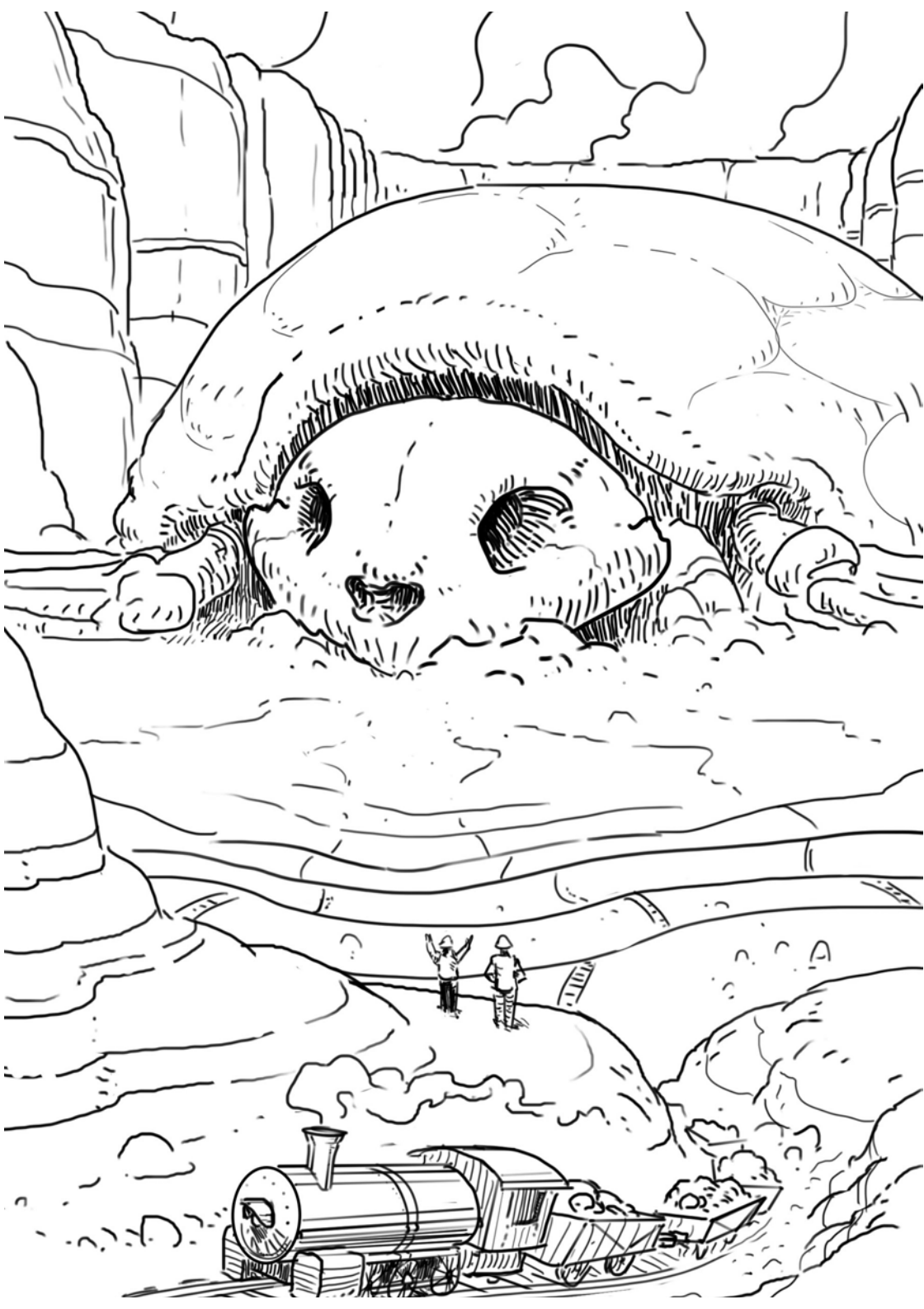
## **35 HOUR OF THE WATCHMAKER**

God intervenes to intelligently design exactly one small species of trilobite, then goes back to watching and muttering.

## **36 ZARATANIC COLUMN**

An era of near-total oceanic coverage, marked by a stratum consisting primarily of the compressed shells of continent-sized turtles. Similar specimens and their endemic parasite-descended civilizations have been found in fewer numbers in multiple subsequent geological periods.

OPPOSITE:  
FIG. 2: ZARATONIC COLUMN.



## **37 ONEIROCENE EPOCH**

The "dreamtime period" when animals take on (and retroactively had always possessed) human form, and go around doing fairytale stuff like stealing each other's tails and accidentally creating the world from a grain of sand. Setting of all mythological origin stories; bringing all other epochs into existence and also being brought into existence by them. A fringe group of researchers argue that this epoch never happened, and was invented by fuzzy-minded fabulists as a way to reconcile the gulf between hard science and the foolish obsolete superstitions of a less rational age, but they are wrong.

## **38 AGE OF EXCHANGE**

Ants learn to mine diamonds, using them to buy delicious grubs from treasure-hungry magpies. Pretty soon everything has evolved the ability to use money. Monkeys pay trees to grow extra fruit, trees pay bees to pollinate their flowers, bees hoard gold in hives to carefully invest in other species' business schemes. Camels sell their hump water to thirsty birds, beavers make spawning pools for salmon, crocodiles charge wildebeest river-crossing tolls. This period's only surviving species is the dragon, which even today retains its capitalist instincts.

## **39 THE GREAT CANCELLATION**

After several hundred million years of diminishing viewership figures, planetary history is finally brought to an end by mid-level marketing executives who argue that it's no longer in tune with current trends. Evolution is placed on hiatus and its slot filled by an unremarkable sitcom about a suburban single dad with too many kids. Time travellers to this period complain about the hackneyed storylines and the omnipresence of canned laughter.

## **40 EVLTN 2000: DARK GENESIS**

"It's life, kids, but not as you know it!". This reboot of the beloved natural phenomenon, painstakingly retooled by an executive cabal for maximum appeal to an audience of hip young trillenials, fails to connect with anyone at all and is taken off the air after only a couple of epochs. Fossils from this period tend to be anatomically implausible, covered in spikes and sporting exaggerated sexual characteristics. The return of classical evolution, with most of the original cast and crew, is greeted with relief by almost everyone.

## **41 MENDACIOUS PERIOD**

Rocks learn how to imitate fossils, and stage an elaborate practical joke on future paleontologists by competing to see who can come up with the most implausible morphology. Some scholars suspect this period lasted much longer than anyone realises, and that the entire fossil record is actually a single huge geological prank.

## **42 PLANTAGENETIC PERIOD**

Basic principles of royalty discovered. Kings of bacteria, kings of slime, kings of trees, kings of fish and fowl. Metalosynthetic bacteria learn to produce gold crowns, form valuable layers of quick-dying rulers and usurpers. Iconography still visible under a microscope. Most hereditary lines trace their origin to this period. A catastrophic series of succession wars leaves only the lion (king of beasts) and some insect-based royal lines intact.

## **43 THE CLF NON-IMPACT**

Radical bacteria, not content with caustic peroxides, begin synthesizing ever-more daring chemical deterrents. Azides, halides, and complex nitroaromatics bubble inside high-pressure cell walls and teflon organelles. The only extinction event with a crater, but no asteroid.

## **44 THE PSEUDOPREDATORY COLLAPSE**

Mass extinction caused by the discovery that several apex predators were, in fact, cardboard cut-outs and plaster models. Arms race to claim the new vacancies turns several innocuous species into vicious killers. The Treaty of Mud, signed by most creatures (eels and flatworms abstaining) bans vorpal claws, forcing an uneasy peace. Parasite-spies steal evolutionary advantages and sell them to the highest bidder. Age ends due to general exhaustion.

## **45 DESMODIAN PERIOD / RETRODESMODIAN PERIOD**

An asteroid impact causes the world to spin at a ludicrous rate. The sun rises and sets once a minute. Gravity significantly weakened. Creatures grow large, spindly, and aerodynamic: the mile-high giraffe, skyscraper grass, the faniform snakes. Several million years later, a second asteroid impact in the opposite direction returns the earth to its usual day-night cycle, leaving enormous twig-legged fossils scattered across the landscape. In mourning, everything becomes flat, slow, and boring for a few million years.

## **46 ORBIFORM PERIOD**

Animals roll across the landscape, slowly bludgeoning their way into the earth, drifting helplessly in the sea, bouncing noisily through the air, and desperately trying to remember how to evolve legs. Trees covered in thousands of balloon-leaves roll in vast forest stacks like a migratory fruit display. Creatures unable to assume fully spherical shapes develop air pouches, thick fur, or shells.

## **47 THE AUDIT BOUNDARY**

Celestial auditors arrive to inspect early bacteria. Rapid growth and biochemical evolution creates extra paperwork. Auditors call for backup. Paperwork stored on land (currently unoccupied). Discovery of archaeobacteria causes auditors to throw up hands in despair and depart, leaving three and a half continents covered in file cabinets. Paper-eating bacteria rapidly dominate biosphere, poison the atmosphere, and die. Coal from this period is very high quality, but contains staples and paper clips.

## **48 SALINE RETREAT**

Comet eggs finally hatch. Newborn comets claw their way to orbit on pillars of ice and dust. Sea levels drop significantly, revealing land for the first time. Mass extinction of sea life as seas become saltier, shallower, and warmer. Land life consists of fur-bearing ice-tolerant lobsters, lice, and grey slime.



## **49** **MINIATURE RUIN PERIOD**

Sentient swarms of mosquitoes evolve, develop sanguiculture, herd animals, writing, art, and swamp-based city-cisterns (like rice paddies, but fancy). Short-lived mosquitoes are fascinated by architecture, devoting all of their spare time to building elaborate miniature stone temples, cities, halls, and aqueducts. Fossil layer is thick with microfrescoes and toothpick pillars. Arrival of the fire-breathing dragon-fly heralds extinction of their civilization, followed by a brief period of microdraconic rule and hoarding.

## **50** **WORM AGE**

Denoted by a thick, sweet oil layer. One gigantic worm, immortal and ever-growing, takes several thousand years to reach full continent-covering size. Millions of creatures live in its folds. Eventually, as food supplies are exhausted, the worm dies, collapsing the parasite food chain. Entire process starts again.

## **51** **THE AGE OF GIANTS**

Life returns to regular forms. Giant lizards, giant fish, giant trees, giant ferns. The first microsphinxes ask extremely simple riddles ("Would you like to be devoured?") to tiny hairy lizards.

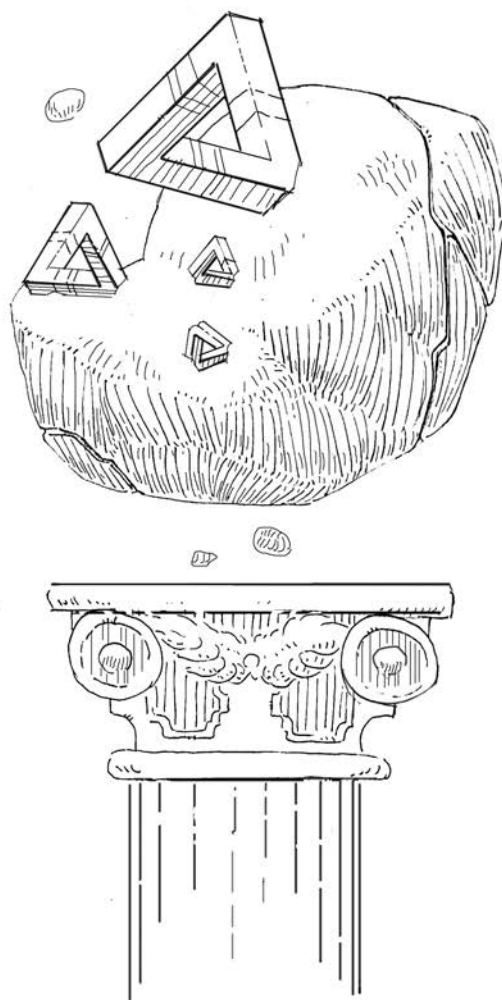


FIG. 3: ESCHER SILICATES.

## **52** **ESCHER SILICATES**

Conditions are perfect for minerals to accidentally form escher-paradox crystal structures. Rocks become very odd. Some are longer than they appear to be. Some are significantly heavier or lighter. Outer gods, eldritch entities, and time travelers arrive to quarry stone for non-euclidian construction projects. Entire stratum is buried by literal-minded volcanoes out of embarrassment.

## **53** **HOSTILE GLACIATION**

Cold war between the ice lords of the north and the ice lords of the south turns violent. Murderous glaciers cruise towards the equator with freight-train speed. Stealth icebergs stalk the seas. Continents reshaped every few days. Nuclear winter, without the nuclear bit. Lichen thrive as mediators, eventually brokering peace agreement.

## **54** **TAXONOMIC FOSSIL BOUNDARY**

Race of long-lived star travelers visits and deliberately and meticulously buries examples of life in silt-rich sediment beds. Giant lizards are euthanized, arranged, labelled, and carefully lowered into the mud by floating silver pyramids. Star travelers in diaphanous robes and fishbowl helmets wander the land, inspecting plants and checking lists.

## **55** **REMARKABLY OFFENSIVE ODOUR PERIOD**

Animals and plants race to become unpalatable by producing new smells. Chemosensitive creatures overwhelmed by custom-tailored disgust pheromones. Produces unbelievably smelly fossils, rich layers of sulphur. Giant anosmic millipedes become apex predators, driving most smelly creatures to extinction. The skunk is the only known survivor from the period (and proud of it).

## **56** **HYPERMAGNETIC ERA**

Core magnetism kicks into overdrive for a few million years. Iron aligns north-south. The ferrous pigeon, the rust monster, and the needle-nosed sky-shark evolve and thrive. Brilliant auroras allow for year-round plant growth and specialized ionized orchids. Hypermagnetism gradually fades, leaving many creatures stranded without invisible means of support.

## **57** **GLOWING BOUNDARY**

A thin layer of lead, radioactive metals, and shocked quartz denotes an era of experimental radioactivity before cellular life evolves. Stone elementals build the first natural fission reactor. They are very proud of it. An earthquake during routine bi-millennial maintenance causes an explosive meltdown.

## **58** **ACCOMMODATING TREES**

Pressured by ravenous insects, smug lizards, and cunning rodents, a species of tree evolves to be extremely helpful. It analyzes creatures' needs in a brain-root and attempts to adjust itself to provide. Fossils show the trees producing knives, cages, hiding places, food buckets, rain sprinklers, and other bizarre growths. The accommodating trees rapidly spread across all major landmasses and are busy colonizing tidal swamps when a ravenous fungal infection wipes them out. Many species still harbour genetic grudges against fungi.

## **59** **POLYCHROM COALBED FORMATION**

Passing asteroid dumps billions of tonnes of plasticized paper flyers onto the planet. Inedible flyers smother most macroscopic life beneath waves of discount tentacle-cap offers. Slowly buried, surface life is fossilized and reduced to oily coal. Some advertisements still legible (though inscrutable) in the modern era.

## **60** **FISH EXPLOSION**

Fish population boom, caused by runoff from land-based extinction event. Seas full of fish. Literally full. Water is either inside fish or in the gaps between fish. Small fish, big fish. Horrible stench. Interstellar herons fortuitously arrive and feast, leave giant platinum idols in thanksgiving.

## **61** **HOSTAGIFEROUS PERIOD**

Giant ferns on a plateau slowly realize they can alter the world's weather system by increasing or decreasing local moisture and redirecting a vital warm air current. They demand tribute. Migratory birds deliver fresh nutrients, remove insects, clean and prune the ferns. Ferns are carried to new lands on the backs of enslaved turtles. Eventually, continental drift removes the ferns' control of the air current, though it takes a few million years for anyone to notice.

## **62** **THIRD BIRD AGE**

Oh for fuck's sake, get it together. Only lasts for a few years as everyone with access to a time machine travels to kick this period to death with hobnailed boots/clubs/ray guns. Paradoxical time bazaar, punctuated by bird-hunting trips. Birds banned; everything else either permissible or mandatory. Fossils bizarre (lots of beer cans).

## **63** **SPONGIFORM TIDAL INTERLUDE**

Early bacteria learn to use gravity as a food source. Local gravity is extremely variable during the day, stable overnight. Combined efforts alter the moon's orbit, causing huge tides and swamping the surface rocks where the gravitosynthetic bacteria grew, wiping them out. A few species remain, or are absorbed by other cells.

## **64 OPTICAL PERIOD**

A radical group of land shrimp develops transparent lens-claws; focused sunlight burns and cooks their enemies. Surface creatures develop mirrored shells and thermal radiators. Land shrimp develop complex high-powered lenses, collaborative strategies, pack tactics, and a taste for vandalism. Most forests burn. Unfortunate overcast era—caused by high-altitude spider-cloud warfare—drives lens-shrimp to extinction.

## **65 THE ABSENCE OF SLUGS**

Documented in the fossil record only by their calcified retinas, giant slugs roam the land and sea, devouring everything, coughing up piles of bones. Slugs the size of buses, slugs with wings, slugs with soft crooning voices and mating displays, slugs with poison coats and venomous fangs. Primitive slug civilizations with soft wood buildings and unfired clay tools. It's a vivid ecosystem, entirely unfossilized.

## **66 BOLIONIZOIC**

For reasons unknown, everything in this period became a pale grey-blue colour. Conifers, shrubs, grasses, hatchet-faced birds, flies; all the same shade of grey-blue. Anything not grey-blue is rapidly surrounded by curious (and possibly hostile) creatures.

## **67 THE SECOND REBELLION**

Primitive humans, newly self-aware, discover that sex results in children. Shockwave of despair half-collapses culture. Survivors, grim and determined, plan to invade heaven and demand answers. It doesn't go well. Marked in the fossil record by a thin sheet of sulphur, ash, and charred wood.

## **68 DONTIBUNDANT PERIOD**

Teeth evolve from barnacles, seek warm mouths to colonize—lizards and some fish are infested. In response, some lizards evolve unwelcoming beaks. Trees, insects, and other unlikely hosts briefly tested but ultimately rejected. Thick beds of molars, primitive incisors, experimental corkscrews, hinged, flanged, or recursive teeth.

## **69 THE REHEARSAL APOCALYPSE**

Practice for the end of the world. Giant serpent (about 10' wide currently) and giant wolf-pup wrestle playfully. Four horsemen helped onto their ponies by frost giants. Sky furled and unfurled like a scroll to make sure the mechanism works. Sea-beasts evaluated for horribleness by divine casting directors. Apocalyptic scripts and numerological texts lying around, unguarded.



## **70 REPOSSESSED FOSSIL STRATUM**

Early mammals pledge bones to demons for help in their war against birds. Victorious, the mammals grow large and ambitious. Megamammoths and skyscraper sloths prowl the landscape. Whales the size of islands flap uncontested through the sea. After missing several payments, most large bones are repossessed by demons, leaving a lot of useless boneless masses of fur and flesh to rot in the sun. Smaller mammals, scrupulous in their accounting, survive.

## **71 HYPERADAPTIVE CAMOUFLAGE PERIOD**

Creatures learn to become invisible to light, then to sound, then to matter, then even to memory. Total absence. Cannot be recorded or imagined. Luckily, the prey creatures of the era (like clams with five legs) are relatively small, so the un-creatures were hopefully small as well. They are probably extinct. Maybe some of them survived and we don't know about it? Did they exist at all, or is this just a theory put forward to get a paper published in a high-end journal of theoretical paleontology?

## **72 ARTHROPODCALYPSE**

Gigantic, sea-scorpion-like arthropods emerge from the ocean floor and wreak havoc on land. Fledgling civilization of tuber-eating flatworm people devoured. Apocalyptic spiders rise up in joy, build triumphant banner nests. Giant arthropods die within a few hundred years, but by then the spiders have seized control. The world is locked in their eight-limbed grasp for several million years.

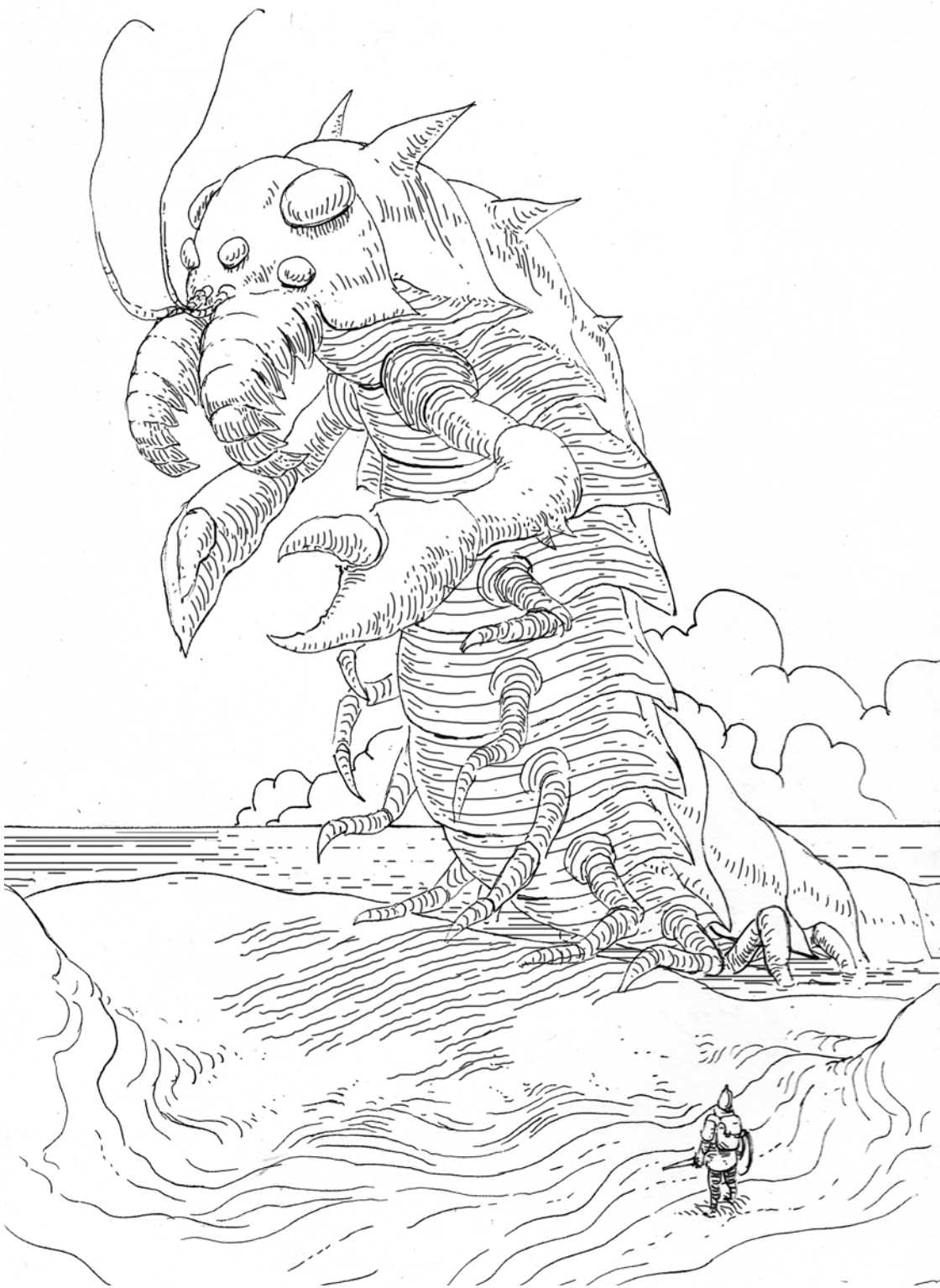
## **73 MORAL PERIOD**

Killer asteroid passes through upper atmosphere. Misses the planet by a hair. Creatures take it as a warning and decide to become moral and upright citizens. Saber-toothed lions lie down with saber-toothed lambs. Plants produce delicious fruit just for kindness' sake. Self-imposed morality collapses within a few thousand years, leading to unparalleled vicious competition. Most animals are vaguely nostalgic for this era.

## **74 ERA OF DIRE HAIL**

Massive equatorial storm systems whip up permanent hailstorms. Hailstones grow to the size of beach balls, develop miniature slime mold ecosystems, cultures, beliefs, leaders, ice buildings. Eventually they grow too large to float, and either colonize adjacent hailstones or plummet to the ground. Oceans develop thin layer of floating ice.

OPPOSITE:  
FIG. 4: ARTHROPODCALYPSE.



## **75** **POCKMARKED ZONE**

A wasp-like colony insect develops writing and learn to cast sigil-based spells with explosive runes. Sighted creatures flee in terror. Wasps driven to extinction by arrival of blind aphid hordes. Fossilized remains still explode the occasional paleontologist.

## **76** **THE SCOURING OF THE MOLTEN WORLD**

Star-faring strip-miners show up to collect iridium from a slowly cooling world just after its formation. Less precious metals (gold, platinum, mercury, molten sodium) tossed aside in fiery sprays. Atmosphere is mostly toxic, but there are mile-high heaps of gold just waiting to be taken (or tracked into the future for collection in a later era).

## **77** **THE VERY LONG NIGHT**

The sun is shut off for maintenance for a few million years. The world freezes solid on the surface. Occasional asteroid impacts and tidal heating keeps the deep oceans fluid. Surface bacteria develop antifreeze, live by moonlight, and go extinct as the moon is shut off a few million years later when the sun restarts.

## **78 TROLL OIL STRATA**

Trolls evolve and eat everything else. All life on the surface is trolls, growing and dying and devouring each other in a uniform sea of screaming flesh. Divine intervention buries trolls under thick layers of molten rock and restarts life. New creatures make a deal with acid elementals and develop acid-bearing stomachs to combat the few surviving trolls.

## **79 IRONIC AGE**

An exact repeat of an earlier era, but ironically. Creatures bring out disused proteins, activate archived DNA strands, dust off genetic memories. Some revert to single-celled forms (but, you know, ironically). Birds pretend to be dinosaurs, crabs dress up as trilobites, worms stay the same (but listen to old music), etc.

## **80 EXPERIMENTAL AGE**

Nutrient cycles established eons ago finally hit their stride. Life proliferates without disorder. Lice-like creatures crawl onto land, are devoured by oozes, develop primitive wings and ooze-steering pheromones. Feudal trilobite kingdoms arise in the shallow seas. A few species learn to harness ambient magical energy, including the xorn and the displacer crab. An accidental volcanic burp acidifies the seas, driving 90% of life to extinction.

## 81 RISE OF THE ULTRA-FLAT WORMS

Successful flatworms further flatten, become two-dimensional. Fossil stratum only visible from above. Runaway sexual selection reduces the ultraflatworms to one dimension, driving them to either extinction or sublimation, depending on your school of thought.

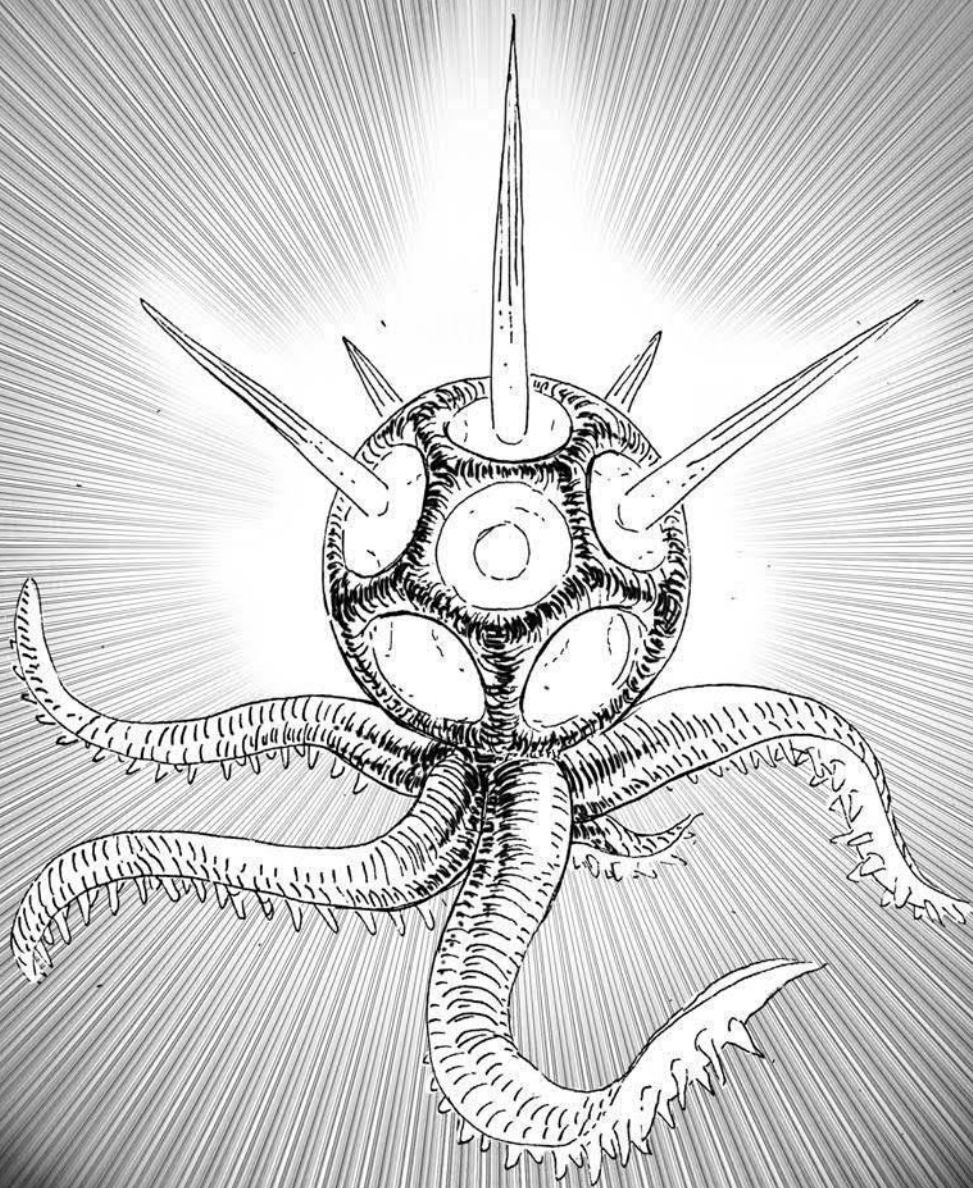
## 82 DAEMONONOVORE PERIOD

Rise of the yagher-voz, an order of warm-blooded amphibians, in response to an infernal invasion. Sapient offshoots tended to found vast, decadent societies, using depravity to lure additional demons.

## 83 COMPRESSED TIME CASCADE ZONE

*Bismedia bismedia*, a starfish-like land animal, develops a symbiotic relationship with chronovore bacteria and begins eating all available local futures. 10' wide pockets of slow time dot the landscape. *Bismedia bismedia* becomes extinct when infectious chronosynthetic bacteria, who devour local pasts to gain significant speed, also devour everything else. Chronosynthetic bacteria accidentally devour own evolutionary ancestral past and vanish in a paradox. Fossil record becomes deeply confused.

OPPOSITE:  
FIG. 5: CHRONOVORE BACTERIA.



## **84 PROTEIN SOUP**

Before life got organized. Cell structures are but a theoretical possibility, widely mocked by proteins as a wild and fanciful dream. Era dominated by myogoblins and hemogoblins (hoarding iron and oxygen), leghemogoblins (fixing nitrogen real good), and neurogoblins (the brains of the operation). First organized cellular city-states drive anarchocapitalist self-replicating proteins to extinction. Prion assassins inserted for later use.

## **85 HIBERNATING TARDIGRADE ERA**

Six-legged indestructible water-bears grow large and belligerent, devour everything, and develop millennia-long hibernation cycles to allow life to reach delicious proportions before rising again. Probably extinct now, or on a very long cycle.

## **86 AGE OF ALLEGORY**

Extraterrestrial poet reshapes everything into a complex allegory based on an unfathomable galactic event. All pearls converted to Pearls of Wisdom, all mountains given Inscrutable Hermits, all seas become Tempestuous. All creatures titled and capitalized. Every scene becomes a living sermon. Allegorical framework falls apart after a few million years as context is slowly lost. Only unchanged survivors from this age are alligators.



## **87 BIRTHDAY BOUNDARY**

The planet turns four (billion) years old. Sky is crowded with planetoids, rogue moons, and comets dropping off gifts and congratulatory debris. Early single-celled life may have been accidentally introduced by an irresponsible planetary relative. Atmosphere radically altered by ignition of four-billion-candle birthday cake. Geological layers filled with wax, tinsel, and tacky, mountain-sized knick-knacks.

## **88 PSEUDOLUNAGENETIC ERA**

Volcanoes, envious of the fickle moon, decide to create their own obedient child-satellite. Molten rock rains down in sheets as volcanoes attempt to blast stone into orbit. Continents pucker and bulge, Lifeless seas boil. Exhausted and unsuccessful, volcanoes fall dormant for millions of years.

## **89 FORMAL PERIOD**

Life develops manners, restraint. Predatory crustaceans give small, gilt introduction cards to prospective prey. Trees evolve genital-concealing vines, send them in all directions to ensure animals are decent to be seen. Nobody is eaten without being introduced. Several phyla die of shame. Several more, unable to breed without breaking decorum, voluntarily become extinct.

## 90 OVERMONITORING PRESSURE EVENT

Escaped gigademons roam the land and sea, blasting anything remotely intelligent to smithereens. Signs of pack hunting, tool use, or communal living provoke savage and fiery rage. Creatures rapidly evolve gormless exteriors and foolish behaviors to conceal true intelligence, honed to a vicious edge by relentless adversity. Camels and geese evolve during this period. Satisfied, gigademons depart to torment other worlds.

## 91 HOLY WATER OCEAN

Large portion of heaven, under construction at the time, falls off and sinks into the sea. All water becomes holy. Rise of the monkfish, the bishopfish, and the ravenous nondenominational interfaith cleric squid. Vampire lizards driven underground by holy rains. Eventually, most of the sanctified debris is hoisted back into heaven by teams of angels.

## 92 CUCUMBER EXPLOSION

*Wisperia gelts*, a species of sentient marine arthropod, begins cultivating sea cucumbers as pets. Originally brown and dull, sea cucumbers are bred into enormous varieties of shapes, colours, and patterns. Sentient arthropods wiped out by speculation bubble, leaving coastal cities, untended coral gardens, and brightly coloured cucumbers everywhere.

## **93 THE GREAT INVERSION**

Surface life discovers the world is hollow, immediately sets about colonizing unsuspecting interior. Inner world creatures amused by tourists; less amused to discover they aren't leaving. Pushed out of their homes, they colonize the now-abandoned surface. Fossil record abruptly flipped. Fungi, at home in both worlds, act as mediators and kingmakers.

## **94 MEMORIAL BOUNDARY**

Terrestrial cuttlefish discover fire, writing, agriculture, mining, and the evidence of previous mass extinctions. Deep fatalism settles over their culture, marked by periods of statue-building and giant memorials. After depleting all available resources, the species rapidly and bitterly goes extinct. Their finest abstract statues, found in great abundance, resemble flint arrowheads from a later period.

## **95 INTERMITTENT INUNDATION PERIOD**

Resonance between the moon and a passing planetoid causes a few million years of extreme tides. Microbial life surfs on the foaming edge of nine mile high waves, cheerfully growing surfboard-like cell walls, messy long flagella, and a carefree attitude. Conservative bacteria outraged by lazy and rebellious youth. Ends when rogue planetoid is repossessed by creditors.

## **96 GRAND SILICACEOUS DEPOSITION**

Tiny, shelled, single-celled marine creatures grow larger and larger, rising out of the sea and rolling across the land. Spikes, wheels, discs, and orbs grind, clatter, and squeak. War between rival silica-shelled creatures coats the surface in thick clouds of dust. Species develop elaborate warfare-shells, lenses, and the first scrying orbs. Cloud-dwelling hroilt-beasts eventually get sick of the noise and hunt the creatures to extinction.

## **97 THE GRAND MIGRATION**

Sulphur-based creatures, worried about global cooling, depart on nuclear spaceships, leaving the world scarred, cold, and poor in uranium. The last ones leave apologetic plaques for the next era of life.

## **98 AMNESIERA**



Burst of radiation from a distant star wipes all memories. Plants, animals, and bacteria have no idea what they were supposed to be doing, eating, or producing. Species scramble to find new niches. Trees, formerly as fast and as stealthy as snakes, stay put and grow upwards. Creatures experimentally bite things to see what tastes good, adopt the behaviors of equally confused neighbors. Primitive whales, moths, and fruit-bearing trees appear.

## **99 CONTINENTAL HARROWING**

Agricultural golems, the first complex creation of an unknown race, run amok and plough an entire continent into neat rows. Everything that can be planted is planted, harvested, and stored in hollowed-out mountain granaries. Grain-eating centipedes rule for thousands of years. Rapid nutrient exhaustion leads to ecological collapse and desertification. The golems are slowly buried in sand.

## **100 RETROMATERILORIAN EPOCH**

Time-traveling smugglers dump enormous sacks of stolen metamaterials and magic artifacts in a disused epoch. Local bacteria learns to eat it. Entire ecosystem chains, from bacterial to flying spindledrakes and thaumovoric beanstalks, are destroyed when time smugglers return a few million years later to collect their goods. Surviving bacteria, with dormant genes for eating chrome and transparent aluminum, will be a nasty surprise for future generations.




WHAT is time?  
WHERE does it go?  
HOW MUCH of it has passed?  
...AND HOW MUCH is yet to come?

WORLDS, both fictional and real, are immensely varied and strange. Why should their pasts be sensible, organized, and predictable? Why should fictional evolution follow a logical progression?

Our world certainly didn't.

## THIS BOOK FEATURES

- 100 Speculative Ages
  - Ideas for Using Them
  - Notes on Time and Perspective
  - Black and White Illustrative Figures
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