

All About the Galactic Mindsea Empire

Also Known as the Empire of the
Common Mind

by
Bonnie Brunish

Copyright © 2024 by Bonnie Brunish

Table of Contents

Overview.....	9
Culture of the Empire.....	10
Roots.....	10
Imperial Branches.....	11
The Palace.....	11
The Bureau.....	12
Imperial Jobs.....	12
Education.....	12
Job Fairs.....	13
Horse Races.....	13
Genetic Engineering.....	14
Gender in the Empire.....	14
Children of the Empire.....	15
Mating Flights.....	15
Marriage.....	16
Group Marriage and Mixed Marriage.....	16
Birth.....	17
Names.....	17
Generations in an Ageless Society.....	18
Animal-Heads.....	18
The Five-Generation Rule.....	19
Classes in the Empire.....	20
Death in the Empire.....	20
Common Causes.....	20
Megadeath.....	21
After Death.....	21
Crime and Punishment in the Empire.....	21
Crime.....	21
Trial and Punishment.....	22
Art and Drama.....	23
Sport.....	24
Torsa Horses.....	24
Religion.....	25
Language.....	26
Non-Citizens.....	27
Other Species.....	27
Slaves.....	28

Pets.....	28
Nanders.....	28
Deep-level Beings.....	29
Mindseas.....	30
Definitions.....	30
Contamination Laws.....	31
Teachings of the Mindsea Academy.....	32
Mindsea Powers.....	33
History of the Empire.....	34
The Dispersal.....	34
The Founding.....	35
The Patternistic Theocracy.....	36
The Patternistic Mindsea Empire.....	37
The Return of Aturon.....	37
Revolution of the Shadowfolk.....	37
The Evolved Plutocracy.....	38
The Doubting Theocracy.....	38
The Unfused Plutocracy.....	38
The Templefall.....	38
The Era of Extension.....	39
The Spacious Mindsea Empire.....	39
The Ziponist Era.....	39
The Reversionist Era.....	40
The Transaxial Meritocracy.....	40
The Blooming.....	40
Besi's Wake.....	41
The Cataclysmic Theocracy.....	41
The Trembling Time.....	41
The Za Leit Era.....	41
The A.I.G.G.L.E. Regime.....	42
The Temporal Aristocracy.....	43
The Spacious Aristocracy.....	43
The Contested Era.....	43
The Age of Illumination.....	43
The Fluidity of History.....	44
Conflicts that Shaped the Empire.....	44
The Fall of Ulona.....	44
War of the Soul-Gems.....	44
The Bioid War.....	45

Bid for Immortality.....	46
Judgment Against Rathax.....	47
Walpurgians Versus Revelationists.....	48
The Green Wave.....	49
The Egg Crisis.....	50
The Ziponists.....	51
The Za Leit Wars.....	51
The Ghost War.....	53
The Code War.....	53
The Great War.....	54
The Lesser War.....	54
The Nander War.....	55
The Aiggle War.....	55
War Between Levels.....	56
Imperial Home-Level Technology.....	56
Antiaging.....	56
Wonderdomes.....	57
Copy Insurance.....	57
Glowworms and Fireflies.....	57
Bioids.....	58
Nooks.....	59
Memory Buttons.....	59
Firefly-Assisted Reproduction.....	60
Airlifters.....	60
Weather Engineering.....	61
Imperial Deep-Level Technology.....	61
Patternistics.....	61
Deep-Level Communications.....	62
The Theory.....	62
LZ-Nodes.....	63
Farfling.....	63
Enfoldments.....	63
Mind-Net.....	64
Deep-Level Travel.....	64
Downleveling Ships.....	64
Transways.....	65
Trans-Gates.....	65
Chronon-Twistors.....	65
Deep-Level Artifacts and Architecture.....	66

Soul-gems.....	66
Deep-Level Swords.....	66
Interlevel Artifacts.....	67
Shipping Containers.....	67
Freezing Chests.....	67
Deep-Level Architecture.....	68
Time Pockets.....	68
Time Labyrinths.....	68
The Stairway of Ice.....	69
Gradations of the Deep.....	69
Downside of the Deep.....	70
Time Measurement.....	70
Intragalactic Travel Times.....	71
By Deep-level Ship.....	71
By Transway or Chronon-Twistor.....	72
Famous Downleveling Ships.....	72
Amber Sun.....	73
Whirlaway.....	73
Serious.....	73
Genesis IV.....	73
Sola.....	74
Reflection.....	74
Silverlance.....	74
Mantis.....	74
Kiadox.....	75
The Freedom Series.....	75
Planets of the Empire.....	75
Sector One.....	77
Tywoshak, Planet 1.....	77
Piatlo, Planet 3.....	77
Xatme, Planet 43.....	77
Wamatu, Planet 161.....	77
Amugro, Planet 169.....	78
Saqufe, Planet 190.....	78
Planets of the Red Star Empire.....	78
Rexros, Planet 3069.....	78
Sector Two.....	78
Mosalno, Planet 402.....	78
Sector Three.....	79

Niom, Planet 997.....	79
Sector Four.....	79
Haslo, Planet 1269.....	79
Sector Five.....	79
Bri, Planet 1730.....	79
Sector Six.....	80
Lal, Planet 2215.....	80
Sector Seven.....	82
Thapauti, Planet 2484.....	82
Sector Eight.....	82
Rigre, Planet 2871.....	82
Medne, Planet 2999.....	82
Hopario, Planet 3010.....	83
Ulona, Planet 3011.....	83
Planets of the Code Empire.....	83
Meru-Iola, planet 3386.....	84
Imperial Space Structures.....	84
Major Imperial Characters.....	84
Attequol.....	84
Kokkiro.....	85
Aturon.....	85
Quokisa.....	86
Ashia.....	86
Zipo.....	86
Rathax.....	86
Besi.....	87
Hub.....	87
Raolin.....	87
Horl.....	88
Orgmorgan.....	88
Strithie.....	89
Deov.....	89
Ix.....	89
Thermeon.....	89
Morning Glory.....	90
Fuerida.....	90
Puflet.....	90
Katora.....	91
Quintillion.....	91

Serpenlino.....	92
Shell.....	92
Imperial Sayings, Gestures, and Titles.....	92
Sayings.....	92
There is no Death in the Deep.....	92
Stripes' Stripes!.....	93
Like a Freak at a Free-for-All.....	93
Twistored.....	93
Transaxed.....	93
The Sandfish Pointing at the Grinx.....	93
Gestures.....	93
The Mind-link Sign.....	93
The Internal Sign.....	94
Challenge to a Race.....	94
Pilot Gestures.....	94
Nander Gestures.....	94
Titles.....	94
Galactic Presence.....	94
Son/Daughter of the Circle.....	95
Grandmother.....	95
Matriarch.....	95
Using the Website.....	95

Overview

The Galactic Mindsea Empire will exist in the Milky Way Galaxy roughly a million years in our future. It will arise when scientists discover an aspect of reality hinted at in the contradictions of Quantum Physics and presaged as the implicate order of physicist David Bohm: There is another way to interpret spacetime, matter and energy, known to imperial patternists as "The Deep."

Employing nonlocal characteristics of the Deep, imperial science will make the breakthroughs in superluminal communications and travel necessary to hold together a galactic empire. A few humans possess the ability to directly perceive phenomena of the Deep. They are known as mindseas.

The Empire is distinguished by its "Deep-level" technology, technology bridging the gap between fantasy and science fiction. In this empire of the distant future, mindseas can call upon powers that seem magical, but there is a scientific explanation for all that they do.

The secret of mindsea power is in a new way of looking at reality, in which the laws of physics familiar to humans today arise as special cases within the more general operations of Patternistics. When all of the possibilities are explored, it becomes evident that what humans today regard as reality is illusion. Time and space can be taken apart and rearranged into countless alternative structures. The universe is created from patterns that take every possible variation through the working of invariant rules of recombination. The illusions of consciousness and free will arise from the superposition of patterns with the awareness that fills all combinations equally.

The science of Patternistics divides reality into successive levels. Home Level is the realm where humanity evolved, where the illusions of space and time prevail. Patterns of deeper levels allow awareness to see beyond ancestral limitations. By shifting their identities onto a deeper level, mindseas gain the power to break

classic laws of physics, though they remain caught in the illusions of their new level.

Successively deeper levels exist, each containing more raw creative and destructive power than the shallower level it enfolds, culminating in the Center, where nothing exists because all is one undifferentiated all-encompassing awareness. In the Center, there are no patterns, only formless potentiality.

Culture of the Empire

Roots

The Empire was founded by Attequol, a mindsea who forged three thousand ten planets into a union, using the superior technology he had developed, as well as his unwavering determination and force of will. The culture of the Empire in its infancy was largely a product of his vision.

The chessboard base of the Imperial logo symbolizes Patternistics. The development of this field has permitted imperial scientists to dismantle and redesign space and time to their specifications, supporting a galactic infrastructure. The globe at the top signifies a mind containing the galaxy. The term *Common Mind* describes the oneness in identity that the founder envisioned for his Empire. According to his plan, the empire always would be headed by a mindsea, someone able to act on Deep patternistic levels where world-lines and identities fuse. The mindsea would personify the empire and provide a unified timeline for historical events.

In practice, small-minded people often seized the throne to the empire's detriment, or supported rival mindseas, and history became shredded.

Over the millennia the people of the Empire went through many changes, but parts of Attequol's legacy remained fixed throughout the Empire's history:

- Genetic engineering that provided citizens with "antiaging," or indefinite youth.
- Health care centering around chemical pools within "wonderdomes."

- Deep-level interstellar and intergalactic ships.
- Torsa Horses.
- A government divided into branches, with the emperor's power balanced and limited by other voices. Some emperors have tried to seize absolute power, as have some non-emperors, but in time the pendulum has always swung back toward center.

Imperial Branches

There are two branches of imperial government, the Palace Branch, headed by the emperor, and the Bureaucratic Branch with its Circle of Scientific Experts. At times there have been third branches, formally, as when Attequol made the Mindsea Academy his third branch at the Empire's foundation, or less so. The Pilots Guild, with its control over interstellar shipping, has rivaled the powers of the two branches, especially during times when alternate modes of transportation were unavailable. Pilots Lounges on every planet of the empire are safe haven from mindseas, imperial troops, and planetary police.

The Palace

The emperor or empress heads the Palace Branch of imperial government, with the imperial major as their second-in-command. Since the Decadent Epoch, the power of the major has equaled or exceeded that of the emperor. Since the Decadent Epoch, the third highest official in the Palace Branch has been the mind-river of Lal. Major and mind-river have the authority to command the imperial armed forces, while the emperor does not unless standing before the Judgment Wall.

Imperial armed forces are made up of imperial minors, men and women bred and trained for the job, their breeding, education, and justice system separate from that of other citizens. They are a separate race, descended from the yellow children of Ulona. While on duty, they always appear in golden armor, with or without visible weapon systems. Golden visors shield their faces. They

wear plumed helmets and long surcoats with the emperor's colors and insignia. They strive to serve the Empire, though not the emperor personally. They are headed by a tradition master anonymous to the public.

Planetary police forces and sector space fleets are made up of ordinary citizens.

The Bureau

The Circle of Experts has ever rivaled the emperor in their power and prestige, controlling glowworm tentacles that permeate the fabric of imperial society to direct every aspect of a citizen's life with multitudinous regulations.

The pink torus-shaped Bureau Headquarters rising against the backdrop of towers and sky-bridges of Tetbo, the imperial capital, is for many citizens the symbol of reason and civilization, the champion of citizens' rights against the irrational fury and power which the mindsea-emperors are regarded as epitomizing.

Imperial Jobs

Education

Every adult citizen of the Empire is expected to fulfill a role in the ongoing task of perfecting of human civilization, and imperial education is designed to shape them for this role. Immediately after hatching, imperial children are gathered into creches with their age-mates, and instruction is provided by bioids in human or animal form. Parents are expected to visit often, but children live in a learning habitat with their creche-mates, unless the parents secure special designation as child-caring authorities, or if their habitat is too distant from centers of civilization to make a creche practicable.

When they reach the Minimum Age of Adult Citizenship at twenty years of age, children can decide whether to immediately apply for a niche, or whether to continue their education.

When they reach a hundred years of age—or a few years more or

less if their creche is graduating together—every citizen must be niched. Those incapable of holding a job will be sent for wonderdome adjustment. If that fails, they may be judged incompetent and terminated.

Job Fairs

Upon graduating, a young citizen will be directed to a job fair, a permanent city housing representatives of every known occupation. Graduates are expected to seek out representatives according to their diploma, which is a key that opens the portals to a building showcasing the opportunities in their niche. Once inside, the graduate will choose an opening and receive their assignment.

Niches can also be assigned directly by corporate officials or government authorities if the graduate has the right connections.

Horse Races

There is an ancient tradition for some government posts, such as mayors of large communities, lunar or planetary potentates, and, on occasion, the imperial throne itself, to be won in a Torsa horse race through dangerous, Deep-level obstacles.

Genetic Engineering

The genome of imperial citizens has been carefully modified to produce healthy and intelligent citizens, while at the same time allowing for ample genetic diversity. The height and weight of citizens falls between officially set parameters. Although characteristics of all known human strains from pre-Dispersal times are included in the genome, making the typical imperial citizen what would be called multiracial on ancient Earth, hair, eye, and skin color determinants have been moved to mutually exclusive alleles so that contrasting colors will continue to emerge rather than blending together. Skin tones range from the palest pink to the deepest brown, with bronze, copper and gold tones as well. Green skin is caused by photosynthesizing endosymbionts, and blue skin by a variant in blood chemistry which has no deleterious effects. The silver-black and silver-white skin tones are

caused by the production of reflective nodules in the epidermis, which helps to protect against harmful radiation.

Aside from the pruning of genetic combinations known to cause neurological disorders, Genetic Algorithms has done little to regulate the mental functioning of citizens, as Proposals for such changes have proved too controversial to implement.

Citizens who have non-human parents may exhibit non-standard features, such as the luminescent white hair of nurrs characteristic of Emperor Thermeon's descendants.

Gender in the Empire

Because imperial children can be created from gene specs and grown to viability in incubators, sexual reproduction is unnecessary. However, male and female genders have been retained as part of the human heritage and species identity. Citizens may acquire a neuter identity or dual-sex identity if they so desire, but the vast majority enjoy the drama of sexual interaction, just as did their Earthborn ancestors. Bisexuality is considered the norm, as it offers the most opportunities for enjoyment. Citizens are also encouraged to experiment by switching genders during their formative years, as a simple wonderdome float will reshape their body into the opposite sex. Upon reaching maturity, many citizens feel satisfied with a single gender and sexual orientation, while others continue to switch.

Until such time as they are granted reproductive rights, imperial citizens are infertile. Males do not produce viable sperm. Females do not ovulate, nor do they experience menstruation. When a citizen wins reproductive rights, the Genetic Algorithms official who hands out the incubator for their offspring will also send a signal their body switching on their ability to engender the child. Many couples enjoy natural fertilization, though it is not necessary. When it is chosen, the zygote is generally transferred to the incubator after a few days.

There are of course known ways to illegally overcome infertility. Kid kits can be purchased almost anywhere in the Empire.

Mindseas can use the multiple aspects of their Deep-level selves to make themselves fertile, as can Deep-level pilots who minutely guide their upleveling.

Children of the Empire

Mating Flights

During the Decadent Epoch, many children born in the Empire were the result of mating flight hookups. The parents had probably never met before the race and probably would not meet again afterward. Terms set out in the mating flight advertisement specified which party would be responsible for raising the child. The Department of Genetic Algorithms would naturally not approve production of a child without provision being made for its care. The parents could, if they wished, specify some third party as caretaker. It was fashionable for wealthy citizens to have their children raised at the **Orphan School of Mosalno**. They would first introduce themselves to their offspring at their MAAC graduation, when the child was twenty imperial years of age.

Marriage

Marriage was outlawed during the Decadent Epoch with the reasoning that it restricted genetic variation. After Thermeon's accession, such long-lasting bonds were once again allowed. It became common for children to be raised by both of their parents, and for Genetic Algorithms to grant reproductive rights to the same couple multiple times. The right of lovers to send forth their genes overrode the genetic diversity argument.

The number of citizens able to reproduce has varied from era to era. During times of expansion and settlement of new planets an increased birth-rate has been permitted, but throughout most of the Empire's history, privileged couples have produced children with gaps of only a few years space between them, while those without swift steeds for mating flights may wait in vain for centuries.

Group Marriage and Mixed Marriage

Another reproductive strategy that has varied in popularity across the millennia is the Group Marriage, where more than two people contribute genes to the child. At one time group marriages involving up to nine people were not uncommon. This allowed citizens to have children, even if they were unable to win a mating flight.

Occasionally citizens of the Empire have requested reproductive rights with aliens, with zombies, with members of other species, or even with bioids (artificial life-forms). Such children are produced with the aid of gene-splicing laboratories.

Parthenogenesis is another reproductive mode which has waxed and waned in popularity. During most periods it has been considered selfish, and it has sometimes been outlawed.

Birth

Nearly all citizens are birthed or "hatched" from incubators provided by Genetic Algorithms to those who have won reproductive rights. The emerging infant is more developed than ancestrally birthed babies were. Within days they are walking and talking.

Rarely, a citizen will opt to experience childbirth in the ancestral mammalian way. Men and women alike can be altered to undergo this experience.

Some of the poorer native peoples of the Empire, including Lalian peasants, undergo childbirth as a rule, although they rarely acquire reproductive rights. The Nanders also birth their young in the ancestral manner.

Oviparity has sometimes been a fad among imperial elite, and bodies adjusted to produce eggs.

Names

All children born to the Empire are issued names by Genetic Algorithms. Letters of the name correspond to the recipient's genome. Sometimes the combination of letters has unfortunate results. If the recipient or the parents are unhappy, they can pay to have the name changed. The cost of a name change increases exponentially with each additional letter to be changed. Deleting a letter costs double. Granting name-changes is Genetic Algorithms' major source of income aside from accepting bribes to grant reproductive rights. Many people, unable to afford a name-change, must satisfy themselves by using a short version of their name or a nickname. Some people, like Thermeon and Quintillion, name themselves.

All citizens are assigned three names. Full siblings will receive the same third name. At times it has been the custom for citizens to switch between using their first and second name when they switch sex.

Because of the vastness of the Empire and the complexity of its systems, the imperial age of majority is a hundred years; however, starting at twenty years old, the Minimum Age of Adult Citizenship, children enter a series of subadult stages with increasing responsibilities that lead gradually to full adult status with its privileges.

Generations in an Ageless Society

Thanks to antiaging genes, a citizen's age is not revealed by their appearance. Nevertheless, most citizens feel that their particular age-bracket is superior to others, and make their allegiance known by their dress, hairstyling, and speech mannerisms. Glowworm-animated clothing and hairstyles have been known back at least as far as the the Founding, so creating a new, shocking style is not easy. Yet every generation attempts to make its own unique statement. Sometimes a style from an obscure planetary tradition, which may have been considered provincial the year before, can be elevated to the year's "in" thing. The resh-wool ponchos of Longgorians, and even Nander pajamas have had their day. From

time to time, it has become popular with the young crowd to augment their bodies with animal features, such as wings, fur, or tails. Those who do are known as animal-heads.

Animal-Heads

Early during the Contested Era, it became the fashion for the idle youth of the Imperial capital Tetbo to transmogrify themselves with animal features. These animal-heads filled the nightspots along the Way, the central thoroughfare of the capital, indulging in all-night dancing and debauchery.

Animal-heads believed that an Age of Falling Darkness, brought about by the excessive use of Deep-level equipment in the Empire, was about to engulf the galaxy. The Empire's leaders would be unable to divert this disaster. Holes had been rent in the fabric of spacetime, and Deep-level material was bubbling through these tears into Shallow levels, taking the universe's energy along with it. Entropy would gobble up the exhausted universe. The lights of the stars would fade within a few years, leaving the galaxy cold and black and dead.

The animal-heads wanted to enjoy themselves while they still could.

Quintillion claimed that the animal-heads were followers of Thermeon, imitating his animal features. Some pundits believed that they modeled themselves after Quintillion's imperial major, River Rock. Still others say that the animal-heads' leader was Torm, a stepson of Quintillion who fought his father for the throne.

The Five-Generation Rule

Because it is possible for citizens to live for thousands of years and to continue winning mating flights throughout that time, and for their children and children's children also to win mating flights, the Empire's oldest citizens may live to see thousands of descendants. At a time when heads of both Imperial Branches—Emperor Thermeon and Head of the Circle Raolin—were prolific breeders,

the Five-generation Rule became law. Accordingly, no citizen may claim kinship with a progenitor more than five generations removed. This relieves the elder citizen both from inheritance claims by the youngster, and from criticism should they unwittingly—or not—mate with their own distant descendants.

A citizen may still claim descent from a celebrated ancestor, as Katora cites her connection to Empress Besi across eighteen generations, but such ties have no legal significance.

Classes in the Empire

Officially, there are no classes in the Empire; every citizen is equal before the law and all will receive an exhaustive education and find opportunities for obtaining reproductive rights. In practice, the descendants of the people who came with Attequol when he conquered the planets occupy the best niches and dominate mating flights. As they have tweaked their genes to maximize their height, these arisocrats are almost always much taller than descendants of a planet's conquered native peoples.

Mindsizes are another source of division among people. During times when mindseas have been admired or even worshiped, those who could boast of mindpowers rose to the top of society. During periods in which mindseas were villified as subhuman, those suspected of mindpowers suffered various persecutions.

Death in the Empire

Common Causes

The most common cause of death in the Empire is mental shutdown, or crystallization. The second leading cause of death is suicide.

Accidents rarely prove fatal, thanks to the twin safety nets of wonderdomes and copy insurance. Disease organisms and genetic weaknesses have been weeded out through the efforts of Genetic

Algorithms. Local natural disasters are held in check by weather engineering.

A small number of fatalities, including unexplained disappearances, occur because of criminal activity or malfunctions in downleveling equipment or spatiotemporal-translation equipment.

Megadeath

At times plagues have broken out among strains of glowworms to attack human bodies from the inside, causing great loss of life. Warfare involving Deep-level weapons or bio-engineered weapons has also caused heavy losses. Rampages of the most powerful mindseas have unleashed destructive Home-level and Deep-level phenomena on a planetary scale.

After Death

When a citizen dies, the body is usually disposed of without ceremony. Every wonderdome is equipped with one chute leading to the float tanks, and another leading to the recycle unit. Certain religious movements claim that this is callous behavior typical of the Decadent Epoch, but even for believers, death is seldom marked by any ritual beyond a ceremony of remembrance, which does not require the presence of a corpse, which, because of their unfamiliarity with death, might traumatize citizens.

Occasionally, especially on obscure planets, the gene specs of the deceased may be deemed so valuable that they are preserved, sometimes along with the body itself. The body may be reanimated with glowworms, becoming a "zombie" rather than a citizen, as the individual's personality has been lost.

Crime and Punishment in the Empire

Crime

Across the ages, perhaps no subject has seen more debate within the Circle of Experts than the crime question. It has been argued that Genetic Algorithms has the means of rendering all citizens happy and law abiding, so why shouldn't it be done? Opponents of the "Perfect Humanity" cause argue that such perfect humans would have been robbed of their self-determination, a quality more vital than security or predictability. Also the concept of what is lawful can evolve. Thus far, the "Determine" cause has won out in the Empire, although other sovereign states within the galaxy are thought to have honed their citizens before succumbing to outside invaders.

The most common crimes within the Empire are burglary and cheating in games of chance. Smuggling and the selling of unauthorized or falsely advertised substances are common as well.

There are numerous illegal practices centering around hard-to-obtain reproductive rights, from the selling of incubators, to gene theft, gene substitution, and incubator theft.

Serious crimes such as rape and murder are rare.

Citizens, especially those living on less prominent planets or in transit through the galaxy, may be subject to attack by slavers and space-raiders, although members of these criminal organizations are often not imperial citizens themselves

Trial and Punishment

Citizens suspected of criminal activity are taken into custody by planetary police or imperial minors after having been caught in the act or accused by a victim.

The suspect is tried in a court of law where evidence can be presented by lawyers or other interested parties. A judge rules on the guilt or innocence of the accused and decides on punishment.

Punishment usually consists of a wonderdome float designed to

correct the psychological imbalances that caused criminal behavior. If monetary harm was caused to other citizens, a fine must be paid to compensate them. If public harm was caused, the criminal may be required to perform community service.

There are no prisons, per se, although a repeated offender may be sent to facilities such as the one on Wikow, where experimental forms of correction will be attempted.

If the judge rules that a suspect's accuser has presented false evidence, they will be sent for correction instead of the one they accused.

During the Contested Era, trial by mindsea was invoked for notorious cases. The accused would be brought before the mindsea to have their thoughts reamed for guilt or innocence. If they were found guilty, the mindsea would instantly put them to death with a mind-blow. Thermeon, Maxuas, and the Torms took part in this practice, but Quintillion did not.

Aside from acts of treason and rebellion, few crimes merit the death penalty. Since the year 92,146 isuse of mindpowers has been a capital crime. This is considered just because mindseas can manipulate court evidence to exonerate themselves, because they are impervious to any form of correction, and because the harm they can cause in psychic pain and physical damage is beyond measurement.

Art and Drama

Self-programming bioids can be designed to replicate all the fine arts humans have created on Earth and beyond, as well as designing never-before-seen art forms. However, imperial society has always regarded art produced by a living mind as having more intrinsic value than anything spun out by a bioid. Empress Besi's pronouncement that "the living mind stirs the Deep but a mechanism without self-will cannot," continues to hold sway. Therefore, works of art produced by citizens (with or without bioid assistance) are clearly marked as meaningful and presented for public enjoyment and critics' dissection.

In the same way, although bioids can produce a believable (to the Deep-blind) imitation of any human emotion, humans who perform in live theater are accorded the laurels of audience appreciation. Scenes in which characters perform beyond-human acrobatics or suffer dismemberment or explosive death are of course portrayed by bioids.

Sport

As art is regarded as an important human endeavor, so too is sport. Genetic Algorithms could engineer men and women capable of superhuman feats, but this has never been acceptable to the Common Mind. The standard human model, with its strict limits as to size and structure, is zealously maintained for all citizens, including athletes. Because of this, the champion's fans can thrill to the knowledge that only a concentrated effort of will and rigorous training resulted in their winning performance.

There have always been those who attempt to illegally augment themselves, but when caught, they are subjected to public scorn as well as trial and punishment.

Popular sports include sword-dancing, falconry, wrestling, snow, ice, and water games, as well as many forms of ball games originating on different planets.

Mindseas are not permitted to compete in athletic events, as they would have an unfair advantage.

Torsa Horses

Since the legend of Kokkiro riding the white horse up the Stairway of Ice is known to every imperial world, Deep-level horse-like beings known as Torsa have been cherished throughout the Empire from its earliest history. After the reign of Attequol's son Aturon, it became the custom for the Emperor to ride a white stallion, said to be the same one ridden by Kokkiro, up the main thoroughfare of the galactic capital.

In theory, every citizen is entitled to their own Torsa. But in practice, only the wealthy and connected can afford to take their children to an intersection with the deep-level homeland of the Torsa—the Plains of Possibility—for bonding to take place.

Once human and Torsa have bonded, the pair can participate in races sanctioned by Genetic Algorithms as mating flights, or by planetary governments as races for office.

Deep-level horseracing was known to the earliest imperial eras and experienced a resurgence during the Age of Illumination, with many new tracks being built. The greatest of these was Racetrack of Bri, built by Shell. Once they charged from the starting gate, horses and riders would find themselves transported across world-lines into different times and places, perhaps into unknown dimensions where laws of physics changed unexpectedly. Many adventures had to be faced before the racers could reach the elusive finish line. It is a sport for the courageous or foolhardy.

At times during the Empire's history, there have been Ultima Derbies, for which each planet tries to field a team of horses and riders wearing their planetary colors. They are allowed a personal choice of hats.

Religion

The Empire has no official religion. It is the stated position of the Bureau that science, especially the study of Patternistics, represents the most accurate explanation of reality the human mind can encompass.

However, many citizens adhere to the faiths of their ancestors or their planets.

The Code religion has the most numerous and active following. They believe the genetic code to be a message from a loving goddess who has been guiding life, ever since the beginning of creation, toward fulfillment within her transcendent awareness.

One branch of the Coders believes that Maxuas was the Goddess's chosen representative in the Milky Way Galaxy. They regard all of

his descendants as holy.

Many of the poorer citizens of obscure worlds, deprived of their ancestral faiths with their world's conquest and inclusion in the Empire, worship their conqueror, Attequol, as a god who continues to express his will through the Judgment Wall in Lal.

The worship of Kokkiro is also prevalent throughout the galaxy. Believers know that he awaits them at the top of the Stairway of Ice, in the center of space and time, and expect to join him there after death.

The Nanders hold to their primieval faith. The first man, Salomano, sacrificed himself to give them eyes. When they saw through his eyes, they learned to sing and dance, and became human. They reenact his sacrifice in their Grandmother Dance.

Mindseas have frequently introduced religions that centered on themselves as primary deity, only to have those religions fade after their demise.

Imperial Major Horl invented a religion called "Faith, Love, and the Greater Good" in order to excuse the blood sacrifice he required to produce soul-gems, and it lasted beyond his overthrow through the enthusiasm of its chief priest, his granddaughter Zilf.

Language

Lalese is the official language of the Empire. Although children of many native groups learn to speak a planetary language from their parents, Lalese is part of their required education. It is used exclusively in interplanetary circles and by planetary governments. Sophisticates usually consider use of one's planetary lingo a mark of poor upbringing or peasant mentality, although at times novelty seekers have made obscure languages, even non-human languages, a fad. Even so, the speakers of the rarest language cannot hope to confound eavesdroppers. A citizen's standard internal has the capacity for interpreting all known forms of communication in a way that makes understanding seem instantaneous, so a citizen needs to be extremely innovative if they want to have a private

conversation.

Every child is taught to speak Lalese by bioids whose programming has not been changed for millennia, so there is very little evolution in ordinary speech. But each generation strives to find some special lingo of their own, usually based on references to events or personalities that were famous during their youth. Use of such phrases, as well as style of dress, identify a citizen with his or her era. Dressing or speaking as if from an era other than one's own is considered rude, even bordering on criminal.

Non-Citizens

Other Species

Within the galaxy there are countless plant, animal and alien life-forms, as well as persons of human stock who originate from non-imperial worlds. Any species, even descendants of animal species spread from Earth during the Dispersal, can gain the status of alien sentient by passing the **Alien Sentience Test**. Any being passing this test may apply for and receive citizenship.

Those not wishing citizenship are still protected by "Friendly Alien" laws, which have varied from millennium to millennium.

A movement known as **Greenism** strives to outlaw the killing of any life form. Greenism proposes that every citizen be provided with photosynthetic endosymbionts, making the need for plant and animal foods obsolete.

A more popular alternative to the slaughter of animals and harvesting of plants for food is the production of tasty, nutritionally balanced artificial meat, vegetables, and fruit.

Slaves

At various times during the Empire's history, most recently during the Decadent Epoch, human slavery has been allowed, supported by arguments that some humans are too stupid, lazy, or

overwhelmed by the vast complexity of imperial life to care for themselves. Although all slaves were freed after Thermeon's accession, humans can still opt to give up their citizenship and live as total dependents, as long as they are willing to adopt an animal morph that clearly states their status.

Illegal slavery persists, despite numerous government attempts to hunt down slavers. For millennia after the abolition of human slavery, a daughter of Horl named Ix ruled a vast slaver empire and called herself "Empress of the Unknown." She kidnapped citizens, wiped their memories, and sold them to the highest bidder.

Pets

Despite the number of non-human species in the galaxy, pets are uncommon in the Empire. Bioids fashioned to resemble animals have long since taken their place. On some planets it is popular among the wealthy to engage poorer humans to dress up like or morph themselves into animals for the amusement of their children. Such hirelings are known as **ersatz beasts**.

Nanders

Since the Decadent Epoch, there have been spread throughout the Empire small populations of a people known as Nanders, who do not share in the culture of the Empire. Their genes have not been altered from ancestral stock; they have neither the varieties of colors of citizens nor antiaging.

During the Decadent Epoch imperial citizens regarded Nanders as little more than animals. Aristocrats hunted them from air lifters. Others were put into slavery, along with humans and aliens.

Nander slavery and Nander hunting have been outlawed; however, attempts to make Nanders full citizens are strongly resisted, both by citizen groups and by the Nanders themselves. Quintillion, part Nander himself, tried to overcome this resistance. He instituted numerous projects to make the Nanders integral to the Empire—as mind-rivers, interstellar pilots, or trans-gate operators—without

lasting success.

Deep-level Beings

The universe of spacetime in which humans have evolved is known as "Home Level", and is distinguished from deeper or shallower patternistic levels by its "number-of-divisions" or the graininess of its basic units. The deeper the level, the more discontinuous reality becomes.

There are species that have evolved for deeper or shallower levels than the human Home Level, but because of differing perceptions, not the least of which is time perception, humans have rarely had contact with such species.

Exceptions are the Torsa Horses, the zills of Wamatu, and the whales of Medne.

On other rare occasions humans themselves have adapted to Deep-level life. Once instance of this took place on pre-Imperial Mars.

Mindseas do of course venture into deeper levels when they exercise their powers. Some of the Empire's technology, such as tetrascoping ships and farfling towers also impinge upon deeper levels. This has occasionally brought the Empire into conflict with Deep-level beings who resented the incursion into their territory. Conflict has resulted, such as the strife with the Aiggle in 104,822.

Mindseas

Definitions

A person who possesses mindpowers, or the ability to act on Deep patternistic levels, is called a mindsea if their mindpowers are of a certain type. According to the official definition, a mindsea has the ability to link telepathically to anyone they know. They cannot link to people they have never met, nor can they "overhear" the thoughts of people with whom they are not linked.

Historians feel that citizens did not hate and fear Attequol or his successors, and it was not until after Rathax that mindseas earned a reputation for menace.

In order to protect citizens from the powers that mindseas wield over lesser minds, the Contamination Laws were enacted toward the end of the second Plutocratic Era by Empress Hosto.

Contamination laws are also known as “ritual separation,” especially when enforced for emperors who are not mindseas. They prescribe the distance that must be maintained between the mindsea and unmasked citizens for them to remain safe. An alternate mode of enforcing ritual separation is the use of protective barriers or full body armor including masks or visors.

The assumptions behind the Contamination Laws are that mindseas can only exert their powers on individuals known to them, and that proximity is the only way that they can come to know an individual.

Whether those assumptions are true or not is another matter.

It is thought that the contamination distances prescribed by the laws reflect the visual acuity and verbal processing characteristics of a particular mindsea, perhaps Zipo (emperor from 37,889 to 46,000).

Contamination Laws

A mindsea may not touch their bare skin to the bare skin of a citizen. A mindsea may not touch a protected citizen with more than 1.516 units of force.

The mindsea must maintain a distance of 17.23 millilengths from a citizen, this distance to be known as the “Contamination Distance.” The Contamination Distance is invariant under all weather conditions. When going abroad in a public place, the mindsea must give notice of their approach by warning lights and alarms. The Contamination distance on every side of the mindsea must be indicated at all times by contamination lights in a full spectrum of colors.

If a mindsea is addressed by a citizen, the mindsea may not reply before the elapsing of 5.64 second pause, this time to be known as the “Contamination Time.”

The mindsea must observe personal cleanliness to a degree that prevents their body odor from reaching a citizen standing beyond the Contamination Distance.

A mindsea may not pass or throw an object to a citizen.

A mindsea may not respond to any gesture made by a citizen until after the elapsing of the Contamination Time.

Violation of any of these rules constitutes the “Contamination” of the citizen. A Contaminated citizen is entitled to collect from the mindsea compensation equal to the citizen’s total projected earnings during the remainder of their natural life.

The Contamination Laws were rescinded at the end of the Contested Era, and were a dim memory by the time of Age of Illumination, when the number of mindseas in the Empire vastly increased.

People with telepathic powers less than those of mindseas are called **mind-rivers** if they can link only to identical copies of themselves, or **mindpools** if they can link to a few people with whom they have special ties. The latter term is rarely used.

After the destruction of the farfling system during the Contested Era, mind-rivers with copies placed on distant systems provided the chief conduit of interstellar communications until the temporal adjustment of the farfling towers allowed them to function once again during the dawn of the Age of Illumination.

Another group of citizens who possess mindpowers, though they are rarely seen in that light, are the Empire’s interstellar pilots.

Teachings of the Mindsea Academy

Attequol founded the Mindsea Academy to pass his knowledge of Patternistics to future generations. At times the upheavals of history have closed the academy’s doors and denied knowledge seekers; but a second, secret store of records within the Imperial

Museum has always allowed Attequol's teachings to be rediscovered. Among the those teachings are the Four Tenets of Patternistics:

- There is no place but here.
- There is no time but now.
- There is no one but you.
- There is no will but observation.

Other key concepts of Patternistics include:

- Patternistic Integrity, the oneness of a system. It is patternistic integrity that determines the extent of a being, not the molecules making up the body. Unfusing, or destructive upleveling, takes place when entities on a Deep-level ship lose patternistic integrity.
- Patternistic Equivalence is the relative position things occupy in a system. It determines the forms travelers take when they enter reenactments.
- The Total Configuration Effect is the conservation of pattern in the universe. As the total pattern determines every bit composing it, so every bit reflects and determines the overall pattern because it can only fit into one particular pattern. As in "To see a World in a Grain of Sand" and "Eternity in an hour" the TCE dovetails with the First and Second Tenets.
- The Exact Configuration Effect, meaning that subtle changes in a pattern's tiniest bits may bring about a major change in a system, analogous to a phase change.
- The Approximation Effect, meaning that the pattern does not need to exactly match the previous configuration that triggered an effect, but merely be close enough.
- Rules of Concept Formation are thought to describe the way in which patterns of the universe change from one instant (quantum refresh event) to the next. There are four, five, or six rules depending on the source: Arbitrary, Extension, Negation, and Mixing are the most basic.

Mindsea Powers

According to the teachings of the Mindsea Academy, application of the Tenets of Patternistics should give the practitioner the ability to do amazing things. Knowing that space is an artifact constructed from more basic constituents on deeper levels should allow them to assemble any location around themselves, and knowledge that time is fashioned in the same way should make it possible to step out of any moment in time and into any other moment.

But in practice, such feats are impossible. No Academy student since the Empire's foundation has gained such abilities. According to myth, Attequol could travel through the Center to any point in spacetime, but it is only a myth.

In practice, many Academy students have learned to work the Third Tenet, to experience a merging of identities with others in mind-link.

Some patternists claim that all mindsea powers are based on the Fourth Tenet. According to the Fourth Tenet, all a mindsea—or any living being—can do is to choose which among many possible futures to observe, by this choice making that one possibility real. It is the same process as decoherence of a quantum superposition. In the instant between untouchable past and untouchable future, a living mind is composed of the superposition of many possible states. In the next instant, only one of those states persists, and a different superposition of possibilities occurs. What makes mindsea observations more powerful than those of most humans is the number of possibilities in superposition. The deeper the patternistic integrity, or identity-entanglement, reaches, the more possible futures can be winnowed through. That is why some patternists believe that Attequol might indeed have possessed the powers myth ascribes to him.

When a mindsea chooses a future moment, no laws of physics are violated. Whatever phenomenon the choice unleashes, even a blast of destructive energy such as Thermeon directed against the planet Wamatu, will have as its proximate cause some working of known physical laws, although the chance of such an event occurring may be vanishingly small.

History of the Empire

The Dispersal

At a time when Earth scientists were on the verge of discovering the Deep, a disaster forced humans to flee their homeworld and colonize the galaxy. Earth's leaders formed a temporary connection with a Deep-level phenomenon that transported the refugees across huge stretches of space and time. That is why, although the Empire will arise a million years in our future, the history of human settlement on its planets is far shorter than a million years—only a score millennia on average.

Civilization regressed after the Dispersal, as the transplanted humans on each planet could not return to their origins or communicate with other planets. Memories of the Dispersal became myth, the story of Kokkiro, King of Earth, leading his people up the Stairway of Ice. Patternists know that every moment in time splits into as many alternative pasts as alternatives futures, but the story of Kokkiro and the Stairway of Ice is the alternative imperial citizens choose to enshrine.

The colonists who followed in Kokkiro's footsteps took with them the genetic codes for all Earth's life-forms, both living and extinct, and seeded their new homes with familiar flora and fauna. The human mind and body remained largely unchanged on many colonized worlds, so although new languages and customs evolved, a basis for eventual reunification remained.

The Founding

Attequol was born on a small island on the planet Tywoshak. Although his people were simple fishermen, Tywoshak was a technologically-advanced world that had antiaging genes and universal education. Theirs was a trading world, and Attequol was so impressed by the interplanetary merchants who visited that he built his own ship to follow them.

Attequol was gifted with the ability to perceive Deep-level forces

and to design equipment that made use of those forces. He sailed the universe-generating waves of the Deep as he had sailed the ocean of his native world. He is credited with inventing the science of Patternistics.

His mindpowers caused Attequol to be called the first mindsea, although historians feel that Kokkiro must also have been a mindsea.

Attequol had a transforming vision. He foresaw that, just as the myriads of islands on the Tywoshakian ocean were united under one government, the inhabited planets scattered across the ocean of space might be united. He set out on a mission of conquest. Most of the planets he visited were primitive compared with Tywoshak, but even the more advanced peoples could not withstand the patternistic weapons Attequol had developed. Within the course of a few millennia, he forged an empire consisting of three thousand and ten planets.

The Patternistic Theocracy

Attequol ruled his peaceful empire for almost five hundred years. Then he vanished. As the years passed, histories traced back to the moment of his disappearance multiplied. Some maintain that he died aiding citizens during a disaster. Others say that he ascended the Stairway of Ice and never returned, just as Kokkiro had.

Attequol's son, Aturon, was supposed to take over the reins of empire, but he preferred to hunt planets, and vanished for millennia. A magnificent patternistic detector was constructed at the galactic capital, meant to light up brilliantly when Aturon returned, but it lay forgotten long before that event occurred. A theocracy was established, centered around the galaxy's absent gods—Attequol and Aturon—and the patternistic technology that had melded the empire.

Holy Emperor Skresk, a woman who rose from obscurity to seize control of the galaxy, guided the theocracy during its first millennium, impressing upon the people of every planet that they must be pious and worship her as the representative of the absent

gods in order for their technology to continue to work. Her successor, Holy Emperor Skeorlian, was a mindsea like Skresk. Even more narcissistic, he tried to replace the ancient emperors as the galaxy's primary god.

The Patternistic Mindsea Empire

The Return of Aturon

Aturon returned at last to the capital after a voyage that had seemed much shorter to him in the Deep, as far removed from ripples of time as creatures of the abyss are removed from disturbances on the ocean's surface. He put an end to the false piety. But he did not enjoy the responsibilities of governing, and departed once again for other galaxies.

Revolution of the Shadowfolk

In 6,442, Quokisa, a small-time thief who had acquired a soul-gem splinter and developed mindpowers, led an uprising of marginalized citizens and toppled the old priesthood. She bolstered her claim to the throne with the story of being Aturon's longlost granddaughter. She set about sneaking other soul-gem splinters away from the aristocrats who had hoarded them. These splinters were conduits of Deep-level force that had been forged by Attequol and Aturon, and the Deep-blind priests were unable to make use of them, though they denied others their use. It was Quokisa's dream to rediscover the secrets that had made the early empire prosper. She forged a new soul-gem to counter the old soul-gem worshiped by the priests. Hers was called the "Shadowfolk Soul-gem." Her efforts to make her chosen history prevail were thwarted by remnants of the old theocracy, who called her requisitioning of the ancient artifacts piratical and supported the return to power of Skeorlian.

The War of the Soul-Gems ended with Skeorlian triumphant. Before she fled the capital, Quokisa shattered her soul-gem, and its

splinters were lost.

The Evolved Plutocracy

In 10,971 a mindsea named Tseorue rose from obscurity when she defeated Skeorlian in a mind-duel and took the throne. She did away with the state religion, instead emphasizing galactic productivity. A financial genius, she tapped previously unused resources, putting the galaxy's animals to work alongside its human citizens.

Despite a couple of setbacks, including one thousand-year banishment, Tseorue's power structure controlled the empire into the Twenty-First Millennium, as vast corporations run by her favorites arose and slowly consolidated positions controlling all of the commerce in the empire. The corporations remained long after Tseorue's final overthrow in 16,483.

The Doubting Theocracy

Holy Empress Ashia, who took power in 20,973, was the longest continuously-serving galactic emperor. During her interminable reign, she wrested control from the corporations and invested it in organs dedicated to her worship. Her dogma doubted the divinity of ancient mindseas, instead pointing out the present and practical (herself) as the true omnipotence in citizens' lives. She had no mindpowers, and towards the end of nearly ten-thousand years on the throne her personality disintegrated in the process of crystallization that affects most citizens despite antiaging. Long habit kept the theocracy running smoothly for another two hundred years after her death.

The Unfused Plutocracy

The Templefall

Emperor Rathax, who took the throne in 30,464, was inspired to use mathematics creatively in order to increase the Empire's wealth. Other rulers had tried to maintain a unified timeline across the many imperial worlds, but Rathax reasoned that if one allowed the timelines to proliferate freely, income could be collected from all of the multiverse. Rathax tried to reduce all of the timeline-fusing towers Attequol had built, and was crushed by a falling stone.

The Era of Extension

Rathax was succeeded first by his imperial major and later by descendants who called the problem of poor communications the solution to economic woes. A series of these weak emperors controlled the galaxy until the dawn of the Thirty-eighth Millennium, and kept the credits flowing.

The last great ruler of the plutocracy, Empress Hosto, scion of a lesser family, sought still more powerful and destructive equations to draw on the fundamental patterns of the universe. "Extend to the unknown," she urged the stewards of her monetary schemes. "Extension" was one of the patternsitic rules of concept-formation taught at mindsea academies, and her pronouncements thrilled the Common Mind with their clarity and precision. She reigned for nearly a thousand years.

The Spacious Mindsea Empire

The Ziponist Era

In 37,889, Emperor Zipo, a son of old Empress Ashia, swept into power to begin a reign that would extend, off and on, to the first year of the Forty-Seventh Millennium. Zipo cast aside the

reverence for mathematics and the focus on milking the timelines in favor of an old-fashioned warlike and expansionist philosophy, and the Empire shifted from realms of time to realms of space.

The galactic throne had not been won in a mind-duel since the Evolved Plutarchy, but all that changed with Zipo. He paved the way for ambitious men and women to advance, not through family connections, but by Deep-level fighting prowess. They called themselves the Ziponists. Zipo himself was defeated and dethroned on four occasions, but managed to effect a comeback three times before the humiliation of his defeat by the inferior mindpowers of soon-to-be Empress Tleg. The Ziponist movement lived on long after he was gone.

The Reversionist Era

Imperial Major Tseeset, ever seeking to solve the mystery of why she resembled ancestral human stock rather than her parents, engineered a supreme duelling emperor from wild hominid genes. Emperor Roxun triumphed in thirty-one mind duels and held onto the throne for two thousand years. Dying undefeated, he was followed by his and Tseeset's great-granddaughter, Svalmips, who herself regained the throne after her defeat by an unknown mind-duellist.

The Transaxial Meritocracy

The Blooming

In 64,902 Mindsea-empress Besi, who claimed to be a descendant of Quokisa, took power. She cleared away the old engines of war and instituted a meritocracy. Her plan was to allow the most energetic and creative imperial citizens to come to the fore. She hoped to encourage a wide spectrum of improvements, in the arts and architecture as well as science.

Besi's Wake

In 65,530 Besi was assassinated, and the son of Svalmips she had overthrown returned. But Emperor Trero had been softened by Besi's reforms, and had lost his taste for violence. Instead of mind-duels, Deep-level horse races determined the winners of important positions throughout the empire. The seven millennia of Trero's rule saw increasing benefits of patternistic technology, including transaxes that guided interstellar travelers across the timelines. Trero was succeeded by a son who continued his policies for another fifteen hundred years.

During its last millennium, during the reign of Empress Steolfeen, positions of power were often filled by military force or bought, though the name and form of the meritocracy continued.

The Cataclysmic Theocracy

The Trembling Time

In 76,558, Imperial Major Tetre, weary of the tameness of imperial life, transformed the meritocracy into a theocracy. She succeeded in her search for a holy emperor who would believe in her vision of a terrible god by using the DNA that had produced Roxun to create Empress Quazi. Quazi did not reign for long, but she passed her memories of primieval cataclysms to Kahee, her son with Tetre. Kahee had no desire for the throne, so Tetre had to find others to continue the theocracy.

The Za Leit Era

In 78,529, a mindsea named Za Leit ascended the throne with her expanded take on Tetre's vision. She declared that existence was a battle between the human will and the uncaring, often dangerous forces of nature. She emphasized the need for masters of the universe to become strong, to use force against force. She herself provided an example of masterful will. She pointed out,

triumphantly, that mindseas draw their vitality from the same Deep-level realm that generates universes, and thus are immune to crystallization. Unlike old Empress Ashia, she could reign forever.

The following millennia witnessed the back-and-forth struggle between Za Leit, the unleasher of cataclysms, and galactic business interests that craved less destruction of their resources and customers. Za Leit was overthrown, but as she was the only one who understood how to maintain the Deep-level systems that had been built during the previous era, the victors did not dare put her to death. Twice she broke free from supposedly secure prisons to regain the throne. Finally, in 86,206 she was imprisoned for the last time as Tlooshet, a great-granddaughter of Empress Quazi, took the throne. Za Leit died two millennia later during the reign of Holy Empress Zupa.

The A.I.G.G.L.E. Regime

When a financial genius named Zupa ascended the throne in 87,630, the Empire suffered from serious communications troubles. All the wonderful transxes of the Meritocracy had been destroyed and the know how to build them lost. Zupa got to work and developed a system she called the Autonomous Intragalactic Greater Link Energizer. A.I.G.G.L.E. solved the communications problems, but no one except Zupa understood how it worked. She had a glowworm-free office far out in the desert where she would go from time to time with a few officials to adjust the system. None of the people who went there with her could recall any details about A.I.G.G.L.E, but no one questioned the Empress, because it worked.

Secure with her secret, Zupa reigned unchallenged for four-and-a-half millennia, until a newly appointed major accused her of misuse of mindpowers, and she was tried and executed.

The Temporal Aristocracy

(Later known as the Decadent Epoch)

Major Riemis Horl Draxurant bred, trained, installed and removed emperors for seven millennia after disposing of the last Holy Empress, while he used the galaxy as a laboratory for his time experiments. His mastery of the timelines allowed him to banish rivals and detractors into other histories or to isolate them in worlds with spatial, temporal, or patternistic walls, while his chosen lieutenants enjoyed the benefits of his inventions and wielded great power over the common people of the planets they governed. In the end, one of his experiments got out of control and caused his downfall.

The Spacious Aristocracy

The Contested Era

As the Empire reached its hundredth millennium, mindsea-emperors produced by the previous era's breeding program waged fierce battles for control of the galaxy, sometimes laying waste to entire planets. The secrets of temporal and patternistic engineering that Horl had uncovered were again lost. In response to the violence and chaos, a movement grew to exclude the wild genes Horl had introduced in his experiments and return the galaxy to the supervision of the empire's ancient and tested bloodlines.

The Age of Illumination

Daughter of the Circle Empress Katora led the way with her vision of an era where mindseas would provide beneficent guidance for all of the galaxy's peoples. Tracing her ancestry back to the Empress Besi, she felt something grand and mysterious flowing through the generations. There was a special magic in her bloodline, as if tragic Besi's hopes and dreams vibrated within all of her cells. She vowed to pass the love and wisdom that had been entrusted to her on to her own children, who would have the responsibility for guiding the galaxy one day.

The Fluidity of History

Because imperial travel and communications cross timelines, and mindseas engage in temporal engineering, only the broad outlines and the most pivotal events of galactic history remain stable as the Empire's past and future are rewritten. Less vital individuals and events undergo constant flux, and even planets may change or vanish altogether.

Conflicts that Shaped the Empire

The Fall of Ulona

As he gathered planets for the Empire's foundation, Attequol discovered the vast, lush world of Ulona, and hoped to include it in his plans. The Ulonans had their own plans, and fiercely resisted. They were no match for Attequol's patternistic weapons, and the war ended with the utter destruction of Ulona.

War of the Soul-Gems

Raging against an empire dominated by privileged aristocrats who basked in the glow of the soul-gem Attequol had bequeathed them, Quokisa forged her soul-gem for the people. In her reality, there would be no aristocrats. Everyone would gather as much of the universe's bounty as their wits and their determination afforded them.

The priesthood she had banished upon ascending the throne never ceased their efforts to make their reality ascendant, and employed psychological warfare and chemical influencers to win the Common Mind to their vision. Ultimately their schemes proved successful, and Quokisa's soul-gem was destroyed.

Timeframe: 6,442-8,404.

The Bioid War

After overthrowing Mindsea-Empress Tseorue, Emperor Smoatsus set about reshaping the Empire with his vision, which was for technology to duplicate and exceed all of the abilities granted by mindpowers. One of his ideas was that ordinary people could avoid crystallization, just as did mindseas, if they had bioid copies of themselves replace their natural bodies.

His successor, Empress Kalfia, made the bioid project first on her agenda, promising a bioid copy for every citizen.

There were objections to her plan, spearheaded by the former empress, who claimed her mindpowers told her that bioids, just as crystalloids, were not alive, despite their perfect macroscopic mimicry of an original human as well as their own claims that they were living, feeling beings.

Since these claims were untestable, Kalfia accused Tseorue of lying. Tseorue's followers devised a test showing that, whereas living creatures had fluctuating subatomic structures caused by alternate versions bubbling through on quantum refresh, bioids and crystalloids did not. Kalfia accused her opposition of falsifying their results, and led her bioid army to crush them. The bioids were defeated by Tseorue's Deep-level weapons, against which they were defenseless.

Since the time of Tseorue's restoration, no Proposal to grant rights to bioids has found support in either branch of imperial government.

Timeframe: 15,449-15,758

Bid for Immortality

When Empress Ashia died after the longest continuous reign in imperial history, her longtime husband, Plithin, and their son Orto launched a movement to have her copy floated and enthroned. They argued that some people, like Ashia, were so irreplaceably important that they should be granted immortality—their genes preserved so that they could be copied for perpetuity.

Ashia and Plithin's mindsea son, Zipo, opposed the movement. He pointed out that imperial science could not copy the Deep-level portion of his mother's personality, and her connection to the Deep had not been strong enough for the Deep-mind to charge a copy. Thus, the copy would not be her; she would be a twin sister. In addition, since Ashia had been crystallized for two hundred years and Plithin and Orto had been ruling the Empire in her name, their motives were suspect.

The brothers raised their armies, Orto backing their mother's copy for the throne, and Zipo supporting a man named Krintue. The armies clashed. Zipo, a military genius, crushed Orto's forces, and Krintue ascended the throne.

Krintue reigned for only a couple of centuries before he was overthrown by an upstart named Rathax. But ever since the start of his reign it has been imperial law that no person over the age of ten thousand may be copied, and that citizens' gene specs must be deleted from the imperial datasphere upon their death.

Timeframe: 30,256.

Judgment Against Rathax

Rathax came to the throne with the intention of remaking the Empire in his own image. As a blue son of Ulona, he hated the works of Attequol, especially the soul-gem-powered energy temples that dominated every planet. The priesthood that once had guarded the temples had long since vanished, but the temples had powerful fusion fields that made them nearly impregnable.

The soul-gem channeled the Empire's communications along one timeline, but it was a timeline chosen by Attequol, and Rathax wanted it changed. Without a soul-gem, the Empire would diverge along countless timelines, but that wasn't a problem for Rathax. He had been Emperor on the united timeline, and would remain emperor on all of its branches. Just think of the resources he could collect by revisiting a planet on multiple timelines! It was a beautiful dream.

He commenced to make his dream reality by tearing down the temples on every planet, freeing them from Attequol's direction. It was the labor of millennia, but at last he accomplished what he had set out to do. Only one temple remained—the greatest of them all, the Temple of Lal. As long as it stood, Attequol's soul-gem still shone. The temple crackled with hostile power, but Rathax exerted his mindpowers and entered its sanctuary. A mighty upheaval shook the capital. Rathax had succeeded, the temple had fallen, and the soul-gem was shattered.

But Rathax was gone; no trace of his body remained. People gathered in wonder around a massive wall—all that remained of the temple. The story began that the top of the wall must have crushed Rathax when it fell. He had been judged and condemned by the spirit of Attequol. Afterwards, the wall was known as the Judgment Wall, and every emperor after Rathax stood before it to be judged. When they were not crushed, it was manifest that they had been judged worthy of leading the Empire.

Timeframe: 35,633.

Walpurgians Versus Revelationists

When Zipo ended the Unfused Plutocracy and militarized the Empire, a galactic safety ranger named Blijue Beli founded an opposition party who called themselves Walpurgians. Blijue Beli was guided, he claimed, by the an exhibit Attequol had created in the Imperial Museum. The exhibit told about human history going back to ancient times on Earth. Humanity had ever been divided into two warring factions—the Walpurgians and the Revelationists. The Walpurgians named themselves after Walpurga, the first woman to record history in writing. They were preservers. Revelationists were always getting thunderstruck by some novel idea they considered holy, which made them want to sweep away everything that had come before. They were destroyers. Zipo was a Revelationist, and his violent acts would erode the Empire. He must be stopped.

Zipo just laughed at his detractors, but he had apologists who

defended his policies. Patternists explained that Attequol's exhibit was not meant to be taken as history. It was an allegory about the nature of reality. All existence was pattern, and the minimum requirements of pattern were bits that could be differentiated, like the black and white squares of a chessboard. The Walpurgians and Revelationists symbolized the squares of the chessboard. The Walpurgians were the black squares, quiet and conservative. The white squares were Revelationists, brimming with explosive energies. It should be clear to anyone that both were necessary for existence.

Blijue Beli argued that galactic civilization would prosper with less destruction, and as Zipo continued to wage wars against imperial worlds that wished to continue splitting timelines as well as foreign empires, the majority of citizens lost confidence in him.

Challenges for the throne came every year, and although Zipo was the master of Deep-level duels on horseback, he was eventually defeated, and the throne passed to a grandson of Blijue Beli.

The notion of an eternal war between Walpurgians and Revelationists resurfaced from time to time. During the Contested Era, Quintillion and Thermeon played the roles of preserver and destroyer more perfectly than any warring mindseas before or since.

Timeframe: 38,367-38633

The Green Wave

While Yutubis, a man from an unknown family, sat on the galactic throne, a woman named Wastoe launched a movement calling for changes in the human genome. She had worked as an aquasphere ranger, and she had noted how ocean ecosystems were powered by the sunlight penetrating the water's surface. If humans powered themselves in the same way, dispensing with complex systems of food production, a wave of prosperity would sweep the galaxy.

Photosynthesizing endosymbionts were well-known. If all citizens were infused with them, they would commence converting sunlight directly into food. Not only would their lives become more

efficient and prosperous, the moral dilemma surrounding the consumption of animal and plant products would also be solved.

On every planet, multitudes answered Wastoe's call in what was hailed as a "Green Wave." Planetary governments mandated green citizens. Emperor Yutubis proposed a galaxy-wide conversion. Head of the Circle Krorl hesitated.

Zipo had been serving as admiral of the imperial fleets since his overthrow. He loudly derided the Green Wave. "It will dissolve on the rocks of reality," he predicted. "If humans turn themselves into plants, they will be ripe for harvesting by some other species. Hunting, reaping, and battle are necessary components of the human makeup. Does the Common Mind want an emperor or a wimperor?"

Citizens backed Zipo's challenge to the throne, and he defeated Yutubis and returned to power. The Greenist movement persisted, but it never again verged on becoming imperial law.

Timeframe: 40,687-41,161

The Egg Crisis

During the reign of Empress Svalmips, a bioengineer named Aex, a great-granddaughter of Wastoe, began to promote her enhancements to the human genome. Shedtable insect wings for mating flights and oviparity became all the rage. When Svalmips moved to forbid permanent changes to the human form, Aex found an ambitious youngster named Iulf who promised to be more amenable to such reforms if she sat on the throne. As leader of the New Humanity Party, Iulf challenged Svalmips to a mind-duel for the throne. She had no mindpowers, but Aex, who did, fought for her and defeated Svalmips.

An era of fantastic changes ensued. Humanity branched into a number of different lineages—some adapted for flight, others for underwater life, some huge, or with huge heads, others small as ants. The varieties were endless.

Soon every human type formed its own party, agitating for changes to suit its way of life. Ancestral-type citizens felt threatened and

turned to Svalmips to champion their cause. She challenged Iulf for the throne and, forewarned this time about Aex, defeated them both to effect her comeback.

Altered humans were denied reproductive rights, and all future alterations to the human genome forbidden. Cosmetic enhancements were still permitted, as long as the changes would not be passed to offspring. Interspecies mating was permitted. Citizens could still grow temporary wings and lay eggs if they wished, but the fad had passed.

Laws against altered humans enacted after the restoration of Svalmips were never rescinded.

Timeframe: 50,868-51,883.

The Ziponists

When Empress Besi outlawed mind-duels and made the Empire a meritocracy, a great number of people felt that a cherished tradition was being set aside for no valid reason. What besides a mind-duel could determine the person most fit to rule a mindsea empire? The disaffected called themselves Ziponists after Zipo, the famed dueling emperor. The old method of challenges for the throne had been replaced by an examination for fitness, so they resorted to illegal violence, assassinating Besi officials and blowing up examination sites.

In 65,529 a Ziponist succeeded in assassinating the Empress, and a former mind-dueling emperor, Trero, returned to the throne. But in a surprise move, Trero refused to restore the mind-dueling succession rules—perhaps he worried about his own ability to continue victorious in such contests.

The Ziponists kept up their attacks until mind-duels were again made legal during the reign of Empress Steolfeen. By then violence had become a way of life for descendants of the original group. They continued to call themselves Ziponists and to commit acts of violence long after their purpose was removed.

Timeframe: 64,910-76,558.

The Za Leit Wars

Za Leit started life as a gaming champion, and never stopped seeing life as a game that she was determined to win. Combining vast mindpowers with an ability to focus on and master any scientific field she found interesting, she restored the Empire's transaxial travel and communications systems and stamped out the last of the Ziponists who had constantly sabotaged those systems.

Za Leit was uncompromising in her insistence that all citizens obey the rules of the galactic game that she, as empress, set forth. Business interests and aristocrats who had reaped unearned rewards during the previous era through bribery and extortion found their old tactics worthless in her realm. Offenses brought to her attention unleashed swift and severe punishment. Za Leit had the worst offenders brought before the throne in a public ceremony during which she executed them with her mindpowers, ramping up and prolonging their agony for the Common Mind's edification.

Za Leit regarded weakness and cowardice in the same category as criminal behavior. For amusement, she would tweak probabilities to unleash firestorms or meteor barrages against "snivelers" and observe their struggles for survival from her lofty perspective as the galaxy's most powerful mindsea.

Business interests combined with disgruntled scions of formerly influential families to bring her down. On three separate occasions her military leaders were convinced to turn on her and she was captured. But her captors' hopes that she would maintain her Deep-level systems from prison were disappointed. Neither threats nor promises could induce her to cooperate. She laughed at pain and belittled her interrogators from her dungeon. Without her guiding mind, intragalactic commerce broke down and planet-to-planet transmissions faded into the multiverse.

Za Leit broke free twice to resume her games, though her foes gave her little respite. During her third captivity, a young mindsea named Zupa created a new Deep-level system for the galaxy, and Za Leit died forgotten in an impregnable prison.

Timeframe: 78,655-86,227.

The Ghost War

Early in the reign of Emperor Thermeon, a conspiracy by two of Horl's daughters to restore human slavery made him believe that Horl's ghost was attempting a return to power. He set out to exorcise the ghost and fell into the trap Ix and Xeera had set. After escaping and blasting the women's puppet emperor in a mind-duel, Thermeon reclaimed the throne and continued his anti-slavery reforms.

Timeframe: 99,607-99,737

The Code War

Remnants of the Ulonan people who had fled their doomed homeworld during the war with Attequol had settled on some three hundred planets. There they established an independent empire with laws and traditions based on The Book of the Code written by their empresses under inspiration from the Goddess they worshiped.

When contact with the Empire of the Common Mind was reestablished during the Decadent Epoch, people of the Code vowed to avenge the wrong that had been done them long ago. They launched fleets of Home-level ships against the hated enemy. Though entirely lacking in Deep-level technology, they felt certain their devotion to the Goddess and the decadence of the enemy would grant them victory.

The slow Code ships arrived at their targets during the reign of Thermeon during the Contested Era, and several bloody battles ensued as Code attackers fought furiously to the last man, woman, and child. The war ended when Thermeon—some say by trickery—married the Code Empress.

Timeframe: 9,9758-100,087.

The Great War

Maxuas, son of Emperor Thermeon and the Code Empress, was the hope of the future for both his parents' peoples. When he came of age, his father divided the galactic empire, giving half of the planets to his son to rule. Maxuas immediately launched his secret plan to take over the entire galaxy, kill his father, and avenge his mother.

A cautious, thoughtful man, Maxuas explored every angle as he made his preparations. When he was certain that his fleets and his weapons were superior to his father's, he launched his attack, hoping for a quick victory.

The war escalated quickly into horror as Maxuas had to call forth more and more of his genetic weapons to crush his father's resistance. The gruesome deaths experienced by victims of his genetic alterations finally broke down Thermeon's inhibition against striking out at a beloved son, and Maxuas's capital, the beautiful planet Wamatu, was devastated in the same manner as the people of the Code's ancestral world, Ulona.

Timeframe: 102,241-102,264.

The Lesser War

When disgruntled Emperor Quintillion fled his responsibilities, his major elevated his stepson Torm to the throne. The depredations of this angry young mindsea so alarmed the Common Mind that Quintillion had to be coaxed into making a comeback as emperor of the planets that had been Maxuas's during the Great War and allowing his people to fight Torm.

Torm came up with a foolproof plan for victory: if there were two of him, he could hunt down his stepfather while remaining in Lal to direct his fleets. He shared his mindpowers with his copy, and sent him to Niom to confront Quintillion. The plan backfired when Torm and his copy became locked in mind-link arguing about which of them would rule the galaxy after their victory. They would not emerge from their trance for hundreds of years after the

end of the war.

Timeframe: 103,534-103,589.

The Nander War

After Quintillion's restoration at the end of the Lesser War, he decided that damage to the spacetime fabric caused by Deep-level ships could be avoided if ships were piloted by members of his father's ancient people, the Nanders. He also began to construct trans-gates to replace the nonfunctioning Decadent Epoch transways that had replaced the lost transaxial system of the Meritocracy. Nander pilots practiced their time-honored ritual of blood sacrifice, claiming a victim for each flight of a ship or trans-gate passage. The outraged Common Mind demanded that they be punished, but Quintillion refused. The conflict dragged on until the end of his reign. His successor's first act was to remove Nander pilots from ships transporting humans, and the killings ceased.

Timeframe: 103,589-104,037.

The Aiggle War

A Deep-level being known as Aiggle began preying on interstellar shipping in Sector Eight. Human fleets sent against it were destroyed, and many citizens feared that the Empire was doomed. Thermeon defeated the Aiggle with his Buzzfly Squadron.

Timeframe: 104,822-104,825.

War Between Levels

The ultimate goal of the Age of Illumination was to guide humanity into a Deep-level life. When Thermeon attempted to achieve the "Crossing-Over," violence broke out between those who saw themselves destined to take this next step in evolution,

and those who chose to continue living as humans. Mindseas themselves were split on the issue. In the wake of the terrible cataclysm set off by their battling, Palace and Bureau resolved to settle the Ziponist issue once and for all. Mind-duels would never again provide the measure of fitness for the galactic throne. Instead, a one-time third government branch, the Mindsea Academy, would be restored, its purpose to test all candidates for government positions, including the imperial throne, for their fitness and their humanity.

Timeframe: 106,057-106,432.

Imperial Home-Level Technology

Antiaging

Imperial citizens are the products of genetic engineering that has given them an array of attractive skin, hair, and eye colors, bodies free from heritable illness or defects, and eternal youth.

Despite their young bodies, citizens are susceptible to a type of mental aging known as crystallization. The crystallizing mind becomes incapable of encompassing new experiences or registering new memories, growing ever more mechanical in its reactions. Victims customarily are euthanized after failing competency hearings.

Wonderdomes

Physical injuries are healed in special chemical pools known as wonderdomes. A dead body that hasn't suffered extensive decay or Deep-level damage can be refloated; that is, restored to life. Wonderdomes can also be used for physical enhancements or genetic alteration, as well as for mental healing.

Copy Insurance

Citizens who have not yet lived for ten thousand years are entitled to purchase copy insurance. If they die, a copy will be floated and primed with the life memories they have stored with the copy insurance company.

Glowworms and Fireflies

Imperial artifacts, furniture, clothing, and buildings are customarily animated by glowworms, living nanomachines that can be bred and programmed for innumerable tasks.

Glowworms can be embedded in the human body as communications devices (internal links) or tools. All well-to-do citizens, except for Deep-level pilots, have internals both for communications and for cognitive augmentation. Pilots don't use them because downleveling generally purges them from the body as tissues transform to Deep-level stuff and then return to Home-level form. Young people are not permitted their first internal until they reach the Minimum Age of Adult Citizenship at twenty imperial years. This is to give them the chance to develop learning and memory skills with an unaugmented brain. Controversy about the degree to which such skills should be managed by glowworms continues.

Citizens are unaccustomed to a glowworm-free life and find objects unresponsive to their wishes strange and disconcerting. Because of the pervasiveness of glowworms, the occasional plagues that strike them are major disasters for citizens.

Free-flying glowworms are called fireflies. They are used to produce colorful ads in the air, or to convey messages when no direct link is available.

Bioids

Glowworms can be assembled into entities resembling humans or

other life-forms. These programmable resources are known as bioids. Nearly every company in the Empire uses bioids to perform mindless tasks from customer service to freight loading.

Because they can mimic living things so closely, laws require bioids to clearly be identified as such by a brief transmission to citizens' internals, as well as by some non-biological affect, such as metallic skin or glowing eyes.

There has been much controversy throughout imperial history about whether bioids can be considered sentient. Because their behavior is restricted by error-correction that prunes away unwanted responses down to the subatomic scale, a bioid always completely predictable. According to Mindsea Academy Headmistress Vedina: "The subjective experience of choice comes about because a living mind may be reconstituted in more than one configuration after each quantum refresh. Awareness momentarily enfolds all of those possibilities before the timelines branch and a single configuration predominates. That is why it is said that all living beings have a Deep-level component and cannot be entirely Deep-blind.

"A bioid can only emerge from quantum refresh in a single state dictated by its programming, and therefore does not experience a succession of 'nows' in which choices can be made. Though its tiny constituents do experience quantum fluctuations, it is not designed to respond to these fluctuations. Any uncertainty in the outcome of its processing would be considered a flaw, and is strongly guarded against. In the wake of the Cataclysm, vast numbers of bioids were destroyed because they had developed flaws that would have made them unpredictable and possibly dangerous. But only a flawed bioid can be sentient."

Nooks

Most of the furniture in imperial homes consists of nooks, soft, adjustable seats composed of glowworms. The material conforms to the user's body, and can also be adjusted to accommodate different numbers of people.

The various styles of nooks are named after letters of the alphabet.

- U-nook , for a single person.
- W-nook (Lalese OI-nook), for two people facing the same way.
- S-nook (Lalese F-nook), for two people facing one another.
- Y-nook (Lalese FL-nook), for three people facing one another.
- X-nook (Lalese KR-nook), for four people facing one another.
- C-nook (Lalese W-nook), for several people in a crescent.
- Wheel-nook, a closed circle.

Memory Buttons

Recorded data that needs to be distributed across the galaxy without alteration is often stored on memory buttons, silvery globules that fit easily on a human palm. The buttons are carried aboard Deep-level ships in special shipping containers that protect their contents from downleveling. Buttons are also used for personal communications between citizens.

When a button is used for the transfer of credits, it is called a credit button.

Firefly-Assisted Reproduction

Imperial citizens reproduce by having fireflies combine their genetic material and inserting the resulting zygote into an incubator from which their child will emerge when ready to walk and talk.

The parents may be a man and a woman, two women or two men, or even more than two people. Interspecies reproduction is also possible, once laboratory glowworms have snipped and woven the genetic contributions of the parents into a form that can produce a viable zygote.

Airlifters

Airlifters are the ubiquitous form of personal transportation for any distance too long to comfortably walk and short compared to a planetary circumference. Airlifters are formed by an invisible cloud of fireflies that adjust the properties of air molecules to provide lift and propulsion. They are usually provided with a weatherscreen to protect the rider from collisions or falling, though the weatherscreen can be turned off. Once the rider indicates the desired destination, the airlifter finds the route, flying high enough to avoid obstacles and other traffic.

For distances considered short for an airlifter ride, there may be moving walkways. Inside buildings there are zip floors and airshifts.

For distances considered too great for airlifters, there are sky-buses that do not leave the planetary atmosphere, and space shuttles or space-planes that do.

Weather Engineering

The weather of nearly every planet requires some tweaking to make it optimal for human enjoyment. Trillions of fireflies flit through the atmosphere, devouring bad chemicals and releasing good chemicals. Atmospheric rivers are adjusted to insure the proper amounts of rainfall, and winds channeled to produce pleasant temperatures.

When a planet or inhabited moon is too small to easily sustain an atmosphere, or when a separate, specialized climate zone is desired, a weatherdome can be inflated.

Imperial Deep-Level Technology

Patternistics

The science of Patternistics was crucial to the emergence of the galactic empire. Patternists recognize multiple levels of reality. Phenomena familiar to humans exists on Home Level. Deeper levels generate all the possible alternatives of our Home-level universe. Patternists continually search for Deep-level patterns useful for manipulating reality. Concepts such as space, time, matter and energy are no longer central. Only the patterns that give rise to space, time, matter and energy on our Home-level reality are important.

The same patterns may be interpreted in multiple ways. Thus, on Home Level, we perceive our familiar phenomena. But on deeper levels of reality, alternate interpretations of patterns give imperial scientists handles to bypass the lightspeed barrier and achieve practical intragalactic communications and travel.

Perhaps the best understanding of the empire's Deep-level technology available to Twenty-first Century humans can be found in the writings of David Bohm. Bohm refers to Home Level as the explicate order or the manifest world, while deeper levels are the implicate order and super implicate order.

Bohm explains "... it is possible, not only for the manifest level of ordinary experience, but also the quantum level underlying it, to emerge from a still deeper implicate level in which the classical Cartesian notions of form, order and structure have more or less dissolved. ... such ideas, underlying our classical notions of space-time and measure, would have to arise as limiting cases of this deeper implicate order." (D. Bohm, B.J. Hiley:*The Undivided Universe* p. 374)

Deep-Level Communications

The Theory

Bohm foresaw the possibility for superluminal communications, writing, “Our proposed ontological explanation of the quantum theory ... implies nonlocality and this would seem to contradict relativity ... But it is possible to propose a deeper theory of the individual quantum process which is not relativistically invariant and which nevertheless leads to Lorentz invariant consequences for all statistical results, as well as for the large scale manifest world. In this theory there is a preferred coordinate frame in which the instantaneous transmission of impulses is in principle possible, so that there is no contradiction with nonlocality for individual quantum processes. In other words, we say that underlying the level in which relativity is valid there is a subrelativistic level in which it is not valid even though relativity is recovered in a suitable statistical approximation as well as in the large scale manifest world.” (D. Bohm, B.J. Hiley:*The Undivided Universe* p. 346-347)

Patternists have discovered multiple means by which to transmit messages instantly across the galaxy. Because deeper levels subsume multiple instances of shallower universes, guiding the messages to a Home-level receiver in the same instance (timeline) as the sender is the major problem.

LZ-Nodes

LZ-nodes, the least reliable form of Deep-level communications, simply insert the messages into the Deep by removing all Home-level phenomena from the target area. The message will reach its intended recipient by lucky chance. Sending multiple copies of the message may or may not help.

Farfling

Farfling towers powered by soul-gems are more reliable than LZ-

nodes. Soul-gems are Deep-level artifacts that exist simultaneously in all the farfling towers throughout the galaxy, providing guiding waves that keep transmissions on a single timeline.

Enfoldments

Farfling can support communications in full sensory detail to allow gatherings to take place in a virtual space that feels real to the participants. Small objects may even be passed from one node in the enfoldment into another, though too great a flux will cause the glowworms interfacing with the Deep-level radiation to fail. A well-known case of such failure is when lovers Kuleng and Smenirk attempted to conceive a child in an enfoldment.

Mind-Net

Intragalactic communications can also be effected by mindseas, who know how to transmit Deep-level impulses, or by Deep-level alien beings whose aid can be obtained.

During the Decadent Epoch and the Contested Era, mindseas held a mind-net consisting of over three thousand mind-rivers, one posted on each of the Empire's planets. Horl's mind-rivers were copies of originals who remained in the capital, and they could exchange messages independently of a mindsea. By the time of Quintillion's reign, the mind-rivers had lost the ability to act independently. Unlike mindseas before him, Quintillion did not need to go into trance to hold the mind-net. He held it continuously, while doing other things, and exhausted the mind-rivers.

Deep-Level Travel

Downleveling Ships

As with communications, several methods of transporting people

and goods quickly across intragalactic space have been utilized.

The simplest, and slowest method for crossing the galaxy is by means of ships that are able to transform for infusion into deeper levels. The deeper a ship can go, the faster it crosses the galaxy.

Because a downleveled ship navigates a realm where many Home-level universes are fused, care must be taken in upleveling to return to the same universe the ship left. Ships may cross timelines and vanish. A ship may also lose patternistic integrity on upleveling and splinter along multiple timelines, destroying everyone and everything on board.

Transways

Transways have powerful patternistic engines that reconstitute spacetime to effect an instantaneous translation of objects in their target zone to a set destination. They do not take into account alternate timelines that branch out with the reconstitution, and require the guiding beam of a queue crystal, generally one aligned with a soul-gem, in order not to lose travelers. When transways are not aligned, travelers will still be transported to their destination, but they will find themselves in a parallel universe.

Trans-Gates

Trans-Gates were Quintillion's answer to travel problems when the Empire's soul-gem was shattered. Like transways, they would directly shift travelers between two points. Instead of a queue crystal, Nander gatekeepers would guide travelers with their Deep-level senses. When it was discovered that gatekeepers were demanding blood sacrifice as payment for their work, the Circle of Experts cut off funding, and the trans-gate system was never completed.

Chronon-Twistors

Chronon-twistors directly alter the spacetime anchors of any object within their target zone to instantly transport those objects to another region of spacetime. But they do not reconstitute spacetime itself, so branching timelines are not a problem. They generally offer multiple destinations. Alterations to spacetime anchors may be partial or temporary. A temporary, partial twist will end when the subject recoils to its original place in space and time.

Because the universe is in constant flux, the configuration of forces needed to transport matter constantly changes, and a chronon-twistor can easily fall out of sync and cause bad translations. Its engines require frequent adjustment by someone with enough mindpower to foresee the effect of those adjustments. A chronon-twistor can also provide novel destinations in the hands of an expert twistorian.

They are called “twistors” rather than “twisters” because of their connections with the mathematical concept of twistor space.

Deep-Level Artifacts and Architecture

Soul-gems

Deep-level artifacts cast a fusion-field that pulls things around them down to their level. This is dangerous, as objects acted on by forces of different levels tend to split along timelines. Soul-gems and their splinters are generally safe, as their quasicrystalline structure keeps Deep-level radiation trapped inside. Only the faintest glow of a soul-gem's power escapes its lattice. But when a soul-gem is linked with artifacts such as swords or farfling towers, the spacetime-destroying power is directed outward.

Soul-gems are called such because they contain the pattern of a Deep-level personality, or soul, within their lattice. This pattern determines the wavelength analogue that is emitted when the soul-gem is tapped. The soul-gem picks up the pattern from its environment as it crystallizes into its gem form. It may have a human soul, or the soul of an alien life-form, or even the soul of a

planet.

Deep-Level Swords

Any Deep-level object or energy becomes a weapon when it intrudes into Home Level, but citizens with mindpowers traditionally have enjoyed flaunting Deep-level weapons, especially swords, forged with the patternistic integrity that keeps them from unfusing. The swords are often, but not always, linked with soul-gems that infuse the blade with their radiation.

Interlevel Artifacts

When a Deep-level item needs to be carried safely on Home-level, or when a Home-level item needs to be transported through the Deep without downleveling, interlevel containers are required. These items are composed of layers. For safely handling Deep-level items, sheaths for Deep-level swords, for instance, the outermost layer will be of Home-level stuff, and the innermost meshing with the deepness of the artifact to be contained. Transition layers are made up of matter-energy in a pattern that is interpretable on both inner and outer layers.

Shipping Containers

For safely transporting items that would be damaged by downleveling aboard Deep-level ships, special shipping containers are used, the most reliable those produced by the Zero-0 Company. These containers are made from multiple layers, with the deepest of them, a Deep-five layer, sandwiched between shallower layers ranging from Deep Four to Home-level. When the ship carrying such a container downlevels, the outer layers fuse and become transparent, down to the layer equivalent to the ship's fusion field, but the inner layers and the goods inside the container are protected from alteration.

Freezing Chests

Freezing chests are a very specialized type of shipping container. They also protect goods contained within from downleveling aboard a ship, but they also form a time pocket around their contents to keep it in stasis. They are used when transporting persons with mindpowers, such as mindseas or Nanders, because such persons would break free from Home-level restraints in the Deep.

Deep-Level Architecture

Architecture, like downleveling ships, can be designed to safely downlevel contents. One such edifice is the Mini Milky Way on Bri, built by Quintillion. Beneath its dome, visitors will find the entire galaxy reproduced. Given the correct cues, it will downlevel successively to Deep Four, giving prospective pilots a taste of the Deep.

Time Pockets

Time pockets are small encapsulated spaces inside which the flow of time is altered compared with the surrounding space. Time may be accelerated or slowed-down. It may be reversed, or reciprocal. The membrane surrounding the time pocket may be permeable to radiation or mechanical disturbance, with all matter passing through having its chronons adjusted during the passage.

Time Labyrinths

Another method for rapid travel between points in space and time is a time labyrinth. Fashioned from purified chrononic material and anchored by a soul-gem, the time labyrinth has a few spatial endpoints that can be visited at any number of points in time. As with a chronon-twistor, visiting past moments will cause timelines to split.

The Stairway of Ice

The Stairway of Ice was not built by the Empire, though it was essential to the spread of humanity through the galaxy. The Stairway consists of successive steps, each a level deeper than the preceding step. As deeper steps lie beyond time, and thus eternal, the Stairway must be considered a natural phenomenon, though the shallowest steps connecting it to Home Level are human artifacts. The exact number of steps needed to reach the deepest Deep, the center of all creation, is unknown.

Bohm recognized the possibility of successively deeper levels, writing, “As in the particle theory, the implicate order manifests in the activity of the particle through the quantum potential. It is clear that in field theory there is a super implicate order that manifests in the field beables. ... At this point a little reflection shows that the whole idea of implicate order could be extended in a natural way. For if there are two levels of implicate order, why should there not be more? Thus if we regard the super implicate order as the second level, then we might consider a third level which was related to the second as the second is to the first. That is to say, the third implicate order would organize the second which would thereby become nonlinear. ... Evidently we could go on indefinitely to higher levels of implicate order.” (D. Bohm , B.J. Hiley:*The Undivided Universe* p. 380)

Gradations of the Deep

Imperial technology works on six levels of the Deep, from Deep One to Deep Six, Deep One being the most similar to Home Level, and Deep Six the most awesome and mysterious.

Level	Color Code	Resource Name
Deep One	Red	Vorticity
Deep Two	Orange	Power
Deep Three	Yellow	Flare

Deep Four	Green	Sooth
Deep Five	Blue	Glory
Deep Six	Violet	Puissance

Downside of the Deep

Despite the benefits of Deep-level technology, it undermines the familiar reality of human existence. In the Deep, neither past nor future is stable, nor individual identities. All of existence is continually created and reabsorbed by the deepest Deep.

Time Measurement

The Lalian year consists of ten **tenthyears**, each made up of three **tendays**.

Lalian peasants living on the planet's northern hemisphere named the tenthyears as follows:

First tenthyear	Heyelf	The time of new beginnings.
Second tenthyear	Oevyelf	The time of gaining light.
Third tenthyear	Okyelf	The time of gaining heat.
Fourth tenthyear	Nuyelf	The time of gathering clouds.
Fifth tenthyear	Ebyelf	The time of thunder.
Sixth tenthyear	Kruiyelf	The time of ightning.
Seventh tenthyear	Slayelf	The time of rain.
Eighth tenthyear	Fooyelf	The time of flowers.
Ninth tenthyear	Afyelf	The time of wind.
Tenth tenthyear	Maiyelf	Harvest time.

Weather engineers insure that the seasons progress on scedule—as long as no mindsea fireworks interfere.

The Lalian day consists of thirty hours, each made up of 3500 seconds.

Lalian seconds are equivalent to Earth seconds. The Lalian year

consists of 31.5 million seconds, while an Earth-year has 31.54 million seconds.

The Empire does not use the 60-second unit of minutes. Instead, there are centiseconds and kiloseconds.

All the planets of the Empire have their own local days and seasons, but seconds are standard throughout the galaxy. The planets reckon their histories according to imperial years.

Intragalactic Travel Times

By Deep-level Ship

Level	Home-Level Time	Perceived Time
Home	100,000 years	100,000 years
Deep One	6,250 years	390 years
Deep Two	390 years	1.5 years
Deep Three	24 years	1.75 days
Deep Four	1.5 years	15 centiseconds
Deep Five	30 days	3 seconds

The standard interstellar ship is the tetrascoper, capable of navigating Deep Four. Pentascopers, ships that fly Deep Five, are not generally used for travel within the Empire, as the brevity of perceived travel time makes overshooting one's goal a very real danger. Pentascopers are used by planet hunters and intergalactic traders. With a pentascope, travel time to the Andromeda Galaxy is a little over two imperial years, with perceived time of about a minute. Travel to Andromeda by tetrascoper is not considered feasible because the two years perceived time spent downleveled

Imperial ships contract spacetime by rearranging the patterns of the matter composing them and their cargo into a form that can be acted upon by Deep-level forces.

By Transway or Chronon-Twistor

Travel via transway, chronon-twistor, or other spacetime-reweaving system is instantaneous (or even faster) between system nodes, but these nodes must be built in interstellar space, and travel from a planetary spaceport plus wait time in the queue for the target zone, will usually take several days.

Famous Downleveling Ships

Throughout its history, the most celebrated ships of the Empire are its pentascopers. Expensive and difficult to produce, pentascopers are generally used by intergalactic traders, but most of the mindsea-emperors throughout imperial history have kept them as status symbols.

A pentascoper can downlevel five times. Each time it downlevels, it meshes with a deeper level. Components useful on shallower levels cease to function, and a new set of components comes together and activates. The ship takes on a different appearance for those aboard. The Deep-blind, who cannot process the patterns of the new level, fall asleep. Observers on levels deeper or shallower than that of the ship would not see it clearly. Those on deeper levels might notice something tenuous and bubble-like. Those on shallower levels might notice a wake of unfusing particles

The deeper the ship goes, the more difficult it becomes to describe it. It will have many aspects, hidden dimensions that spring out seemingly at random, having no similarity to objects in the human realm.

The universe too looks very different to those onboard a downleveled ship. Space grows more viscous with each downleveling. On Deep Five, space is solid. A pentascoper seems to roll along a corridor with many other corridors branching away in more directions than are possible on shallower levels. The gravity wells of stars may manifest as rooms along the corridors.

Amber Sun

The ship of Aturon, the second emperor, who used it to escape his duties, his father, and the Milky Way Galaxy. He may still be fleeing, never to return until he has circumnavigated the universe. But there are those who claim to have seen *Amber Sun*.

Whirlaway

The ship of Quokisa, the Shadowfolk empress. Like Aturon, she may lurk at the edge of the galaxy. Because Deep Five contracts time so greatly, a millennium seems only days long to those whose lives are spent traveling on pentrascopers.

Serious

The ship flown by an intergalactic trader named Eria, Quintillion's half sister. *Serious* made regular runs to Andromeda throughout the Decadent Epoch and the Contested Era. It might not have been a ship at all, but a manifestation of Eria's Torsa horse, also named Serious.

Genesis IV

Horl's ship, a floating palace, appropriated by Orgmorgan after his overthrow and renamed *Counting on Kindness*.

Sola

Thermeon's pride and joy, flown during the Code War and the Great War. When he was betrayed and ousted from the throne he flew her to the Andromeda galaxy, where he encountered the Andromeda Settlers Association. After running several missions for ASA, he broke their business agreement because he wanted to return to the Milky Way, and had to turn *Sola* over to them.

Reflection

Fuerida's ship, built by Horl. She is sleek as a golden arrow and looks too small to be a pentascoper. During the Aiggle War, she was refitted to land on planetary surfaces, and Thermeon flew her at the head of the Buzzfly Squadron.

Silverlance

Morning Glory's ship. A silvery version of *Reflection*. She was named *Unforgiven* by Horl, and Morning Glory changed her name to *Seeker* when she first got her. She became *Silverlance* for the expedition Morning Glory hoped would find help for averting the Cataclysm. The expedition failed, and when Morning Glory died in the Cataclysm, *Silverlance* became her daughter Kweenk's ship.

Mantis

The ship Horl made with his wife when he was married to Thermeon's daughter Quixa. Her bridge was a bit gaudy, and her shape a bit lopsided, but she flew fine. When Quixa and Horl died in the War Between Levels, *Mantis* passed to Quixa's half-brother Dino.

Kiadox

The ship Thermeon Thermeon built himself for his journey to the Stairway of Ice. He was immensely proud of his work, even though Orgmorgan made fun of her. She was destroyed by Serpenlino in the aftermath of the Aiggle War.

The Freedom Series

Freedom I-XXIII are pentascoping space-planes built by Shell at the Rexros shipyard for the push to eradicate slavery and piracy from the galaxy in the Hundred-sixth Millennium.

Planets of the Empire

Attequol founded the Empire with 3010 planets. Imperial children are encouraged to learn the planetary order, the order in which the Founder conquered and added the planets to the Empire, before they receive their first internal, which will provide the knowledge for them.

After the addition of the three hundred seventeen planets of the Code Empire at the end of the Code War, and the fifty-eight planets of the Red Star Empire at the end of the Great War, and the rediscovery of Ulona at the end of the Contested Era, there were 3368 planets in the Empire. Other planets may be part of the Empire only on some timelines.

Planetary governments may follow any number of forms, usually determined by the local groups of influence, but every planet is required to have

- bioid teaching creches where children are provided with the standard imperial education.
- A job fair for assigning niches to young citizens graduating from their creches.
- Wonderdomes for maintaining citizens health and a court system to determine when citizens must be remanded to a wonderdome for alteration, or for termination if their useful lives are done (usually due to crystallization).
- a designated intersection with the Plains of Possibility where citizens can bond with Torsa horses.
- racetracks near each population center where mating flights for reproductive rights are run.

- A spaceport and shuttle station for intragalactic travel and commerce. A transway or transaxial station if either of those systems is working.
- A farfling tower powered by a soul-gem for intragalactic communications, or a mind-river tower if the farfling system is broken.
- a Pool of Love for adherents of the Code religion. (This only became mandatory after the unification of empires.)

The Empire is divided into eight sectors, each of which has a sector capital. Lal, a huge desert planet, is both the capital of Sector Six and the Imperial Capital. Imperial planets generally are Earthlike. Some have had their orbits adjusted to improve their climates.

The following are some of the more famous planets of the Empire.

Sector One

Tywoshak, Planet 1

Capital of Sector One, Tywoshak is a huge, oceanic planet dotted with numerous small islands. It was Attequol's homeworld. It is governed by a board of directors.

Piatlo, Planet 3

Piatlo, a small mountainous planet, is famed for its apples and for the products they go into, especially the apple wines and fine apple brandy. It is governed by the winner of a moon-skipper race held every ten years in honor of its first imperial governor, Ninel Applegrove.

Xatme, Planet 43

The skyfalls of Xatme draw locals and tourists alike to put on wings and fly through the spray. Once a year, a skydiving contest

is held, with those who can plunge from the top of the falls into the ocean fastest. It is also known as the “Chicken Olympics.” Xatme’s planetary potentate is decided in a horse race.

Wamatu, Planet 161

Wamatu is a large planet, home to a blue-skinned people who originated on Ulona. It was Maxuas’s capital during the Great War. Its cities and its people, animals, and vegetation were obliterated by Thermeon in the flashing that ended the war. Resettled after the end of the Contested Era, it is now famous for its zills, Deep-level birds whose evolution was sparked by the flashing. It is governed by a king.

Amugro, Planet 169

Amugro is a midsize tropical planet with a small population scattered over several tropical islands. It was the setting for the Ghost War. It is governed by a king and a high magician.

Saqufe, Planet 190

Saqufe is a large planet famous for its extensive gold mines, its black swamps and venomous lizards, and its lobster tea. It is governed by a Sheriff.

Planets of the Red Star Empire

The fifty-eight planets of the Red Star Empire were discovered and populated by Maxuas as he made his preparations for the Great War. After the War, they became part of the Empire of the Common Mind, and their empress took the title Matriarch.

Rexros, Planet 3069

Capital of the Red Star planets, Rexros is a large, temperate world with vast stretches of unbroken grasslands watered by rivers and streams. It is governed by a chief minister.

Sector Two

Mosalno, Planet 402

Mosalno is the capital of Sector Two. It is famous for its extensive museum of the galaxy and for its Orphan School. The rich and famous of the Empire send their offspring to this school, and they become orphans when they cross timelines on the voyage home to the galactic capital. Mosalno is governed by six sages appointed by the Palace.

Sector Three

Niom, Planet 997

Niom is a large oceanic world, capital of Sector Three. The population has adapted to an aquatic life, and dwells in extensive cities beneath the waves. Thermoclines and currents separate rich from poor. Niom is governed by a queen.

Sector Four

Haslo, Planet 1269

Zozsa is the capital of Sector Four. A huge planet entirely covered by water, it boasts several beautiful floating cities, but foremost among them is Zozsa, the capital. Zozsa is famed for its shopping malls and its memorial to the Great War. The ocean of Haslo is called the "silver sea," because one or more of the planet's seventeen moons is always there to light the waves at night.

Haslo's planetary potentate is decided by a horse race on a floating racetrack.

Sector Five

Bri, Planet 1730

A small planet with a noxious atmosphere no one bothers to weather engineer, Bri is capital of Sector Five. It is the site of the Empire's foremost learning center for those who would pilot downleveling ships. The cadets are divided into groups according to the deepest patternistic level they can master. Most wash out before attaining a Deep-one rating, because the Deep is so alien to the human mind. Only a few in the history of the Empire have graduated with a Deep-five rating.

Bri is also the location of a vast amusement park, "Take Care," built by hand by Quintillion.

Bri's planetary potentate is appointed by the Palace, but the most important person on Bri is the Commandant of the Pilot School.

Sector Six

Lal, Planet 2215

Lal is a huge desert planet, capital of Sector Six and capital of the Empire. Its capital city, Tetbo, is a metropolis of soaring towers divided into the Indigo, Xanthe, and Vermillion districts. The most wealthy Lalian have vacation homes situated to the north or south of Tetbo, which has been leveled by mindsea duels on several occasions, but vast portions of the planet are sparsely inhabited by poor native peasants and their herds of dros, camel-like creatures that sift sand for their sustenance.

There are numerous must-see tourist sites in the city:

- The Judgment Wall is all that remains of the energy

temples Attequol built on every planet of the Empire. Enclosed within the imperial palace in the heart of Tetbo, the galactic capital on the planet Lal, it symbolizes legitimate authority in the galaxy. According to legend, it dropped the stone that crushed Emperor Rathax as he attempted to destroy the last of Attequol's great works. Subsequent emperors who have not been crushed can claim that the Wall has "judged" them worthy to stand before it.

- The imperial palace has taken several forms across the millennia as wars and mind-duels have shattered its walls and tumbled its towers. Standing at the Western end of the capital city's main thoroughfare, it is the emperors' home and headquarters for the government's Palace Branch.
- Bureau Headquarters stands at the Eastern end of the Way. The Circle of Experts, comprising the Empire's top specialists in nine-hundred ninety-nine fields of study, meet within its curving walls to debate humanity's next step. The Bureaucratic Branch is equal in authority to the Palace Branch.
- A broad avenue connecting the two main branches of imperial government, the Way is where things happen. Emperors ride down it for their annual "Showing." Mating flights for the galaxy's elite race over it. It is lined by the capital's most famous shops, restaurants, and nightspots, as well as by planetary embassies and corporate headquarters.
- The Imperial Museum was established by Attequol and comprises a vast labyrinth beneath the city of Tetbo and beyond. Deep-level experiences such as historical reenactments are available within its walls.
- A holdover from ancient times, the Garden of Snakes serves no known purpose beyond being one of the mandatory stops for offworld tourists in the capital. It is said that Rathax built its twisted little towers to amuse his children.
- The Temple of Inspiration is one of Tetbo's newer tourist attractions. It was built by Quintillion to celebrate the creative spirit. There is an eagle-shaped aperture in the

apex of its facade, and every morning as the sun climbs through the sky, its rays cast the image of an eagle that flies up the steps toward the building.

Interesting places outside the city include the Mindsea Academy of Lal, which, like the imperial palace, has been demolished and rebuilt on several occasions; the Meklodi Resort, owned and operated by Dino, son of Thermeon; and the North Desert Shuttle Station, hub of galactic traffic.

Sector Seven

Thapauti, Planet 2484

Thapauti is the capital of Sector Seven. It is a small planet with a small population. Its capital, Arcoh-Virec, uses antigrav technology to maintain a mountain-high altitude above land or sea as it follows the sun on a daily revolution about the planet.

Thapautians enjoy the constant daylight, as they never sleep for most of the year. But when their season comes, citizens leave the flying city to check into their assigned space in one of the cavern hibernatoriums, where they do their whole year's sleeping in one session. Thapauti is governed by a bioid commission that never sleeps.

Sector Eight

Rigre, Planet 2871

Rigre is the capital of Sector Eight, famous for a downleveling arena where artists sketch out creatures that come to life in the Deep and do battle. The top artist becomes planetary potentate for the next year. It is said that the arena was built by Za Leit.

Medne, Planet 2999

Medne is a very large planet covered by a very deep ocean inhabited by a species of Deep-level whale whose shed skins provide suits for pilots and riders in Deep-level horse races. It is the location for the Empire's primary Deep-level shipyard. Medne's planetary potentate is appointed by the Palace.

Hopario, Planet 3010

Hopario is a small, icy world, Attequol's final conquest. It is home to the imperial minors, the yellow sons and daughters of Ulona who serve in the Empire's armed forces. The small civilian population is governed by the Mayor of Kax.

Ulona, Planet 3011

Ulona was flashed by Attequol before the Empire's foundation and remained lost until Katora and Dino rediscovered it in 104,028. Katora built the city of Alonaton at the South Pole, and Puflet restored the city of Tadruhemdron at the North Pole. Ulona's axial tilt is nearly 90°, and its year is equal to fifty imperial years, giving each pole twenty-five years of unbroken daylight followed by twenty-five years of unbroken night. Some authorities believe that the flashing tilted the planet, but others point out that the native pahmaks are well adapted to the tilt, migrating from hemisphere to hemisphere with the seasons. Proposals to adjust the planet have always failed.

Planets of the Code Empire

Three hundred seventeen planets made up the Code Empire, settled by the red sons and daughters of Ulona after the destruction of their homeworld. When they were absorbed into the Empire of the Common Mind, they became planets 3070-3386, and their empress became matriarch.

Meru-Iola, planet 3386

Meru-Iola is the Capital of the Code planets. It is a huge, icy world with several rocky continents bounded by icy straits and seas. It is governed by a Keep of Sentinels.

Imperial Space Structures

Every imperial world has at least one spaceport in high orbit where downleveling ships can safely dock. Transways, trans-gates, and chronon-twistors are located far from any planet or star in interstellar space, because their working components are spread out over vast distances. The Empire also boasts one way station where intergalactic traders can moor their ships. Known as the Edge, it is located in Sector Five.

Major Imperial Characters

Since the time of the Patternistic Theocracy, when Attequol and Aturon were gone and their successors felt the need for firm guidelines to maintain the social hierarchy, the List of the Galaxy's Thousand Most Celebrated Citizens has been maintained. Imperial planets soon followed with their own planetary lists. Each year one citizen is enrolled, usually because of birth, naturalization, restoration to life, or sudden rise to fame, and another is dropped. If the Lists failed to note an important player on the imperial stage during their time, they may be added retroactively.

Attequol

The Empire's founder was never enrolled on the List as he was already regarded as a god by the time the List was established. According to myth, he dwells inside the Judgment Wall, ready to make a stone fall on any unworthy person who tries to occupy the

Brain-Throne. He may have answered the prayers of Luixa, Mind-river of Lal during the Contested Era, by stepping out from the Center of space and time. There are also rumors that he participated in the Emperor Race of 105,711.

Kokkiro

The Earth-God, like Attequol, was never enrolled on this List, which is intended for mortals, not gods. It is said that he remained at the top of the Stairway of Ice after leading humanity in the Dispersal from their doomed planet. In that eternal height he will remain forever, always ready to respond to the prayers of the faithful—such is the teaching of religions dedicated to his worship. Because the Stairway of Ice leads to realms beyond time, it is possible that Kokkiro both remains up there and has descended into the human universe. Citizens claim to have seen him, among them a pilot named Swotchall who descended the Stairway with his guidance after being stranded there from a distant future.

Aturon

Enrolled for Imperial Year 10 (retroactively, as the List had not been established then). A mindsea. Aturon was the Founder's only child and a major disappointment to his father as he took off in his pentascope for distant galaxies. Such long voyages contract time, so he may still be around. Cargo from his ship, *Amber Sun*, has been found in the Planet Hunters Club at the Edge, and he was seen and heard singing on the stage of the Mosalno Opera House in Quintillion's opera, playing the role of ... Aturon.

Quokisa

Enrolled in 6,442. A mindsea. She championed the Empire's poor and downtrodden masses, and overthrew the ruling aristocracy of her time. She remained supreme for about two thousand contested

years before her foes managed to dislodge her. Soul-gems were her passion, and she was forever collecting—some said stealing—splinters needed for their forging. When enemy forces were about to seize her, she shattered her soul-gem and fled in her pentascoper, *Whirlaway*.

She returned from intergalactic travels from time to time, and took on a new identity as Lorlue, enrolled on the Planetary List of Tiop in 63,410. Under that guise she participated in the Emperor Race in 105,711.

Ashia

Enrolled 20,953. Despite her lack of mindpowers, Ashia had the longest continuous reign of any Common Mind Emperor, over nine thousand years.

Zipo

Enrolled 27,556. Zipo was imperial history's greatest military genius and Deep-level duelist. The sight of him charging on his golden stallion, Prancer, struck fear into the hearts of generations of opponents.

Rathax

Enrolled 30,464. A mindsea. A blue son of Ulona, Rathax tried to obliterate the stamp their ancient enemy, Attequol, had set on the Empire. He is famous for tearing down all of the Founder's energy temples, but even more famous for being crushed beneath the falling debris of the last temple.

Besi

Enrolled 64,890. A mindsea. A tragic figure in imperial history, Besi championed peace, education, and merit-based government appointments and was assassinated by enemies who preferred mind-duels.

Hub

Enrolled 86,908. Not a mindsea. The longest serving Member of the Circle of Experts, the top tier of imperial bureaucracy. His philosophy is to relax and take things slow, for today's tidal waves will resolve themselves into little ripples by next year or next century.

Raolin

Enrolled 87,214. Not a mindsea. He has served as Head of the Circle from the end of the Cataclysmic Theocracy, through the Decadent Epoch, the Contested Era, and into the Age of Illumination. He feels that mindseas are monstrous and must be curbed, so that rationality and humanity may prevail. Midway through the Contested Era, he tired eliminating the position of emperor and running the galaxy without a mindsea, but severe problems with interstellar communications necessitated the return of a mindsea-emperor. Raolin is always serious and reasonable. He has no pets or hobbies. He rides his horse frequently, but that is because he is convinced that contact with the Deep-level animal extends his life.

Horl

Enrolled 87,981. A mindsea who pretended he had no mindpowers. As Imperial Major, Horl ran the Empire through a succession of puppet emperors throughout the Decadent Epoch. Thermeon put an

end to his games and his epoch, but Horl was secretly restored to life by Thermeon's enemies. He had a change of heart after dying and is striving to become a better person, though Thermeon still doesn't trust him. Smaller than most imperial citizens, Horl finds it easy to pretend he isn't powerful. He likes to drink blood-red nonalcoholic zartcher juice and makes up cute, often alliterative nicknames for people he likes.

Orgmorgan

Enrolled 90,264. Not a mindsea—at least don't call him one to his face. Orgmorgan's passion is piloting Deep-level ships. Thermeon made him head of the Pilots Guild, and he retained that role through the Contested Era and into the Age of Illumination. He has no use for modes of interstellar transport than don't involve downleveling—transways, chronon-twistors, and the like. Short and broad, he wears whaleskin flying suits in outrageous colors and gives people insulting names. Thermeon is “Fang-face.” Horl was “Major Horrible” when he was major, and “Remiss” since then. He guzzles Xatmean ale and insists on everyone else joining him for drinks.

Strithie

Enrolled 98,377. Not a mindsea. One of Horl's many wives during the Decadent Epoch. The scathing neologisms she applied to him inspired him to outlaw marriage.

Deov

Not enrolled on the galactic List, but entered in the imperial minors' system on Hopario for the year 98,379. A huge golden-skinned man with black hair and black eyes, Deov has been the minors' Tradition Master since the Contested Era. He is unknown to the public, but Horl and Orgmorgan have made his

acquaintance, and the three of them sometimes meet in pilots' lounges to discuss the galactic situation.

Ix

Enrolled 99,042. Not a mindsea. The daughter of Horl and Strithie, she was the Expert on Slave Affairs when human slavery was legal, and Empress of the Unknown, ruling over a vast slaver network, when it was outlawed. She dressed in red, with boots that struck the floor with the sound of thunder.

Thermeon

Enrolled 99,568. A mindsea. Perhaps the most powerful mindsea since Attequol. He destroyed Horl and Quintillion in mind-duels and flashed the planet Wamatu to end the Great War. His life centers around the vision he once had of a star speaking to him in a woman's voice and promising him eternal dominion. He believes this goddess-star will take human form and envelop him in eternal love as they rule the galaxy together. His life has been a series of misadventures as he fixes on one woman after another, certain each time that he has found his goddess-star.

Morning Glory

Enrolled 99,549. A mindsea. Thermeon's half-sister. She was raised in Horl's savage experimental habitat along with Thermeon and broke free long before him. She helped Thermeon to overthrow Horl and replace his soul-gem with one of their own. When the Contested Era with its destructive wars followed their triumph she felt terrible guilt that would not be assuaged until she had assembled a new soul-gem for a happier age.

Fuerida

Enrolled 99,600. A mindsea, daughter of Morning Glory and Orgmorgan. She's in love with a Deep-level sword named Starflash that Horl forged for the hero Foske. She flies around the galaxy in her pentascope *Reflection* looking for battles to fight.

Puflet

Enrolled 99,907. A mindsea, daughter of Thermeon and Ix. Raised as a slave by Ix, she orchestrated the revolt that killed her mother. Quintillion bequeathed her his mindpowers, which she envisions as a powerful monster, and she uses them to fight slavers and space pirates throughout the galaxy. Her favorite drink is the Saqufean fire-dragon.

Katora

Enrolled 101,425. Daughter of Raolin. The galaxy's most powerful female mindsea, she uses her powers to see into the future and manipulate timelines rather than to battle. Her dream is to bring the Age of Illumination to the galaxy. Because her father wiped her memories and she has no recollection of family ties, family is very important to her. As a distant descendant of Besi, she feels destined to fulfill Besi's dream through her own descendants. To produce the offspring she envisages as the hope of the future, she must mate with the most powerful male mindsea in the galaxy. She has attempted to fulfill her destiny with Quintillion, with Thermeon's son Dino, and with Thermeon himself, but none of their offspring has yet turned out perfectly. She is baffled by her failure, but determined to continue pursuing her dream.

Quintillion

Enrolled 102,373. A blue son of Ulona. Quintillion is a powerful mindsea, but he is very circumspect about how he uses his powers.

He is a vegetarian and a total pacifist. He regards all life, even insect life—some would say especially insect life—as sacrosanct. He is a masochist who believes that his personal suffering is the only thing keeping the universe from utter annihilation. While emperor, he spent his days sitting on a cactus couch funneling all communications of the galaxy through his head. Other mindseas could hold a mind-net, but they had to enter a trance to do it. Quintillion can do other things, such as creating works of art and architecture or composing music, while he extends his awareness through the galaxy. He feels he might become the galaxy, a single sentient being with thousands of eyes distributed across the planets. Mind-rivers subsumed by his usage can no longer function as independent beings. He recalls distant pasts and futures and can become confused about the direction of the flow of time.

Serpenlino

Enrolled 102,217. A mindsea, the son of Quintillion. His enrollment date is before his father's because Quintillion was thought to be dead for a time. Rejected and walled off by his father, Serpenlino simmers with deep resentments, although he presents a face of confidence and optimism to the public. He loathes his ex-wife Puflet, because she was the one his father passed his mindpowers to. Serpenlino feels that he ought to be the most powerful mindsea in the galaxy, and wages legal battles against those he suspects of having greater mindsize than himself, because only in the service of evil could they gain such powers. In 107,275 he fought a mind-duel against Horl in which the smaller man was subsumed by Quintillion's personality. This horror convinced Serpenlino that his dead father's overmind is the greatest threat to humanity, and he is determined to save the galaxy from its Deep-level, incorporeal threat.

Shell

Enrolled in 104,037. Daughter of Quintillion and Katora, a

mindsea. Rejected by both parents, she was raised at the Mindsea Academy of Lal. She feels closer to aliens than to humans, and adopted the offspring of the Aiggle when its parent was killed in the battle with Thermeon.

Imperial Sayings, Gestures, and Titles

Sayings

There is no Death in the Deep

This phrase is frequently bandied about, but is it true?

Stripes' Stripes!

An exclamation of annoyance used by pilots. They have many other expressions beginning with "Stripes," such as "Stripes' Armpit," or "Stripes' Afterthought," referring to unhappy planets. The stripes in question are Attequol's tattoos.

Like a Freak at a Free-for-All

A slaver expression that probably originated from the habit of sending slaves that didn't turn out as expected to the battle arena.

Twistored

An unhappy state, as if the spatiotemporal adjustment provided by a chronon-twistor went wrong.

Transaxed

Undone.

The Sandfish Pointing at the Grinx

A Lalese saying equivalent to “the pot calling the kettle black.”

Gestures

The Mind-link Sign

Thumb and forefinger forming an “O” are touched to the head to indicate that one is, or about to be, engaged in mind-link.

The Internal Sign

Tapping the side of the head indicates that one is exchanging information with an internal.

Challenge to a Race

Tapping toes of the right foot against the floor, the foot pointed toward the opponent, indicates a challenge to a horse race to settle a wager. The challenger’s initials may be projected if fireflies are available.

Pilot Gestures

Pointing to the armpit is equivalent to saying, “Stripes’ Armpit.” Tapping two fingers of one hand crosswise against two fingers of the other hand indicates patternistic integrity. Planetary number is indicated by flicking the fingers four times—first flick for the sector, second for the quadrant of the sector, and third and fourth for the rank within the quadrant.

Nander Gestures

In Nanderese, fingers and toes indicate the tones and cycles that

make up the universe. An entire story may be told in gestures.

Titles

Galactic Presence

This has been the title of the emperor or empress of the Common Mind since the reign of Xublian.

Son/Daughter of the Circle

This is the title given an offspring of the Head of the Circle.

Grandmother

This is the title given a respected elder among the Yakasni of Amugro.

It is also a Nander title of respect for an old woman, *Shoma* in Nanderese.

Matriarch

Title of the leader of the Red Star planets and the Code planets after the merger of empires.

Using the Website

The Infernal Museum website, www.infernalmuseum.com has complete listings of emperors and empresses, the 3010 original planets of the Empire, and of citizens enrolled on the Galactic List of a Thousand and the Planetary Lists of a Thousand. The Lists cover Imperial Years 1-111,000. Each citizen's mating flights that produced offspring also on the Lists can be researched.