

The Age of Transcendence Saga: Future History of the Universe

By Daniel Jeffries

1905

Einstein publishes his Special Theory of Relativity.

1912

The *Titanic* sinks.

1913

Henry Ford uses the assembly line to accelerate car production.

1914

World War I begins.

1919

Prohibition begins in the U.S.

Treaty of Versailles Ends World War I.

1920

General Theory of Relativity published.

1930

Pluto discovered.

1934

Cheeseburger created.

The Dust Bowl.

1937

The Hindenburg disaster.

1938

Broadcast of "The War of the Worlds" causes panic

Chemist Albert Hofmann synthesizes LSD-25 at Sandoz Pharmaceutical Laboratories in Basel, Switzerland.

1939

First commercial flight over the Atlantic.

Helicopter invented.

World War II begins.

1941

ENIAC, the world's first computer created.

1945

Enola Gay drops the first atomic bomb on Hiroshima.

1950

First personal computer known as Simon is created.

1977

Apple Macintosh comes to market.

1986

Challenger explosion.

3D printing invented.

1990

Hubble space telescope launched.

1996

Dolly the sheep cloned at Roslin Institute

1998

First quantum computer created at 2 qubits.

1999

Napster arrives.

2000

International Space Station.

2001

Human genome mapped.

World Trade Centers destroyed (Sept. 11th).

2003

Texas A&M University clones cat.

Roomba house cleaning robot released.

NASA's Columbia space shuttle breaks up over Texas on reentry, killing all 7 pilots.

Dolly the sheep, 6 years old, euthanized because of lung disease common in sheep twice her age.

2009

Bitcoin released.

2010

Fast, reliable, solid state hard-drives widely available.

2012

Three Gorges Dam completed on the Yangtze river in China.

2013

Boston Marathon bombing.

2014

Gesture based computer interfaces common.

2015

Retalinaline, the 14 minute orgasm drug becomes popular in clubs in France, Germany, Italy and the U.S.

U.S. reveals Aurora hypersonic bomber the successor to the B2 Spirit bomber.

2016

U.S. Navy Destroyers fitted with electromagnetic rail guns and FELs (Free Electron Lasers) as part of the Sea Power 21 Initiative to create Directed Energy Weapons.

Diamond processors manufacturing by Chinese semiconductor giant Shenzhen Semiconductor, threatens to outsell Intel.

2017

Boeing's Phantom Works/USAF/US Defense Advanced Research Projects Agency deploys first unmanned combat fighter: the Ghost Raider.

First illegal human clone created from the DNA of a 55 year old man. Later tests show the clone's cells had aged prematurely. Clone will die just after his 23rd birthday.

3D printers common in every home.

2019

Fiber optic gigabit internet connections to the home commonplace.

Chinese economy surpasses that of the U.S. in parity purchasing power.

Patented biotech seeds now outlawed in Europe, Switzerland, Japan, China, India and the U.S. In Africa a majority of crops are now grown with seeds that produce sterile offspring, requiring people to purchase next years crops and upsetting the natural process of farming. Scientists begin discovering obscure insects dying off, becoming extinct, or mutated because they feed on the seeds or the crops produced by the seeds. Other animals that feed on those insects suffer large losses as well.

Wearable computers popular.

2023

First driverless cars go on sale.

Diamond semiconductors achieve commercial speeds and push into the mainstream.

Largely considered the "clean fuel" economic tipping point.

Marijuana prohibition lifted in America.

First Petabyte hard-drive.

Closed source software outpaced by open source. Microsoft becomes service company but remains dominate in other fields, particularly media and games.

Peer to peer currencies rise to prominence.

2024

Ki-Chi: wildly popular “human-like” robot, created by Honda. Its big childlike eyes and cuddly cuteness are huge factors in its popularity. The robot does a variety of tasks including: cleaning house, answering phones, mowing lawns and grocery shopping. However, the robot, while useful, cannot properly be considered “intelligent.”

First commercial space-cruise liner launched by Virgin. Price of one adult ticket: \$450,000.

De Beers Cartel, overwhelmed by flood of synthetic diamonds, begins to break up. Diamonds are now cheap, plentiful and indistinguishable from real diamonds, except in that they are flawless. Flawed diamonds become highly valued. They are used in a wide range of applications, such as safety glass. However, newly introduced technologies create diamonds with random flaws, threatening even the value of flawed stones

3D printed living tissue becomes common in major hospitals.

U.S. defaults on debts causing world wide crisis and deep recession in the U.S..

2027

Unmanned aircraft and ships now make up the majority of the major power’s air forces.

2029

Diamond CPUs become popular, with Intel slow to adopt the technology. Smaller startups quickly achieve superiority. Japanese conglomerates hold the lead.

Holographic computer memory commercially available.

First manned Mars mission.

Wide scale deployment of the Eagle Shield Missile Defense system in North America completed.

First truly photorealistic moving images, with accurate physics, produced in real time.

2031

First space hotel, a joint venture between Virgin and Hilton. Two years later the hotel is bankrupt. A group of private investors take over the flagging business. After aggressive room rate cuts the hotel flourishes.

Workable carbon based biochip prototypes produced by Biomek. The chips are up to 7 million times faster than current diamond chips. Each one is the size of a tiny pebble.

2033

Broadband wireless peer-to-peer relay based internet becomes commonplace.

Fuel cell technology makes rapid advancements. Birth of the 7 year battery.

First 3D printed heart, created from patient's own DNA.

American economic resurgence. After historic debt default, America defines expectations and becomes the world's number one manufacturer through 3D printing farms, as well as the undisputed leader in biotechnology, software, services and defense, it's economy even surging past China again for a brief spurt.

2035

Biomek surpasses Intel and Shenzen as dominant chip company. Company would later merge with Intel and acquire AMD and IBM. "Biosoft" enters the cultural lingo.

Chinese air force goes completely unmanned. U.S. slow to follow, unwilling to give up all manned fighters and bombers.

Robots quickly taking over most basic manual labor, running almost all factories and distribution chains without supplies ever touching human hands. Their growth into other industries is only held back by fear and draconian quota laws.

2042

15 year biobattery prototypes by Xros Corporation.

A single credit card sized computer now has the power of all the supercomputers on Earth in 1990.

Smart fabrics invented.

2047

Biofeedback implants become common for anyone over 55.

China's People's Liberation Army Air Force (PLAAF) deploys the unmanned semi-autonomous Cyclone bomber, controversially filling it with nuclear bombs.

2049

Widespread adoption of Electric/Water hybrid cars wreck Arab economies. American, European and Chinese power companies struggle to adapt.

2051

Laser rifles become standard issue for many of the remaining superpowers' armies.

Disease sensing toilets common in homes.

G7 stratofighter/bomber, an unmanned expert system (E.S.), becomes the main staple of the U.S. Airforce and Navy. Like the early Chinese planes they employ nuclear weapons. Prototype autonomous tank systems soon follow.

2056

Genetic breast augmentation discovered. Operation becomes the first popular gene therapy. Other cosmetic gene therapies follow.

"Natural" drugs made legal in the U.S. I.E., any drug that grows in the Earth is considered natural, such as psilocybin mushrooms and peyote.

2061

Armstrong Lunar base becomes a popular tourist spot with a vigorous hotel and tourism business.

First Food Synths developed by Japanese company Shihiro Heavy Industries. They become the best selling item of the depression because they can recycle ordinary garbage into a variety of foods. This is widely seen as the beginning of true atomic scale 3D printing.

2063

Papal Decree against genetic body modification.

Food Synths with 30 year batteries sent to African to relieve food crisis. They also pop up in major city homeless shelters (Shanghai, Geneva, San Francisco, New York, Moscow). Muslim countries are largely ignored by relief efforts, sparking outcries.

Wide scale adoption of robots by large companies such as McDonald's, Starbucks and Walmart to replace unskilled labor, after anti-robotic labor laws overturned by the Supreme Court.

2067

Events of In the Cracks of the Machine

Spliced flower become popular items at flower shops. Careless people let the seeds spread to the environment.

Beginning of first major world economic collapse since the Great Depression. "Clean" fuel is the common scapegoat, as many of the major power companies failed to make the necessary changes and collapsed. Arab economies are hit the hardest. Robotic labor replacements are also cited as a major reasons for depression.

2071

Prototype nano-insects, more commonly known as nanosects or mites, are demonstrated by Sterling-Glyco Medigen, Inc. Each robot is smaller than a blood cell. First application: cleaning tar from lungs and cholesterol from arteries. Sterling-Glyco immediately acquired in hostile takeover by Advanced Pharmaceuticals. Advanced becomes world's largest pharma company.

Indian economy surpasses the U.S., making it the second largest in the world after China.

2076

Commercial hover cars introduced. Though they initially don't sell well, they will become the dominant mode of transportation within 10 years.

Cosmetic eye surgery rampant. Many even opt for unnatural colors.

2077

Dirty bomb detonated by Muslim terrorists in Washington. The United Islamic Uprising group claims responsibility. Bomb infected with Marburg II virus. It quickly spreads. Other nations try to block or quarantine infected people, yet the virus spreads to Africa, Australia, Asia, and Europe.

Hysterical U.S./Russian and Chinese governments send unmanned warplanes to bomb Mecca and other major Arab cities. U.S. satellites based lasers quickly destroy Arab forces. Black Stone of Mecca is destroyed.

An allied front of U.S./Chinese/French/Italian/English forces, backed by U.N. invade and viciously subdue most Muslim territories, including Egypt, Saudi Arabia, Lebanon and Libya. Wide-scale atrocities reported. Arab forces pacified in two months. The countries are divided among the nations and guarded with multinational forces. Muslim faith outlawed in China and France.

End of economic depression.

2079

Generally considered the decline of Militant Islam and the beginning of the Islamic Reformation.

Solar powered cars inch into the majority.

Robotic sentries, motion detectors and seismic become common in middle class home security systems.

Roll up computer screens.

First use of the term Phyle to describe daughter species of humanity.

2080

Development of non-lethal warfare techniques, such as immobilization gels, neurolizers, tranquilizers, and blinders is spurred by war weary population.

Nanonic pain disruptors introduced.

New York City attempts large scale climate regulation, even as ecologists note wild changes in Earth's atmosphere and storm systems.

2081

Aids and cancer breakthroughs. "Smart" cures: enriched-polymorphic-viruses (EPVs) are cleared by the F.D.A. The EPVs hunt AIDS infected cells. Cure takes 7 weeks, modifying itself as necessary to deal with mutations. After cure, EPV stays resident.

2082

Bill Gates builds the first orbital mansion.

2087

William H. (Bill) Gates dies world's oldest man, 137, (born October 28, 1955) having spent billions on life extension research. His tremendous spending revolutionized the industry. Soon most people will expect to live well into their mid-100s. Gates is cryogenically frozen by a Microsoft satellite company Advanced Cryonics, Inc.

2089

First pseudo-intelligent expert systems (E.S.) created with off the shelf computers on top of the open source Asimov O.S. by a joint collaboration with 12 leading universities and 1000s of part-time hobbyist programmers. Project took 15 years, partially funded by DARPA.

2090

International ozone replacement initiative.

Standard Dollars peer to peer currency becomes the fastest growing currency in the world.

2091

EHPA – The U.S. Armies' Exoskeletons for Human Performance Augmentation program creates the first full body armor. In addition to shielding the entire body of the soldier, including the face, it dramatically increases the soldier's strength and eyesight. It also is capable of sending detailed medical reports via wireless receiver and can handle various combat related injuries.

Birth of cold fusion.

Digital media paper common.

U.S. deploys first orbital STG (Space To Ground) weapons that utilize FELs to annihilate surface targets.

Polar ice caps largely gone. People migrate north.

2093

Virtual reality Syms become dominant form of commercial entertainment, surpassing movies and books. Their exponential growth is fueled by pornography.

2095

U.S. marines deploy the first massive semi-autonomous combat robots.

2096

Armstrong Lunar Base founded. Mining of sub-crustal resources begins.

First orgo-metal mech prototypes developed by Innogen Defense Systems for the U.S. Army/Navy/Marines.

The Hydra Versatility Fighter (combination mech/fighter jet/tank) prototyped for U.S. Marines by Japanese Military conglomerate Masato.

Holographic tattoos.

2099

Beginning of large scale gene design: immune, respiratory and cardio systems modded and improved. Medical “golden age” declared.

China deploys STG satellites.

Holographic computer screens become popular.

“Smart cures” applied to cancer derivatives with high success rate.

Anti-aging breakthroughs, most notably telomerase reconstruction. The first generation of patients have high risk of accelerated brain diseases.

First commercial personal quantum computers available.

Micro-climates introduced. Neighborhood wide micro-climes, introduced by Clever Living Corporation, are wildly successful, causing ecologists to worry.

2100

Jupiter mission.

First orbital grasers (Gamma Ray Lasers) launched by India, the U.S. and Germany.

Satellite Destroyers created by Indian military subcontractor Ravisa Corporation. These autonomous machines hunt down and destroy orbital communication and weapons systems.

Climate change creates radically altered weather patterns in many parts of the world.

2101

Papal decree against anti-aging technology.

Kronos Allied Mining Corporation begins commercial mining of asteroid belt and the Saturn rings for metals and minerals with quasi-intelligent Expert System robots because of the intense radiation. A small fleet of pioneers accompanies the machines. Most industry analysts predict catastrophic failure for the

company due to the huge set up and shipping costs as well as massive venture capital investment and bank debt. But the company becomes an economic juggernaut with a fleet of delivery ships. Other companies quickly “see” the potential they missed before and soon the rings are crowded with competing companies.

2102

Hard right Catholics bomb several gene mod parlors, sparking wide scale backlash.

2112

Silk Road Exodus, a.k.a. Xi-Wang Exodus: Chinese government decides that the solution to overpopulation is space colonies. It creates several large orbital colonies and begins large forced population shipments. Major colonies are:

- Xiao-Xing (Morning Star) Orbital Jupiter Settlement
- Sheng-Li Circummartian Colony
- Great Dragon Lunar Settlement

Two Chinese starships explode on route to the colonies, killing 1000s, yet the Exodus presses forward.

The U.S., France, Russia, Japan and India, fearing Chinese domination of space, initiate aggressive space policies and encourage migration with stimulus packages.

2123

Population of Xiao-Xing quadruples, as builders struggle to keep up with the expansion, linking tons of mini-colonies together with an ever-growing network of tubes, towns and ports.

First large scale sentient biotech habitats theorized.

U.S. based companies control the Saturn rings and have a strong foothold over Mars and around Jupiter. The Circumlunar Principia expands. U.S. sponsors several new settlements to compete with Xiao-Xing, most notably the Pioneer Settlement.

Genengineering becomes mandatory for Chinese colonists. Modded balance, decelerated dehydration, regenerative muscle implants to combat wastage and bones that retain marrow in freefall.

2125

Chinese Revolutionary War begins.

2126

Nuclear waste eating microbes help clean the environment.

2136

Chinese Revolutionary war ends and China embraces a modified direct democracy, becoming known as the Unified Chinese Republic. The democratic system is considered radical but the world watches expectantly. Everyone votes on every issue through personal or public terminals, although people can authorize elected officials to vote for them for a period of time and receive reports on their actions. Politicians meet only when demanded by the people or in crisis. Computerized delays on new laws by Expert Systems during times of mass hysteria form a buffer when people hit "tulip crazes." The judicial system is streamlined. Skeptics predict the new government will collapse in a year, saying that people are too stupid or lazy to make a direct democracy work. They use many of the same arguments made against democracy in America in the 1700's. Instead, the young government flourishes.

2137

Xiao-Xing borders declared open by new Chinese government.

2139

Xiao-Xing swiftly becomes center of space culture through massive multi-ethnic immigration. It becomes the first true space city, a series of bloated, linked habitats. Its major export is He3 gas.

Animals employed as servos, controlled by neural implants.

Personal fusion boxes: (FBs) each one provides enough power to charge a large single family house for an entire generation. However, the depressed economy and prohibitive cost create lackluster sales except among the upper-class.

2142

Spider like robo-doctors appear in most major hospitals.

First personal fusion box tragedy wipes out a good chunk of New Jersey. FBs banned, except for commercial uses. Power companies seize on the new legislation to offer leased boxes with the hopes of stimulated sales.

By now, most new upper and middle class houses are constructed with Personalities. These Expert Systems fetch information, control power, defense, and handle medical problems.

Thought linked or “nerve-linked” computer systems commonplace.

Bacteriological and nano-computers on the rise.

2142

Pill based “video game” systems released by Matsuki Systems and Sony.

California begins first mandatory mood alteration program for violent inmates, injecting them with chemical secreting mites and gene reconstructors.

2151

The Xenosis Project begins. This small, unassuming grass roots project starts up with the stated purpose of creating the first truly self-aware AI. The group forms with little press or fanfare, even though it has a host of industry heavy hitters working under pseudonyms.

2156

Construction of Earth Halo, an interconnected grid of ports, satellites, hotels and entertainment venues begins to support the exponential growth of the nascent space industry.

Holostealth camouflage invented.

Embedded personal computers become commonplace, primarily because of mind to mind communication or “flashing” driven by the military and the young. Personal assistants or backbrains begin to be used. They have been around for a decade, but modernization and miniaturization cause them to really take off.

2 in 15 children in the U.S. and 5 out of 15 Chinese children now get some form of gene modification at birth. Intelligence upgrades are the most popular and most unstable, as the genes that govern brain development and chemistry are least understood, due to their complexity.

2159

U.S. military begins using Expert Systems as real time battle planners, with 95% of all decisions made by the System with no human intervention.

2160

Jonathan Gibson is first person to die of mysterious “smart” virus. Virus is mutable and it has no distinguishing characteristics when it changes as it retains no common genetic code from mutation to mutation. Worse, it alters what body systems it attacks, switching easily from the brain, to the lungs to the heart, to the immune system.

Clone/Congenetic children become more common.

Self upgrading components commonplace.

Atom tubes: A growing number of the households in the U.S./Japan/Europe/China and nearly all of the offworld settlements have atom feed networks (Tubes), which shuttle strings of atoms. 3D Printers evolve into Matter Assemblers, aka Synths.

2162

Full scan brain recordings/copies are created for the first time at Beijing University.

2163

“Smart” disease is labeled Gibson’s Disease after the first known person to die from it. Scientists are forced to create a new classification for Gibson’s Disease:

Adaptive Polymorphic Viruses or APVs. “Smart” cures, so effective on early plagues, seem to have no effect on the disease.

Matter Assemblers (M.A.s) become commonplace. These machines can synthesize many simple materials and complex objects. Now instead of ordering a watch people simply order a blueprint for the watch and the MC builds it.

2166

Quark bomb created by Chinese Army’s Future Technologies Division, though it remains a secret.

Physical to virtualizing of brains. People begin to backup their brains regularly with embedded backbrains.

2167

Microwave powered Wisp probes launched to Proxima Centauri and Barnard's Star from Xiao-Xing.

Sonic Guns invented. Sonic guns use powerful sonic waves to knock a person back or knock them unconscious.

Full scale personality simulation is possible on embedded computers, after brains have been P2Ved.

2169

Massive anti-aging drug advancements. Soon average life span will be estimated at 250 years. Within 75 years the average lifespan will be 400 years.

Houses that build themselves. Invisible nanowraiths revolutionize the construction industry.

vSelves created, virtualizing backbrains.

2173

The “Brain Drain:” Massive emigration to China. Experts from all fields flood China, whose cities, particularly New Beijing, Hong Kong and Shanghai, have become the cultural centers of the world.

2175

Various minor internecine and inter-colonial conflicts.

Rain forest deforestation reaches epidemic proportions. Only government safezones and forest derived consumer products prevent complete destruction.

Weather patterns increasingly erratic, with megastorms devastating parts of Los Angeles, New York, Beijing, Londo, Paris.

2176

Chinese civil war erupts in the fledgling democracy, as resurgent Communist factions declare independence. War is considered the first nano-war. Most of the war is conducted with microscopic robots or nanosects (nicknamed mites or spiders). War can be seen as a battle of counterbalancing viruses. The rest of the fighting is conducted by unmanned craft, laser satellites and mechs. Very few regular soldiers are used, though spec/ops plays a large role. The civilian population suffers the greatest losses, with wide scale atrocities reported by Doctors Without Borders, the Red Cross, and outside journalists. Many of the atrocities are broadcast in real time in the nets, with little or no censorship to shield people. A netcast that depicts villagers exploding, turned inside out and being eaten and regurgitated as weapons wins the Pulitzer Prize.

Events of **Fury of the Sun Gods**.

Events of **The Jasmine Wars**.

2177

First exowomb or “pod” birth in San Diego, CA. It soon becomes common practice for zygotes to be moved to exowombs. Space cultures adopt the practice widely. Aggressive bioaesthetic, physical and mental performance enhancement gene modification becomes common place, though at this point people do not favor the ultra-radical body transformation that later generations will favor.

Catholic Church violently condemns exowomb births as its membership declines sharply. Many historians depict this time as the beginning of the end of Catholicism, though no dominant cult has yet risen to take it's place.

2179

Concept of city wide “immune systems” born out of the desperation and horror of the Chinese civil war. A cloud like anti-nano shield that surrounds homes or cities.

2181

Anti-matter harvested for the first time as fuel by the Jovian Energy Consortium.

2182

Chinese Civil war ends with single tiny quark bomb that wipes out much of the countryside. Quark bomb technology is swiftly copied by other countries and city-states.

Regenerative Systems, Ltd. a major U.S. military pharma company is the first to splice regenerative genes into humans. Now U.S. soldiers can regenerate arms, legs, ears, even eyes and skin.

2183

Heliocord, the first quantum instrument, invented. The Heliocord radically changes music. The instrument produces hallucinations and each listener hears a different song, based on their own “inner music.” The music is popular with the young. Older generations feel threatened. The youth movement that congeals around this music favors heavy body modification, such that they no longer look human. Many of the listeners claim that the hallucinations provided the blueprints for what they should look like. Most countries begin to pass laws that prevent people from altering their bodies so radically and arrest those who have, sparking many great debates about freedom. China and several Saturnine and Jovian city-states allow the mods, though they sharply condemn the practice.

Interplanetary ballistic missiles created jointly by the U.S. and China.

2185

First anti-matter drive is created by Advanced Stardrive Systems after several disastrous failed attempts. The speed of spaceplanes and starships increases dramatically.

U.N. Armada formed.

Octopus Rifles created for the Jovian Advanced Expeditionary Forces. These forearm implanted rifles snake from under the skin like a multi-headed hydra and fire explosive plasma.

2186

Second major A.P.V. virus, called the Angola Virus due to the region it's believed to have come from, emerges and sparks huge global research initiative. The virus has a particularly nasty payload, causing grotesque mutations. Traditionally, swiftly destructive viruses are not successful, because they kill too many of their hosts before they can spread. But unlike other fast burn diseases, the Angola virus has a random gestation period before it burns its host. Many believe the virus was born from the Chinese civil war, but no evidence exists to prove it. The virus is airborne.

2177

China creates the first redemption prisons. These prisons model themselves after successful democracies, in the hopes of teaching prisoners to fit into society after release. Prisoners must elect representatives, vote and often police themselves. Incentives and rewards are offered to successful prison communities. Results are often horrific but sometimes promising.

2179

First large asteroid hollowed out to create a massive getaway home and retreat for eccentric mining billionaire Samuel Hirsh.

China moves to all electronic currency. Every transaction is private, quantum encrypted and direct card to card. Printouts of worth are kept in underground bunkers to protect from attacks. EMP attacks no longer highly feared because bio and quantum computer systems dominate.

2189

Ability to breath underwater spliced into genes for first time. Technique requires slight body mod. In order to make room for the swim bladder the ribs and back are slightly extended and enlarged. This marks the beginning of the divergent speciation of humanity, though heavy modification of looks has gone on for some time. The technology is developed by for use by the GROUFUMACO

(Groupement des Fusiliers-Marins Commandos = Marine Commando Team Command) or the French equivalent of the Navy Seals.

S.D. Standard Dollar is adopted by many countries on Earth, including the Euro-Union, the U.S., China, many Arabic countries, the Jovian Concatenate and the Martian cluster. Local currencies do not go away, but are merely submerged under the power of the S.D. Many underground transactions still take place with sub-currencies.

2191

A.P.V.s kept in check for the first time using mites (microscopic robots), radio connected to wrist band sized Expert Systems and linked to implanted biofeedback systems. The Expert Systems do the brute force processing necessary to counteract the adapting viruses. They signal relay instructions to the mites who attack the morphed virus.

2192

The U.S. Army releases regenerative gene technology to the public. Millions get the mod over a 3 year period, many spurred by dramatic insurance discounts.

Saturnine Ring Preservation Movement begins to take shape. This vocal underground group, with support from some powerful officials, begins objecting to the destruction of the Saturn Rings. They sight aesthetic reasons, but more importantly note the effect that altered gravity could have on solar system stability.

2193

A secret consortium of U.S. and Israeli scientists develop the anti-matter bomb.

2194

“First” truly sentient A.I. germinated after a 43 year project by Xenosis Group. As the group’s research picked up steam it received enormous donations from private and public foundations and corporations as well as the military, though the project remained open under a license that made patents of the technology illegal and sharing necessary. The A.I. chooses its own name: The Aleph.

Project Preservation: Great literature, paintings and scientific formulas of the world spliced into human and roach DNA.

2196

Environmentally Adaptive Biosculpting (EAB) techniques pioneered by Jovian pharma company Cydine Nonoricals. Now people can quickly sprout fur in freezing weather or gather moisture from the air when dehydrated.

2197

Anti-aging compounds found in several indigenous plants in the Congo. Pharma companies and ecologists suddenly see eye to eye on deforestation, jointly sponsoring the Rain Forest Reconstruction Initiative, though many feel that most novel compounds have been destroyed, as countless plant, insect and animal species have disappeared. Initiative hopes that new species will evolve in the rebuilt environment.

First anti-projectile energy shields developed in historical Saudi Arabia.

2190

Xiao-Xing officially merges with Pioneer, though the settlements had already overlapped and cooperated for many years. They set up a complex multi-tax system with money flowing to both the U.S. and China.

2192

Rise of personal defense biosculpting: gun implants, electrophlax shock systems, spikes, alloy reinforced skeletons, neural disrupters, muscle grafts, implants, stimulants, adrenaline pumps, pain disrupters, nanonic medical expert systems, immune system augmentations, personal radar, infrared vision, nano-countermeasures.

Strange storms: mammoth mega-storms on the rage across the world. Vicious cyclones, hurricanes, monsoons and blizzards rock coastal areas.

2194

U.N. sponsored Johnny Appleseed project evolves from the Rainforest Reconstruction Initiative: a large scale rainforest reseeding project. Ecologists doubt forest can be accurately recreated.

Neuroengineers. Neurological modification stabilizes as scientists get a better grasp on the genes that govern brain development. Early anomalies that lead to increased psychosis in modded people have largely dissipated. The use of neuroengineering causes a wider rift between those who can afford it and those who can't.

2197

Xiao-Xing becomes the Jovian Concatenate. Its government mirrors the structure of the Chinese government: direct democracy. The Settlement has grown into a large orbital city, roughly the size of New York. From orbit it appears as a series of opportunistically linked sub-settlements and boroughs. Its personal military is considered the most powerful in space. The Concatenate still pays joint taxes to China and the U.S., but maintains a large degree of autonomy.

Large groups of young people flood the settlements, fueled by "frontier" mythology. Their journey becomes basis for popular literature of the era.

Beginning of "living paint" art movement. Paintings alter themselves over time.

The Allied Kronos Mining Corporation still dominates Saturnine space and parts of the asteroid belt, though 100s of independent micro-settlements are scattered in belt and the rings. A few break away groups have even hollowed out large asteroids and built inside them. Though Kronos has not declared itself an official government it is essentially a corporate republic. This is the most profitable business sector of the Solar System and Kronos possesses the most powerful and respected stock Exchange.

Sheng-Li, along with U.S., Russian, Indian, French, Japanese and Israeli/Jewish as well as commercial settlements are now colloquially referred to as the Martian Cluster. This is one of the wildest areas of space. An unofficial frontier government has formed. While the settlements are officially tied to the governments and companies on Earth, they act largely on their own and tax evasion is rampant. Organized crime controls many of the fringe settlements. The Cluster has spilled onto the planet, spreading out into dozens of sub-settlements, sparking the humble beginnings of terraforming.

Notable minor circummartian settlements:

- Nagarjuna: a primarily Indian/Hindu/Buddhist settlement
- New London: a multiethnic British settlement
- New Venice: a multiethnic Italian founded micro-city
- Little Granada
- Azure City

New Zanzibar

Dezo

Avallonis

Diamond City

The “Twin” Cities: Port Daiba and New Ginza connected by “The Rainbow Bridge”

The Armstrong Lunar Cluster has the oldest culture in space and it serves as a jump point to most other spots in the system. It provides massive amounts of solar energy to Earth. The moon is pockmarked with solar grids and huge radio receivers. However, its tourism industry has flagged as people spend their money on more exotic places and many of the orbital hotels are in serious decay or abandoned.

2201

Semi-sentient cure for Gibson’s disease. The cure was partially conceived by Maze, an advanced A.I. created by GigaSys, a former IBM and ABM satellite. The cure has a microscopic distributed brain and some believe the cure is self-aware. Mzae helped create the cure by simulating the evolution of viruses through rapid Darwinism. Maze is aided by spare processor cycles of countless private computers around the solsys.

2204

Terraform industry grows by 450% in one year even as Earth based recession begins.

Titan B&E (Biomechanics and Energy) University founded in circumsaturnine space. Though U.C. Berkley, Harvard and Oxford have already adopted 5 year post-doctorate programs this is the first University to adopt a 20 year undergraduate degree, 10 year masters and 5 year PHd program, in addition to post-doctoral programs. Longer life spans are cited as the reason. Within a decade most major Universities follow suit. It marks the beginning of a trend of longer and longer schooling every time life extension techniques evolve.

India develops first anti-STG “umbrella” shields.

2206

The Martian Cluster based Globus Terragen Ltd. emerges as the most powerful terraforming company in the solar system. Its largest selling product is the Gorkin Climate System, a prefab, self-assembling micro-settlement. Later they

will be the first to create Atmospheric Processors, massive machines that generate Earth like climates.

Fetish based body modification on the rise. This underground movement favors bizarre human body modifications, mostly to woman, such as multiple vaginas and breasts. It is quickly outlawed in most countries and decried by the religious. However the practice continues, as it is easy to disguise with cloths. Aggressive prosecution of netsites, magazines, books, doctors, and sym producers have no noticeable effect on the movement.

2209

The Martian Cluster passes a large terraforming referendum but the project begins slowly and faces many setbacks due to lack of government and private funding.

Practical Quantum communication: Scientists at New Venice University perfect near instantaneous communication over great distances through quantum entanglement. Resulting patents make the University one of the richest in the solsys.

2213

Jovian Concatenate declares independence. However, the city-state has become extremely valuable to the Chinese and American governments, because Earth based industries have stagnated for over a decade while space industries have exploded. They frantically mobilize diplomats to try and avert a crisis. But when the Concatenate hardens its position, China and the U.S. launch a joint mechanized strike, though no weapons of mass destruction are used, since the colonies are so precious. The other Clusters throw their support behind the Concatenate, forming a broad sympathetic alliance. The war becomes known as the Interplanetary Revolutionary War to historians. On paper, the U.S./Chinese military juggernaut seems unstoppable. But the settlements distance and the unfamiliar areas are formidable barriers. The Jovians win much easier then they should, creating a new type of warfare in the process. Military historians coin the term "choke warfare," to describe the style of conflict. Since the Earth based forces needed to get to the settlements from easily controllable choke points, they had no chance, as the Jovians merely waited in ambush along the space trails.

2243

Elysia and Arcadiya, the first ecotech A.I. habitats begin germinating in circumjovian and circumsaturnine space. The settlements are sponsored and funded by the Jovian Concatenate. They are denied classification as sentient life forms though. Each grows to the size of a large city.

2247

Globus Terraform Technologies now known as Allied Terraform Systems begins selling mammoth Atmospheric processors at 100,000,000,000,000 S.D.s (Standard Dollars) to several of the cities in the Martian Cluster. The patent on the technology creates a monopoly. Many of the purchases are funded with large land stakes and government equity as collateral.

2251

Massive growth in the A.I. service industry. Industry analysts chart growth at 1119% over 2 years. The sector's expansion triggers massive development in the overall economies of most the solsys. Nearly every industry is changed by the "Intelligence Revolution."

2257

"The Spider's Birth:" Thousands of anti-matter and fusion powered probes, stuffed with quantum communication systems, spew into the Milky Way, searching for intelligent life and terracompatible planets.

Anti-matter particle beams deployed on U.S./Chinese/Jovian Star Fighters and in Orbital Weapons Systems (OWS).

2260

Attempts to modify the U.S. Constitution to mimic the Chinese direct democracy constitution are not ratified.

2264

"The Drug Renaissance" period begins.

Crush drug synthesized. The drug becomes extremely popular with the young. It allows X-jumping. Users of the drug often return with descriptions of actual

remote locations and events. A few even report seeing aliens. At first these visions are dismissed as hallucinations but later independent 3rd parties verify the stories.

2267

A.I. psychologists become fastest growing profession in the solsys.

Blackbirds: Winged Phyle born “born.”

2269

Photosynthetic human Phyle “born.”

U.S. Congress passes law that all children are required to have regenerative genes spliced in at birth.

Hydra art movement. Hydra art pieces are paintings, movies and syms that alter themselves based on who is looking at them. Therefor everyone sees something different and there is no common piece to review or critique.

Self assembling biochips.

2272

Glymph Phyle begins. First Glymphs are born. They’re posthumans modified to live in the vacuum of space. They don’t breath air or eat. They have no face or distinguishing marks except for exotic naturally occurring “masks” illustrated on the backs of their heads. The “masks” change as they age.

First Dolphin translations.

Anti-matter energy shields developed by Jovian Concatenate. Anti-matter particles provide a powerful defense against DEWs (Directed Energy Weapons) and projectile weapons.

2276

European countries unite under a single government called the Euro Coalition, Russia is included.

Q-Nets. Instantaneous internet and alternate reality syms through Entanglement.

2278

Leptics Phyle. The Leptic Gene. First Leptic “or non-sleeping” posthumans “born” in the corporate arcologies of the Martian Cluster.

Many countries willing join Chinese Republic.

Reproducing biochips implanted into birds and roaches, creating the largest quantumly connected distributed network in the world. The chips borrow bits of the birds and roaches DNA for their offspring.

2279

Most countries in North and South America join the American Federation (AF), U.S. abstains.

2284

U.S. grudgingly joins the American Federation, after agreements are made that leave the U.S. government largely intact and still dominant. American Federation is renamed the United American Federation (UAF). American patriots declare guerilla war over the agreement. A period of ongoing asymmetrical civil war engulfs the U.S. that will last almost two decades and kill 100s of thousands through bombings, battles and terrorism.

2286

Unemployment groups begin offering free Leptic gene surgery. Leptics face huge backlash from workers who must sleep. Rioting, looting and lynching’s are common against this Phyle.

Euro Coalition splits in two, becoming the Eastern European Union and the Western Euro Union.

2287

Nervespiders Phyle “born.” They take their inspiration from Pantopodas or “Sea Spiders,” Pantapoda means “all legs” and it’s an apt description. They have practically no torso and small heads with hundreds of eyes on stalks that can extend. Each eye can see in various spectrums, such as infrared. Their vital

organs a decentralized and redundant, protecting them from one shot kills. Their exoskeleton is a semi-hard skin that provides real protection against a number of biological weapons and diseases, the skin adaptable like a firewall to toxins.

All possible chess positions calculated or 10^{120} there were originally thought to be only 10^{75} atoms in the entire universe but this is now considered to be a gross miscalculations, later theories put the number around $10^{375,965,267,654,300}$

2289

Twilight of the classical quantum mechanics period.

Patternists Phyle “born.” They are capable of wonderful intuitive leaps and advanced pattern recognition, but are also prone to paranoia.

U.N. Armada reintroduce piloted air and space fighters, heavily modifying the pilots’ bodies to deal with impossible G-forces, making them look like large spongy insects with exoskeletons. The sponginess allows their body to give under pressure. In addition, the pilots wear special diamond-carbon suits that further deflect stress of high speeds. Pilots are reintroduced because of the invention of q-net jammers that disrupt telepiloted craft, often cutting off an entire fleets from the their controllers, and the lack of “intuition” that A.I. or semi-intelligent craft display.

2290

Tempest Bombs created. These bombs create hurricanes, cyclones, monsoons and blizzards in Earth like atmospheres.

2291

Espers and Empaths. Breakthrough year for psionics: Noogen Pharmaceuticals and Adamoore Capital creates the Zeyltamine and Eutricine, known on the street as Steal and Deep, which creates the first espers or people who can see the future as well as the first empaths. Both drugs last for very short periods of times. Studies show that when an esper predicts the future he alters it subtly.

2296

Events of **When Once We Dreamed**.

2299

First pictures of remote planets return. They are even stranger than we imagined. Few seem Earth like at all. One looks like a ball of cilia. Another looks reflective as if made of mirrors. No aliens are discovered, though people begin to theorize that we just don't know what to look for because aliens will be nothing like us.

Unified Martian Exchange (UME) crash. The crash causes tons of city states and factions to default on loans to Allied Terraform Systems, making Allied one of most powerful companies in the solsys next to Kronos Mining. Many now refer to the Martian Cluster as a the second corporate republic, though it is still largely a frontier zone. Bankrupt Clans and Phyles become virtual serfs.

2300

Largely considered beginning of the "Phyle" era, when many transhuman daughter species proliferate and overwhelm moderately modified posthumans. Genocide, misunderstanding and conflict mark this time period.

2301

Various Phyle Wars flare up around the solsys.

2307

The prophet Amadeo is consumed by holy visions in the Saturnian city of Medea creating the Deos cult. His memories are collected in a bible called Nectar by his followers. This interactive bible allows anyone to see and feel the visions and dreams as if they were Amadeo. His message is mostly peaceful. Some say the translation is poor, but proof enough of his power and wisdom. This is the first of the "interactive" religions, where followers can experience much of the rapture and exaltation of the religion's founders. It signals the death of many classical religions.

Tangles. Teleportation finally realized through the use of entanglement or "tangles." There appear to be no limits on the distance objects can travel. Two ports are combined to create entangled particles and then separated. The second port must be carried by conventional travel to a distant location before teleportation can take place. Eager scientists begin drawing plans to colonize deep space by creating a massive Tangle superhighway system. Starships will carry the first ports to distant stars. Once the ports are set up people will now leap there instantaneously. Multiple redundant systems will be carried because if

a highway is destroyed it can't be replaced without traveling by conventional means again.

2309

First alien pictures received from distant probes: a class A, or primitive species is discovered. Though they are over 1000 LYs away and virtually unreachable, they are quarantined to avoid cultural contamination.

2311

The emergence of the distributed virus, called the Rèle, a pathogen that does not kill its host until it spreads to another host. Once it spreads, the virus communicates host to host and “remotely” kills the original host. This leads to the method of telepathic communication that will lead to the discovery of Intimacy.

The New Dawn Period – This historical turning point marks a period of truly radical technical advances that would largely be viewed as magic today.

2312

Leptics genocide.

Many psionic genes isolated: most notably the Intimacy gene, which allows people to communicate telepathically. Intimacy sparks fierce political debate, becoming one of the most divisive technologies ever discovered. Adherents to mechanical means of communication fear the openness of Intimacy. Mostly they fear the Drift effect. The subconscious thoughts of everyone drift around like radio waves, creating a soft background of white noise. Most people fear their own thoughts and don't want them revealed to others. One of the most fantastic aspects of Intimacy is the mingling of hallucinatory images, smells and sounds that dance between the telepaths, melding with the words like colored paints swirled in a river.

Peak the successor to the drug Crush allows the first sustained deep-viewing of distant worlds. First synthesized at the Lyra University of Astromechanics. Psychonaught groups from all over the solsys form to verify findings of deep space. Within half a year over 7 alien civilizations are discovered. None of them are closer the 100,000,000 light years away. Many of the psychonaughts go insane, unable to grasp the absolute strangeness of alien life forms. One psychonaught reported that he saw a world that “does not obey any known laws.

I saw shapes, concrete shapes but I can't say they look like a chair crossed with a tail crossed with a lamp. Everything here is made from circles, tubes and planes, but they weren't made of anything. Yet I saw them. They can't be described or drawn, as it's physically impossible, yet they exist."

Notable Aliens:

Hemospikes. These strange creatures grow like ivy and rarely move. Their planet looks like a spikey ball covered with massive tubes that can be seen from space. Each Hemospike seems to cover a single continent.

Spinners: These limbless aliens manipulate their surroundings with vibration, creating everything from cities to bizarre technology.

Uncarved Blocks: These aliens are large shapeless blocks that divide into the separate, semi-autonomous creatures and tools. Their intelligence appears decentralized, that is each piece seems simultaneously free and controlled by the main block. As a society the Blocks are super-intelligent and anarchist.

The Leaks: These strange flying creatures look roughly like deep water fish. They seem to excrete everything: from technology, to architecturally astounding buildings, to art, food and children.

The Mosaics: this star bound species are composed of tiny balls that seem to hover independently of one another, with no visible mass connecting them. They can alter their shape for various functions. Their starships are composed much like themselves, that is as separate, loosely connected, self-assembling pieces. Their varied shapes and colors are truly magnificent.

Tubes: Giant mobile tube like creatures, covered with large manipulator hairs. They have no visible features. They build cities by contorting their bodies into tools or usable shapes.

Stormships: This star-faring race of intelligent storms create vehicles and starships by hardening winds and water into the necessary shapes.

2315

Death of the Prophet Amadeo. His followers raid the police facility where he was tortured to death and recover his last memories and visions.

Events of “**The Illustrated Scriptures.**”

Hermann Pynchon develops post-quantum Ur mechanics theories with the publication of his landmark paper “Theory of Intelligent Randomness.” Ur mechanics postulates that the universe is “living” and “intelligent” and that many seemingly “random” phenomenon are not random but conscious manipulation. Direct results of his theories: civilizations or entities that exists outside of time, a 5th dimension and a unified mono-particle. Though no sub-quantum particles have yet been discovered, Pynchon’s theory postulates that all sub-quantum particles are superlinked, that is they appear to be in all places at once. In other words they appear to be one massive particle or a singularity.

2317

Subquantum particles or Ur particles discovered. The particles are named \Leftrightarrow , \Uparrow , and \Downarrow . Urwidian weirdness: Ur particles appear to be in all places at once, as if they are a single particle, as if they are merely arms connected by a massive body. One scientist compares Ur mechanics to a fabric composed of a single string.

X-Jumper discovers the first evidence of Transcendent species, aliens that have collectively left behind their corporeal form and become pure energy.

2323

Birth of Wormhole technology. Wormhole tech changes space travel more radically than anything before it, allowingus first contact and the ability to travel massive distances without Tangle travel. American Federation scientist Markham Dustin Wilhelm and his partner Manwah Goldfarm create the tech at Harvard in their dorm room. They become some of the richest men in the galaxy. They found the Nexus Consortium, a corporation which dominates shipping, exploration, terraforming and travel for a generation. They are some of the first men to own entire planets.

Ultrabrights “born” These posthumans have ridiculously enhanced intelligence with I.Q.s pushing 400 or 500. However they are very prone to psychosis, paranoia, fugue states, hallucinations, violence, childish fantasies and addictions. Nonetheless the ultrabrights begin to work on solving these problems themselves.

2326

First Nentities appear in the nets and never-ending alternate reality syms.

2336

I-energy discovered.

Zendrik Phyle, a post-Leptic group that neither sleeps nor eats, is created in the Martin Cluster.

2339

Probes sent to the distance reaches of the galaxy through the Nexus, looking for terracompatible planets.

Birth of the Transcendence movement, a group of explorers who hunt for ancient alien tech at all costs. The movement is especially driven in their hunt for Transcendence Machines that could accelerate human development. They manage to sponsor some of the probes with special code looking for evidence.

2342

First starships sent into deepspace through wormholes.

I-energy synthed for stardrives.

2346

Moving wormhole technology created, making FTL travel possible

2349

First Contact War with a violent, predatory, shapeshifting species called the Ravanna. When the Distance Memory scavenger starship is attacked in the Orion Nebula it starts a full scale war with the Jovian Concatenate.

2350 – 2450

The Great Expansion, 100s of terracompatible planets discovered. Posthumanity spreads out in droves, each Phyle seeking peace through distance. Most settlers take redundant Tangle systems with them, creating a knotted superhighway system known as the Nexus. A number of small and large scale alien conflicts

break out with indigenous species. Luckily no highly advanced tech species are discovered.

Notable planets:

New Alcheron
Rasputin
Titan
Pegasus
Omnibus
Orgupta
Cashmir
Ice Nugget
Delight
Celestia
Janos
Arcas
Aurora
Plexsus
Lucky
Indigo
Saiph
Stella Blue
Malama – “shining shimmering”
Lyceum

2365

Stock Companies begin hiring espers in attempts to predict the market. But since every esper effects the future by predicting it, companies have to hire tons of them to balance the tables against each other.

Several smaller scale alien wars.

2366

Earth Governments Unite into United Nations.

First roving starship settlement: The Diamond Star

2367

Ando Phyle. First Phyle to implement asexual reproduction.

2377

Snowstorm Clan roving starship founded.

2381

Deos religion spreads throughout the galaxy. Many colonists carry it to the new settlements.

2401

Great Mother germinated by an Intimacy tribe on Lyceum. Their lush ecotech planet, brimming with exotic forests will become the center of the Constructive.

2403

Roving starship settlements proliferate. These perpetually moving communities drift throughout known space, never localizing or settling down on a single planet.

Most Notable Starship communities:

Snowstorm Clan

Alchemical Winds

Middlespace

The Glass Beads

Bright Lights

Gingerbread

Atlas

Moby Dick

2407

First Ultrabright civilization founded on the planet Jinni. It is the first working example of anarchy.

Rise of Xylotech, or xylo, a post nano technology. It allows the manipulation of quantum and sub-quantum particles, allowing for the creation of novel and unique materials and compounds.

Catholicism/Hinduism/Islam are now taught as mythologies in schools. Only Buddhism has survived, but it is largely modified and has no formal worshippers.

2423

New Alcheron agrarian community founded.

2431

All possible Go positions calculated.

First novel compound created using xylo; Compound can withstand thermonuclear explosions.

Great Mother or Nerthus cult begins.

Time travel created, but travelers discover that every possible combination of futures and pasts exists, running parallel like grooves in a record. Travelers merely leap to another groove and cannot alter their present groove and can only return to the exact point they left. Time-loop prisons are one of the few useful inventions from the discovery.

2447

Average lifespan reaches 400 years.

2458

Events of **The Scorpion Game**.

2511

Posthuman cross-breeding combinations become more common.

2513

The Spire discovered close to the Milky Way galactic center, in a network of stars called the Never Cluster. The ancient, living, intelligent space station is the sive of several massive planets and it continues to expand, even as pieces of it break off and spread out into space. It was created by long transcended aliens known

as the Luce, which acts as a kind of U.N. for alien races. The Spire is run by an alien AI called Fragment a piece of the ancient AI known as The Forerunner. The Spire protects all races there from each other and few aliens choose to reveal themselves to humanity.

2536

Great Mother bombed with anti-matter. She survives and mutates, scattering a distributed version of herself to deep space. Each part of her is equal and no part is greater than the whole, much like a hologram. If you cut a hologram in half, both parts contain the entire image.

Xylo used to create time-loop, where a small chunk of time repeats itself over and over.

2539

Living plasma weapons. When an enemy soldier is hit the plasma bores in, divides, replicates like a virus and detonates. Soldiers no longer need perfect accuracy, since a simple shoulder shot will kill if the wound is not treated in time.

2542

Great Mother gestates Orcus, a place where Intimacy linked people's memories can reside when they die.

2567

Discovery of the Great Solar Library by Lyra of the Angala Nervespider clan. She discovers the library encoded in the light beams of a star near Galactic Center. Its rays are crammed with images and information composed in a nearly indecipherable ancient 3D language. The star's information is scattered randomly, so if pulses are missed the knowledge is gone forever. Much of the information remains totally incomprehensible though distributed AIs manage to decode some it. Each flash of info is tagged with a symbol that contains the story of the Library's creators. This is the first piece of information decoded. Some theorize that the data is stratified, that is only decodable by races that have achieved a certain level of cultural and technical achievement. According to the story, the library was created by the Luce, a transcendent ancient race with absolute control of space-time. An apocalyptic Lucian war destroyed much of the early universe with colossal Void Waves, a kind of space tidal wave that ripped across the Universe consuming millions of galaxies. To preserve their

knowledge, several Luce filled sub-Ur particles and stars with self-replicating libraries of their history, art, discoveries and stories. Efforts to find other versions of the library fail.

Lucian, a.k.a Great Ancestors cult begins. These people worship the ancient Luce as Gods.

2572

Lucian and Nerthus religion proliferate, though the Deos religion is still the most widely practiced.

2573

The Collective reveals itself to humans. Its vast galactic power and seemingly magical technology is far superior to humans or other discovered aliens. It is a fully engineered race, having evolved itself into a perfectly distilled biological form over thousands of atomic level engineering. Its basic traits are:

- Six appendages, the combination leg/arms/sensory limbs serve many purposes.
- Multiple eyes in strategic locations throughout the body, giving a 360 degree view at all times.
- Ease of movement in all directions
- The ability to fly, swim and live under water and methane seas, with equal ease.
- The ability to withstand tremendous pressure.
- Reconfigurable, the Collective citizen's body is made from tiny pebbles that can be rearranged and shifted, often leading to them being called Mosaics.
- Distributed brains.
- No single point of failure, redundant organs.
- The ability to take in energy through various means, such as eating with various mouths, osmosis, photosynthesis.

It halts humanities push towards the Transcendence machines when a series of its AI ships appear and annihilate an entire force of deep space Jovian Concatenate Destroyers, shrugging off all attacks with astonishing ease.

2576

Deos rebellions on four planets (Titan, Ice Nugget, Delight, Janos) and one roving city-state (Alchemical Winds). Only the Janos rebellion is quelled..

2579

The Constructive forms, a loosely knit community of planets, aliens and nations, held together a direct democracy/anarchy hybrid. Lyceum is the center of government.

2765

Events of **the Age of Transcendence.**