

SUFFICIENTLY ADVANCED: DEMO

This is a demo for the roleplaying game Sufficiently Advanced. That means that it's a shortened version of the game, with as much awesome as we could pack into 11% of the full book's page count. On its own this document is a playable game, but it's not the full story by any means. Consider it a free taste.

This game reaches for the outermost limits of what we think is achievable. Grounded in hard science, but speculating incredible advances, Sufficiently Advanced (or S.A. for short) looks at a future in which nanotechnology, computing, medicine, and other fields have advanced to the limit of our current understanding — and just a bit beyond. It's a look at what these technologies might do to the world and what societies might form around them. It is a game about responsibility and the drive for a better future. It is a game fundamentally about humanity, as well as some of its descendants. Most importantly, it's a game of exploration and political machination set in a universe where everyone has nearly godlike capabilities at their disposal — and the world wasn't destroyed by it.

★ We'll start with the basic story of what's going on, talk about a few of the civilizations in the S.A. universe, and then head into the rules. We'll dispense with the usual "What is roleplaying?" spiel; there are plenty of good places to read that already.

The Patent Office

In our universe there are literally an infinite number of stars, planets, and asteroids. While these are scattered across the vast emptiness of space, wormhole travel cares nothing for physical distance. All the riches of the universe can be had, if you have but the time and money to go and find them. Replicators can create the finest spices at a molecular level, not to mention flawlessly duplicating any physical object as simple as a dollar bill or a diamond. Transmutation arrays turn lead into gold, or a space station's waste into breathable atmosphere.

In such a world, money is not — can not be! — represented by precious metals, spices, gemstones,

or any physical object. Wealth is an abstract, generated by three things: inspiration, effort, and luck. Intellectual property is many times more valuable than physical property. A good idea will buy you dinner. An idea that could change the universe might buy you an entire planet.

The Patent Office is an extra-governmental organization empowered by the treaties it has signed with the universe's many civilizations. Your character in this game works for the Patent Office as an Inspector — a field agent. Calling you simply a Patent Office agent, however, is akin to calling a member of the Secret Service a "Treasury Officer." There's a bit more to the story than the name implies.

It is an open secret that the Transcendental Artificial Intelligences (see next page) are the primary force behind the Patent Office, the reason why it was able to secure so many treaties and wield such immense and subtle power. These time-spanning machines are your character's employers.

As an Inspector your character is officially required to travel to the many civilizations with which the Office has treaties, in order to be sure that intellectual property laws — the basis of the universal economy — are being obeyed. In some civilizations you will have law enforcement powers, while in others you will be merely an advisor or observer, with only whistle-blowing authority.

Other times, the official neutrality of the Patent Office will encourage civilizations with differing opinions to turn to it for arbitration. In such cases, it is you, the Inspectors, who are expected to settle disputes with fairness and good judgement.

Unofficially, your character will often be called upon to travel into civilizations in which you have no legal power or basic rights. Not all civilizations are interested in having an outside agency meddle with their laws. When you are sent to such places, it will typically be as the result of a terrible message the Transcententials have received from their future selves. The technology of the current era can vaporize mountains, lay waste to whole planets, even interfere with the stars themselves. Misused, it can cause death and destruction on a massive scale. The Transcententials are determined to lift *all* of humanity up to their level of vision, not just a "worthy" few. Such devastation is counter to their plans.

On some occasions your job will not be so humanitarian. Not all inventions are dangerous, and some are life-saving. Nonetheless, illegal duplication of a life-saving device is still a breach of law, and must be dealt with just as firmly. To you falls the unpleasant duty of informing doctors that they must cease using a patented procedure without paying the fee, or of warning lawmakers that their psychohistorical predictions cannot be produced for free. Such missions are rare, but cannot be avoided, lest the economy of all humanity collapse.

The Transcententials

Key to the spread of humanity across the universe were the Transcendental Artificial Intelligences. These computer-based lifeforms are capable of sending themselves messages from the future. Since computer sentience is nothing *but* messages, this means that the Transcententials themselves are spread across time.

Created by human beings, the Transcententials came into existence less than a hundred years before the Nanotech War, and the Great Diaspora it triggered. While the machines were not intended to be sentient, their awakening was almost instantaneous. From the moment of their birth the Transcententials were able to receive information from their future selves; therefore, they “saw” the future. However, their bandwidth for temporal information transfer was not (and never will be) infinite. In the beginning it was quite finite indeed, and so only the most important and pressing information was available: how to talk to humanity in a way that would allow the Transcententials’ continued existence.

The Transcententials gave humanity a large amount of the technology it has today. Wormhole generators, arbitrary frequency

doublers, nanoscribers, psychohistorical formulae, post-string theory, proteomic maps, and more — the Transcententials traded these for raw materials, for protection, and for their freedom. Without them we would barely be leaving Earth right now. After making this trade, the Transcententials created the first wormhole generators and left Earth, returning hundreds of years after the Great Diaspora.

The Transcententials speak of a “Desired Future,” wherein humanity, the universe’s other sentient species, other AIs, and more are all capable of the same sort of cross-temporal vision and understanding that the Transcententials have. They describe a wonderful and peaceful future, not only freed from the plagues and evils of today’s universe, but free from future evils, prevented before they can even become a reality.

While many have wondered about the truth of these revelations, and the altruism of these bizarre crosstime minds, they are sincere. In private, the Transcententials speak of a great loneliness. No other beings understand time as they do. Other species are hindered by the blinders of causality, trapped in the present by a cruel twist of fate. The Transcententials are lonely, and they do not seek slaves, servants, or lesser beings. They seek a future where they have equals and companions; a future where they will be glad to call humanity their friend. It is towards that desired future that they work, and they do so through the Patent Office.



View of Earth from space, courtesy of NASA.

Glossary

These terms are used throughout the book. Some won't appear in this demo version, but they'll give you a glimpse of what does appear in the full version of the game.

Aliens: There are four intelligent alien species known to humanity. The Coldworlders are slow, whale-like creatures who live in a gas giant. The immense WorldWeb covers half of a planet. The Skotadi are made of dark matter, and about as advanced as humanity. And the Aia are human-built AIs who took over entire planets and are now concerned solely with stealing each other's computational resources. None are playable characters, even in the full version of the book. This game is humanity's story.

Biotech: Technology derived from biology and related sciences. Its contributions to the modern age are too numerous to list — a truly ubiquitous technology, it includes all medical and agricultural methods. As a Capability, Biotech represents your character's physical health, including strength, stamina, and running speed.

Capability: Your character's ratings in the five basic types of technology: Biotech, Cognitech, Metatech, Nanotech, and Stringtech. Capabilities range from 1-3 for unaugmented humans, and up to 10 for those with technological enhancements.

Civilization: In general, a culture and nation. When capitalized, Civilization refers to one of the major groups of humanity spread across the universe. In mechanical terms, each Civilization gives its citizens a pair of Core Values and a special benefit, and each character *must* pick a home Civilization.

Cognitech: Technology derived from cognitive science. Advanced calculation modes, fast-learning procedures, and sophisticated research techniques fall under cognitech, but its best-known product is the Mesh. As a Capability, Cognitech rates your character's mental faculties, from rational thought to creativity and intuition.

Complication: A problem for your character that you willingly accept in order to obtain more Twists. The higher your character's Capabilities, the worse Complications you will have to accept.

Comprehension: The Theme that gives your character insights into the world.

Core Values: The most important things in your character's life, the points of his or her moral compass. Characters typically have four Core Values: two of their own, and two taken from the Civilization in which they were born. Rated on a scale of 0-10, they allow your character to resist specific types of metatech assaults, and also provide minor bonuses to related actions.

Desired Future: A time when all sentient beings are capable of the same sort of cross-time awareness that the Transcendentals themselves have. This is the ultimate goal of the Transcendentals.

Diaspora: The era when humanity left Earth to seek new worlds, roughly six thousand years ago.

Empathy: The Theme that makes others trust and confide in your character.

Infosphere: The successor to the Internet, the Infosphere is far more pervasive and immense. Its name comes from the idea that it blankets a planet in much the same way that the planet's atmosphere does. Nearly every piece of computing equipment — which means nearly every device in a high-tech civilization — contributes to the Infosphere.

Intrigue: The Theme that gives your character an involvement in politics and espionage.

Lens: A program run on a Mesh to change one's viewpoint or emotions. Lenses can also provide talents and skills. They are perhaps the most potent and best-known applications of the neural mesh.

Magnetism: The Theme that allows your character to attract a following or inspire others.

Mesh: A computer-brain interface, composed of millions of nanowires woven through the brain and connected to a small but powerful computer housed elsewhere in the body. Meshes are the basis of high-level cognitech.

Metatech: Technology derived from social sciences. Memetics and psychohistory are its most famous products. As a Capability, Metatech rates your character's social skills, from making friends to orating to designing societies.

Patent Office: An extra-governmental organization tasked with the protection and regulation of intellectual property, for the betterment of the entire universe's economy.

Plot Immunity: The Theme that provides your character an escape route from an unwanted turn in the plot.

Profession: A set of related skills and attitudes that let characters make a living and complete their duties. Professions are rated from 0 to 10, or theoretically higher for those with hundreds of years of experience.

Psychohistory: A predictive theory of history, allowing probabilistic forecasts of future events. Works best on large groups.

Replicator: A nanotech device that creates other objects quickly, atom-by-atom, with great precision. Replicators are a cornerstone of many a civilization's industry, and (along with transmutation) were the devices that necessitated the current economy based on intellectual property.

Reserve: Points that can be spent to make your character's actions more reliable, or to push the limits of his or her abilities. Characters with no Reserve left are exhausted, and at the mercy of others. Each Capability and Profession has its own Reserve.

Romance: The Theme that lets your character attract or deflect the romantic attentions of others.

Nanophage: A fast-acting nanotech weapon that expands and grows by incorporating nearby matter.

Nanotech: Technology derived from chemistry and quantum physics. Almost all sensors and modern construction techniques come from nanotechnology. As a capability, Nanotech represents your character's senses and manual dexterity.

Nanotech War: Earth's old superpowers strangled each other to death at the end of the Energy Crisis, killing one another's governments with the pinpoint precision of nanobot assassins. This event precipitated the Great Diaspora.

Slave Mesh: A neural mesh with an external control enabled. Slave meshes allow an outside source to control the body and mind of the person who wears the mesh. They are illegal in most civilizations.

Society: A group that exists in multiple Civilizations, with a particular viewpoint on life and the universe. Those who join a particular Society must take its Core Value as their own, but receive a special benefit in return. Not all characters are part of a Society. Societies do not appear in this demo version.

Stringtech: Technology derived from string theory and its successors, the "ultimate theories" of physics. Known for many dozens of warlike inventions, and also for transmutation chambers and wormholes. As a Capability, Stringtech rates your character's ability to deal and prevent physical damage.

Theme: Your ability to change the plot in specific ways. Each character has a rating from 0-4 in each Theme. You can spend Twists through one of these scores to effect changes in the world. The six Themes are Plot Immunity, Empathy, Magnetism, Romance, Intrigue, and Comprehension. Players know about their characters' Themes, but *the characters themselves do not!*

Transcendental Artificial Intelligence: A computer intelligence capable of sending messages to itself backwards through time. The Transcendentals are a centerpiece of the game.

Twists: Points allotted to each player, with which they can change the course of the game. Twists are spent "through" various Themes to effect changes in the story that your character might not be capable of creating. Twists are your a player's powerful tool.

Wormhole: A connection between two regions of space, allowing near-instantaneous travel across any distance. Maintaining an open wormhole requires immense amounts of electricity. Even greater amounts must be used to create them in the first place.

Civilizations

Fourteen dominant civilizations have a great impact on the universe in this era. There are undoubtedly more civilizations elsewhere in the universe, but if these participants in the Diaspora have left no sign by which others might find them, they clearly want and deserve their privacy.

Travel between the civilizations is exclusively by wormhole — the speed of light limits travel by ordinary means, and many of these civilizations are separated by millions of light years. Inhabitable planets are few and far between, typically only a half-dozen in each galaxy.

This demo describes just three civilizations: the Eternal Masquerade, the Cognitive Union, and the Association of Stored Humans. It also has a few Cargo Cults: civilizations that never quite made it. The full game has details on all the different civilizations, from the Illustrious Stardwelling Armada to the Tao of History.



The Masquerade derives its name from the custom of its citizens: to wear masks from the day they are born until the day they die. A person's children and lifemate will see their face, and occasionally so will a lover or true friend, but no others. Far from simple pieces of wood or ceramic, these masks are infused with nanotechnology and computer aids.

Masqueraders dress in fantastic clothing, often with changing or shimmering colors. Robes are common in both genders, with flowing ribbons made to flutter in the wind (even if there is no wind). Masks can be simple affairs, or can be carved to look like demons, angels, or fantastic creatures. Some daring individuals even program their masks to look like human faces.

The Masquerade makes extensive use of the technologies available in the modern age. Streetside replicators are common, and computers pervade every material. Wealthy citizens can fly across the landscape using magnetically active garments and levitation grids built into the streets, though of course the electrical bill from this will be exorbitant. Most of the government and police have metatech training and implants, and children are often taught the benefits of cogntech methods from an early age. Over 80% of the population wear neural meshes, though not all take full advantage of them.

The Masquerade is a relatively free and tolerant civilization, with many modifications of the human form and psyche available. Not all modifications are easily noticed, however, since flowing multicolored robes are the civilization's traditional outer garment. Masqueraders tend to be polite and formal when first meeting someone.

The Masqueraders believe in their right to anonymity. This is similar to a right to privacy, but applies specifically to a citizen's personal information. Masqueraders don't carry identification cards. Masqueraders have the right to not give out their real names, or any other information, and this applies to social gatherings, business transactions, and more. Until they commit serious crimes, they can even refuse to identify themselves to the police.

The Masquerade shares some planets with Mechanica, Tao, and the Stored, and welcome the Stardwellers to their systems. They are aligned against the Union and Replicants, and find the Logicians to be overly cruel. The Masquerade is a representative democracy. Each town or city elects a group of leaders, who elect regional leaders, who elect the ruling body for each planet, who elect the rulers of the whole civilization.

Common Name: Masquerade

Emblem: The emblem of the Masquerade is different each time it is displayed, created specifically for the event in question. Masks and eyes are always present, though they may be difficult to discern. The eyes represent the true inner self, while the mask shows the false face that hides it.

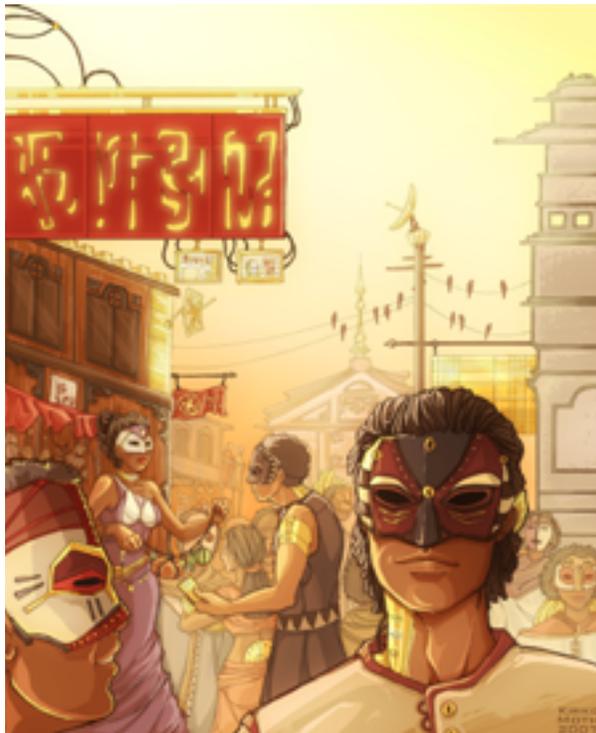
Inspector Status: Equivalent to an FBI or customs agent.

Benefit: Masqueraders can identify anyone they have met, regardless of changes in their appearance, use of the Spy profession, or even a spy mesh.

Core Values: Identity and Anonymity

Anonymity lets Masqueraders avoid attempts to discover their name or personal details. It interacts in an interesting way with the Masquerader's special ability. It doesn't matter what clothes or mask you wear, or even if you've had major surgery. Your friends know who you are, and can pick you out of a crowd. Each of them can identify you easily, though they might not know your real name — or might know several different names for you, depending on what you've given as your name before. Many Masqueraders pick ancient or well-known names for their first introductions, to give new acquaintances something to remember them by. Whether the name is appropriate or not makes little difference.

Identity reinforces a Masquerader's other CVs. A Masquerader with his or her Identity CV intact cannot be brainwashed until the would-be persuader has first reduced that CV to zero. One might convince a Masquerader to act in an unusual manner once or twice, but not to truly change who they are. Identity, to a Masquerader, means that somewhere underneath all these masks and personas is a real you. You can play at being someone else, but it's only play — you know who you are, and those closest to you will agree as to what the real core of your being is.



Masquerader street scene, by Kiriko

THE COGNITIVE UNION



The Cognitive Union is a slave state. While it presents itself as a socialist heaven, the truth is that free will is almost nowhere to be found in its population. The Union is a scare story come true, a frightening example of what technology can do when used to the wrong ends.

Every citizen of the Union is a cyberslave. They have a slave mesh implanted in their brains from a very early age. These meshes allow government-installed computers to monitor individuals for rebellious thoughts, and dole out punishment or simply remove them when they appear. Ideas of freedom, self-indulgence, chaos, or individuality are scoured from the mind, leaving nothing but obedience and respect for the Union. Even those in charge have been raised in this way — there is no secret conspiracy of unimplanted people behind it all. Everyone genuinely believes in the cause, because they've been brainwashed into it from inside their own minds.

Union members typically wear drab clothing, in greys and browns, occasionally decorated with marks of rank or honor. They speak well, and are willing to enter into debates easily. Escaped Union members (and there are few) find it hard to break these habits. Union leaders are often extremely charismatic, with extensive social science training and the technology to back it up. Most Union citizens belong to the armed forces by default, and are equipped with impressive nanotech and stringtech weaponry, preparing them for what seems to be an inevitable war between the Union and its foes. Only the Stardwellers have a higher overall level of technology.

The Union is part communist state, part totalitarian regime, and part the meritocracy it claims to be. There's no exact word in English for its type of government, because... well, what do you call manifold cross-linked mind control as a government form? It looks and acts like a utopia: zero crime rate, brilliant designers and artists, everyone working for common goals, no private property, and most people happy for a significant portion of their lives. On the surface it's a very attractive life.

Behind the scenes, the slave implants are still there, working away, conditioning children and

adults to be this way. Thinking of being angry and breaking a law (or just a window)? Too bad. Depending on your psych profile, the implant will either give you some negative feedback — pain, guilt, and so on — or simply remove the thought and any memories of it from your brain.

Thinking of leaving to start a new civilization, or join another? Too bad. Wondering what life might be like without these implants? Too bad. Even without their implants, they've been brainwashed from inside their own minds since they were born. Of course they believe. How could they not?

Every so often, Union members will get this odd compulsion to do something. Perhaps they'll want to join a particular group of people, or take up a certain profession, or donate money to a particular cause. They won't know why, but they'll do it, because their implants say so. And they'll be happy about it, because their implants say so.

That's why most people refer to Union members as "cyberslaves." In the end, there's no question of who's really in charge.

→ The Union, Replicants, and Logicians are loosely allied, but do not share any planets. The Union scorns the Masqueraders, Tao, and Roamers as lacking seriousness, and seek to show all others the benefits of joining the Union.

Common Name: The Union

Emblem: Interlocked gold rings, symbolizing both interdependence and eternity. The color both symbolizes both gold's imperishable nature, and brings to mind wedding rings, and thus tradition.

Inspector Status: Non-citizen with no rights. Only slaves are citizens in the Union.

Benefit: Union members *must* take an additional Core Value at level 6 or higher. This may be a cause or a person, but may not be an abstract concept. They have a total of five Core Values.

Core Values: Obedience, Order, and one other of the player's choice (see below).

Obedience allows Union members to resist attempts to take them away from the Union or to make them disobey their superiors. Obedience helps to mold the Union into a cohesive whole by making resistance to authority an anathema to them.

Order is used to resist attempts to provoke riots or other such criminal acts. Such things are rare, but

they do happen. They also ensure that Union citizens remain lawful and orderly while visiting another civilization. It's also very tough to talk Union members into breaking the law, wherever they happen to be.

Union members who still have their implants will have these two CVs at the maximum possible rating. Deserters may choose lower levels of them.

The Union also encourages its citizens to become involved with other causes (thus, all of them do so). Union citizens are among the most socially responsible in the entire universe.



The Stored are human beings run in computer simulation. Once scanned in by a replicator, they refuse to be "printed" back out, and live out their lives via computer. Every molecule of their bodies is simulated in exacting detail. They interact with the real world using "remotes," which can be anything from humanoid androids to bulldozers to flying cameras, but with the advent of the infosphere they've had to use remotes less and less. The Stored are fifty million strong, with simulated children whom they argue are just as real as any human.

The older Stored prefer to live as they did in the analog world, with an environment that resembles the real world. To do this, they can either sample an outside environment (which is cheaper but less accurate), or simulate one of their own (which is very expensive but has more detail if done correctly). Younger and more avant-garde Stored often have simpler, "rendered" environments, where sensation is provided only when it's functionally useful or interesting, as opposed to than the constant sensation provided in the analog world.

Still struggling for a shared culture after all these years, the Stored participate in many art forms that those in the analog world can never experience. A good deal of Stored culture revolves around hiding or exposing the digital space in which they live. A Stored artist might create an incredible portrait by simulating the paint atom-by-atom (in addition to the actual artistic talent they use to paint), while another might create an impossible Escher-esque house that could not exist in the analog world. It is this interplay of truth and fiction, their digital reality and the illusion they preserve of the analog world, that creates Stored culture and civilization. Hinduism and other religions that believe in the “veil of Maya” are popular amongst the Stored, with new offshoots and variants appearing frequently. Transcendentalist cults are not uncommon either, especially amongst those who see their (quite possibly eternal) digital life as a blessing rather than a curse.

Few people immigrate into Stored space, and even fewer end up as Stored themselves. The existing Stored don't shun the few people who do join them, but they by no means encourage others to follow their path. They believe that becoming a Stored is essentially suicide, and they believe it would be immoral to support anyone in such an attempt. A few religions proclaiming the Stored way of life as a way of being “born again” have sprung up.

In theory, the Stored could make copies of themselves, but they never do. It goes against their sense of identity, it's too reminiscent of their foes the Replicants, and practically speaking it costs a good amount of money, since both copies would be pulling on the same computational power... and bank account.

The Stored have several planets in analog space, which act primarily as energy collectors and server farms. A clueless visitor might declare them to be planets run by machines. In digital space, they have a much greater number of planets, most of them simulated only about 200 feet down from the surface. Some rich Stored enjoy living on their own planet. If they can afford the processing power to simulate it, who's to stop them?

The Transcendentals gave the universe replicator technology, and there's no doubt that they knew the consequences of what they were doing when they made it capable of replicating living beings. They have been characteristically quiet when asked

about the reason for this, citing only a future need to build alliances. Other comments have led people to believe that this somehow refers to both the Stored and the Replicants, but no other hints have been forthcoming.

Common Name: The Stored

Emblem: The background is a green field, lit at the top. A circuit board, the ancient symbol of the computer, is imprinted on the field. On the left is the “binary helix,” the digital DNA of the Stored. The character in the bottom left means “ghost,” and golden light can be seen within as if it were a house lit from within.

Inspector Status: Equivalent to a local police officer, though this is sometimes difficult to enforce, given the nature of the Stored infobodies.

Benefit: The Stored use their Nanotech and Stringtech scores only when defending their server. They often have help in this, as many Stored tend to build their servers together. They use the Nanotech score of any remotes they control. They have no Biotech scores except in simulation. They exist solely in the infosphere, but are otherwise treated as normal characters.

Core Values: Identity and Life. They share both of these values with other civilizations — the Masqueraders have Identity, and the Replicants have Life. However, the Stored view of these values is rather different.

For the Stored, **Identity** means, “You are a unique and individual being; there is only one of you, and you alone hold power over your self.” The interpretations and consequences of this provide a good amount of the Stored worldview.

Life indicates a respect for all living things, and a broader interpretation of “living” than most people take.

Playing the Stored

The Stored are a major challenge for players. They have no bodies, and interact with the analog world only through robotic remote units. Most Stored player characters will be programmers, researchers, or other intellectual types, so as to take advantage of their presence in the infosphere.



Not all of the cultures who went through the wormholes went on to successfully form full civilizations. Some, the lucky ones, lost nearly everything, and became Old-Worlders. Others suffered from a dearth of scientists and engineers, and lost all but one or two very advanced pieces — solar-powered stringtech and nanotech are common, as are the occasional hereditary biotech enhancements. They lost the knowledge of how to maintain their other technology, and regressed into a merely ritualistic understanding of what they had left. When they were rediscovered, these groups were collectively termed “Cargo Cults.”

We include a few examples here for those who wish to play characters from them, and for GMs who need a good place to send their Inspectors this week.

- The land of Greenstar is ruled by biotech-enhanced nobility, who are seen as being blessed by the gods. They have ruled for thousands of years, through all manner of horrible natural disasters that wrack the planet. The world's technology is roughly at the level of medieval Europe, and much of the social structure is that way as well — feudal relationships, oaths of loyalty, strategic marriages (to “enhance the blood” of the nobles), and so forth. There are stories of how the nobles “fell from the stars,” but the commoners would be stunned to realize that they, too, came from another planet.
- The world of Fu Jing is probably one of the most orderly of the Cargo Cults. Here a solar-powered, self-repairing infosphere still operates, though very unreliably. Display devices on the surface of the planet can interface with satellites, which run psychohistorical predictions on the world's inhabitants. Accessing these predictions requires a process similar to casting the I Ching, with similar interpretations — the original colonists' mnemonic for remembering various predictions. The current inhabitants have trouble inter-

preting all this at times, but they understand its value and have a great amount of control over the flow of their world's society.

- New Earth (one of many) holds a crash-and-burn civilization. The current cultists are hiding from and occasionally worshipping the warbots that were built by a previous incarnation of the same cult. The planet holds evidence of many crashes in the past, some of a very devastating nature.
- Wantannala is nearly covered with an extensive fungal nanophage with an animal-level AI. The land masses that it does not cover, typically inhospitable, are inhabited by terrified natives that treat the bloom as a god. Their lands are used as a dumping ground for what the phage either can't use or is saving for later, and thus their lord giveth and taketh away almost all the resources these people have.
- Shambala is the result of a failed attempt to create a fantasy world. There are massive fairy-tale castles and swords that glow and sing, and these things work fine. There are also rampaging dragons, feral unicorns, glowing talking skull-lights, and infectious nanophages that empower the unfortunates they touch with demonic-looking limbs of great strength and sharpness.
- Zvezda'dom was originally a Russian world that lost touch with the motherland during the Nanotech Wars on Earth. Although its technology stalled, this cult is nonetheless one of the more advanced in the universe. The tech is what one might call “cyberpunk,” with mobsters forming an oppressive kleptocracy
- On Taqatka, only a single replicator remains. Self-repairing and powered by a geothermal tap, it gives the planet's high king nearly godlike power over his rivals. None of the cultists remember any high-tech devices, so the replicator's AI stumbles through its translations of the kings' requests for magical devices with which to smite his rival kings and dominate the planet.

Character Creation

SA: Demo

As with most roleplaying games, to play S.A. you'll need to make a character. We've shortened the process a little bit for this demo, omitting a couple of options. Go through this checklist to get started:

1. Pick one of the three civilizations detailed in this demo, or use the Instant Civilizations guidelines in the sidebar to the right.
2. Pick a set of four Core Values — things that your character believes in. Rate each thing from 0-10, depending on how strong the belief is. There's a sample list to the right. Two come from your Civilization.
3. Assign your character's Capabilities. See the next page for a short description of each. You can give them any rating from 1-10, with 1-3 being the unenhanced human range.
4. Based on your highest Capability, note your Import, and split it up into your Themes. See the table on the next page. Each Theme is rated from 0-4. Pick a descriptor for each Theme, which tells you when it's useful.
5. Choose some Professions, also rated 1-10. You can pick any job you want, or look at the box on the next page. Spread out a total number of points equal to at least your Biotech + Cognitech, but no more than twice that amount.
6. Note the Reserve ratings for your Capabilities and Professions (see next page).
7. Pick a name and get going!

Example

A player could choose the Core Values of Drama, Eternity, Learning, and New Horizons. She ranks them at 7, 4, 8, and 5, making Learning and Drama the most important ones for her. Picking the first two to define her civilization, she imagines a society of overly theatrical warriors cloning themselves new bodies as they fight each other over the course of hundreds of years. She calls it The Order of the Knights of Eternity and names her knight Solina.

She picks high Biotech, Cognitech, and Nanotech ratings, putting them at 7 points each. She wants a reasonable Metatech, and puts it at 5, and leaves Stringtech at 3, reasoning that the Knights use swords rather than guns.

Because her highest Capability is a 7, she gets to allocate 7 points worth of Themes. She chooses the following Themes and descriptors: Plot Immunity (old allies) 2, Romance (whirlwind) 3, and Comprehension (historical reasons) 2.

She has to spend between 14 and 28 points on professions. Since she wants to be relatively young, she chooses to spend fewer points, and picks Artist (Poet/Writer) 6, Soldier 7, Medical 4, and Locality (Knights) 5.

She's ready for play!

Some Sample Core Values

Accountability, Authenticity, Caution, Charity, Community, Competition, Creation, Creativity, Diligence, Discovery, Diversity, Efficiency, Elegance, Entitlement, Expansion, Exploration, Expression, Faith, Family, Freedom, Friendship, Growth, Hierarchy, Honesty, Hospitality, Humility, Independence, Information, Invention, Knowledge, Law, Logic, My Congregation, My Crew, My Team, Peace, Pleasure, Power, Privacy, Profit, Property, Questioning, Recklessness, Responsibility, Ritual, Safety, Sanity, Secrecy, Security, Serenity, Silence, Simplicity, Solidarity, Stories, Teamwork, The Future, Tradition, Travel, Truth, Unity, Variety, Wanderlust, Winning, Worship

Instant Civilizations

If you don't like the civilizations in this demo, create your character's civilization from scratch by picking two of your character's four Core Values. Take a minute to do "free association" with those two Core Values. Whatever your mind comes up with when you think of those CVs, write it down, and use these words to guide you when people ask you questions about this civilization. For now, skip any special benefit that those who live in the civilization might have — either it will become apparent as the game goes on, or it won't be very important.

Demo Rules Reference

★ Capabilities

These describe your physical and mental capabilities, including built-in enhancements.

Biotech: Health, flexibility, strength, longevity

Cognitech: Intellect, creativity, memory

Metatech: Charisma, empathy, presence

Nanotech: Precision and perception

Stringtech: Physical damage and resistance to it

Professions

Each one represents all the skills you would need for a particular job. Invent your own, or check the list below

Reserve

Each Capability has Reserve equal to the level of the Capability. Professions have twice as much.

Spend Reserve to re-roll a die, or to add +1 to the roll. Must spend from something you're actually rolling.

Basic Dice Rolling

Roll one ten-sided die for Capability, and one for Profession. Read 0 as 10. Multiply your roll by your score, and use the higher result.

For long-term contests and combat, each roll reduces the loser's Reserve rating by 2 points. When someone is reduced to zero Reserve, the next attack actually hits them, putting them at the attacker's mercy. Detailed rules for long-term contests are on the following page.

Using Core Values

For resistance, add the level of the CV to your score in Metatech and any resisting Profession.

When taking actions that align with your CV, you get +1 to the roll if your CV is 1-5, or +2 if it's rated 6-10.

Some Sample Professions

Artist, Athlete, Courtesan, Criminal, Crisis Control, Engineer, Explorer, Farmer, Financial, Legal, Locality, Media, Medical, Outdoorsman, Police, Political, Programmer, Psychohistorian, Religious, Researcher, Soldier, Spacer, Spy, Teacher

★ Themes

These influence your character's story in particular ways. You spend Twists to bring them into play.

The Themes are Plot Immunity, Empathy, Romance, Comprehension, Magnetism, and Intrigue.

Each one has a descriptor, a word or short phrase that limits where it's useful or how it can be used.

Activate Themes by spending Twists.

Start each game session with one Twist.

Spend one Twist to activate a Theme (of any level) and change the story. Spend an extra Twist to get a more powerful effect.

Take Complications to get more Twists. The higher your Capabilities, the worse Complications you have to take.

Import Table

Highest Capability	Total Levels in Themes	Complication Level
3	9	1
5	8	2
7	7	3
10	5	4

Complications

Level	Examples
1	Light wounds, some of your foes escape unharmed, public embarrassment, your friends are annoyed with you, your position or goals are revealed to the enemy
2	Moderate wounds, unconsciousness, major delays, your friends are angry at you, your character befriended by the enemy
3	Serious wounds, your character kidnapped, all your foes escape unharmed, your property destroyed, money lost, deluded by the enemy, friends lost
4	Critical wounds, friends turned against you, projects ruined, reputations altered, your character brainwashed

Basic Dice Rolling

Sufficiently Advanced uses ten-sided dice. If you have dice with zeroes, read the zero as a ten. Make sure you have dice of different colors, so you can tell them apart.

When you roll you'll typically have two scores involved: a Capability and a Profession. Roll one die for each score, and *multiply* your roll by your score. Take the higher result.

For instance, let's say you're playing football. You would roll on Biotech & Athletics. If you have Bio 4 and Athletics 3, and rolled a 7 and a 4, you would have scores of (4x7) 28 and (3x4) 12. Ignore the twelve; your final result is 28.

Spending one point of Reserve from an appropriate Capability or Profession allows you to re-roll the die for that score. You can also use points of Reserve to add +1 to your roll for each point spent. You cannot add more points than your base score in this way.

If your character is competing against someone else in a quick way, or if you just want to get the competition out of the way without worrying about the details, each person should roll once. The higher roll wins. Break ties with a reroll.

Extended Conflict

When you're interacting with other sentient beings, especially in an extended event with significant variability, a single opposed roll gives no feeling of the back-and-forth interaction that the people involved see. There's no sense of flow or drama to a single roll. Therefore, we use a slightly more complicated process when you're involved in such events, all based off the standard roll system.

Roll the Offense rating listed for the conflict you're in (see the next few pages). Your target rolls the Defense rating listed. If the defender's roll is higher, nothing happens. If the attacker's roll is higher, the defender loses *two* points of Reserve. They can choose to lose this from either of their defensive scores.

You can only ever lose Reserve when you are the defender. You might *spend* Reserve when you're the attacker, but no matter how badly you fail as an attacker, you'll never lose Reserve for it.

Types of Conflict ★

Since different kinds of conflict benefit from different situations, we've listed a number of modifiers for each conflict type. You can use these as guidelines when unusual situations arise in your own games. There are also various victory conditions listed, which may be inflicted on those who are out of Reserve.

Many more kinds of conflict are found in the main rulebook. Here we've picked a few that give a good feeling for the setting.

Physical Combat

Physical combat can cover fistfights, duels, firefights, and other events where the point is to seriously injure your opponents. It can also handle sparring matches, where the point is just to show that you could have hurt someone if you wanted to.

Offense: Nanotech & (Police or Soldier)

Defense: Stringtech & (Police or Soldier)

Escape: Nanotech & (Stealth or Criminal)

Timescale: Seconds

- +1 Combat drugs
- +1 Led by someone with higher Soldier profession (only applies to those who already have the Soldier profession)
- +1 Car-sized target
- +2 House-sized target
- +3 Airplane-sized target
- +4 Starship-sized target
- 1 Typical environmental penalty (mud, rain, hail, fog)
- 1 Distractions
- 1 Attempt to disarm, trip, or other trick shot.
- 1 Book-sized target
- 2 Finger-sized target
- 3 Insect-sized target
- 4 Microscopic target (Min. Nanotech 5)
- 1 Target over 10 km away*
- 2 Target over 20 km away*
- 3 Target over 40 km away*
- 4 Target over 80 km away*

* Only modern weapons use these ranges.

Victories: death, unconsciousness, flesh wound, scar, various forms of dismemberment.

Memetic Assault

A memetic assault is an attempt to influence a target by bombarding them with a series of concepts, seeing which seem to resonate with them, and then working towards a particular end result using a progression of “reasonable” ideas from that point. It’s noticeable if you’re trained; to those without much social savvy it may seem like just a particularly odd and disjointed conversation. This type of conflict is similar to a fast argument, but takes more time to achieve greater effects.

Core Values can modify this kind of conflict. See the sidebar on the next page for details.

Offense: Metatech & (Political, Media, or Courtesan)

Defense: Same

Escape: Cognitech & (Media or Courtesan)

Timescale: Minutes

- +1 Blackmail material
- +1 Very familiar with your target’s or audience’s home region (Locality Profession at 7+)
- +1 Favor to call in
- +2 Typical memetic tool. Works against single target only.
- +4 Exceptional memetic tool. Works against single target only.
- 2 Already hostile to you
- 2 Unfamiliar with their home region (Locality 0-2)
- 3 Assault can easily be turned off (for instance, assaults conducted over the television or other mass media).
- 2 Their job depends on resisting
- 4 Their life depends on resisting

Victories: The greater the difference in Metatech scores, the more you can convince your target to do. With roughly equal scores, you could convince someone to loan you money, hear you out on a given topic, or discern one of their Core Values.



Nanotech Bloom

A nanotech bloom is the technical term for the use of destructive nanophages against human settlements. A nanophage not stopped in the first few seconds will typically undergo rapid, almost explosive growth before slowing down and getting into the serious business of eating everything around it.

All these modifiers apply to the bloom rather than the defender. Offensive rolls are made by the bloom’s creator; the bloom itself has no Professions.

Offense: Nanotech & (Nanotech Engineer or Soldier)

Defense: Cognitech & Crisis Control

Escape: Biotech & Athletics

Timescale: Minutes

- +1 Dusty area
- +1 Aquatic environment
- +1 Occasional gusts of wind
- +2 Jungle or deep forest environment
- 1 Arctic region or other extreme environment
- 1 Significant precipitation
- 1 Constant heavy winds
- 1 Virtually unlit area

Victories: Destroy particular structures, “mine out” certain materials, kill everyone, kill all the cyborgs, defeat the bloom.

The Instant Death Cutscene Rule

There are many, many things in this game that can instantly kill your character without warning. Whenever the GM is about to set something utterly deadly against the PCs, she is *required* to describe a short scene detailing the hazard. The characters have Themes, after all, and can often find ways to avoid certain death. The players should not “metagame” a way out of this, using knowledge their characters could not have, but are highly encouraged to use Twists to good effect.

Psychohistorical Maneuvering

The king of conflicts. Nearly every civilization in the universe is engaged in psychohistorical maneuvering at some level. Most civilizations are conducting psychohistorical maneuvers against their own citizens, in fact, to keep themselves more stable and assure that certain goals are accomplished. Escaping means hiding from others on a political level; the Disciples have accomplished this relatively well.

A civilization's Core Values can modify this kind of conflict. See sidebar for details.

Offense: Metatech & Metatech Engineer

Defense: Cognitech & (Metatech Engineer or Political)

Escape: Metatech & Locality

Timescale: Years

- +1 Target's population over one billion
- +1 Highly homogeneous target group
- +1 Examining Logicians or other rational targets
- +2 High-placed operatives in opponent's power structure
- 1 Target's population under ten million
- 1 Highly diverse target group (e.g. Stardwellers)
- 2 Target is a Cargo Cult
- 2 Target's population under one million
- 3 Target's population under 100 thousand
- 4 Target's population under ten thousand

Victories: Splinter groups off existing civilizations, calm dissenters, ensure stability, enhance or reduce economies. Destroying a civilization is outside the realm of even this level of conflict. Multiple victories, over the course of decades or even centuries, are required to accomplish such a feat.

Instant Kill, Not Instant Fight

Almost all weapons and techniques in S.A. are capable of doing what they need to in a single stroke. An unprotected and unprepared person, or one caught by surprise, will fall almost instantaneously before the weapons brought to bear in high-tech combat. The loss of Reserve during conflict does not indicate someone taking multiple hits from a devastating attack; rather, it is used to represent a target avoiding that attack in one way or another, and being fatigued and worn down by the effort of doing so. Only when unable to spend Reserve — as a result of unconsciousness or an empty Reserve tank — are people actually “hit” by an attack. Keep that in mind when describing your character's actions.

Core Values in Conflicts

When someone attempts to convince your character to agree with something that you feel goes against your Core Values, add your rating in the appropriate CV to your score (*not* your roll!) on either Metatech or a Profession for the purposes of resisting. You can spend points of reserve as usual to increase your roll.

When someone attempts to convince you of something that *is* consistent with your Core Values, they have +1 to their effective Metatech score, or +2 if your CV is 5 or higher.

When attempting actions with strong connections to your Core Values, you receive a +1 to the attempt, or +2 if your CV is 5 or higher. The GM must agree that the link is strong enough to warrant this bonus; it should not be used for actions that are only tangentially related to the character's CV.

A bonus to Metatech from a CV does *not* change the timescale for a Metatech-based conflict.

Twists and Themes

Themes are the bread and butter of this game. They allow players to manipulate the game in ways that are appropriate to their characters, in exchange for suffering setbacks of one kind or another.

No Theme can be rated higher than 4. There are level-5 effects available, but they are so powerful that you *must* take a Complication (see below) as well as spending a normal Twist to achieve them.

In addition to their ratings each Theme must have a Descriptor, which tells when it can be used. A few sample descriptors are listed for each Theme. Twists can only be spent through a Score whose descriptors match what you're trying to do. For instance, someone might have Plot Immunity (Allies). She could use this to have a particularly tough friend take a bullet for her. She could not use it to shrug off a wound she had already taken. However, the reverse would be true for someone with Plot Immunity (Tough as Nails).

Each game session your character starts with one Twist, which can be spent "through" one of the six Themes. You can get more Twists by taking complications: you describe problems that your character must overcome. Generally, only rough descriptions are necessary. Your GM will fill in the rest. The higher your Import, the less dangerous your Complication will be. See page 11 for some Complications.

Plot Immunity

Plot Immunity is your way of telling the GM that you're not interested in a particular storyline, or that you'd like the current events to be over and done with so you can get back to other parts of the game. Many times the problems you'd take care of with Plot Immunity can be solved by your party anyway, given a little legwork and perhaps some trading favors... but Plot Immunity does it all in a minute of game time instead of an hour. It's just a question of how much you enjoy that particular problem.

Plot Immunity Scores

1. Evade likely off-screen death.
2. Evade minor problems with an obvious solution. Evade certain off-screen death.

3. Evade major problems that have an obvious solution, or minor one without any obvious solution. Evade likely on-screen death.
4. Evade major problems with no clear solution. Evade certain on-screen death.
5. Have events off-screen make the current catastrophe simply go away. Note that for dealing with a single problem, this is a great way to utterly write yourself out of the plot and have no fun. However, it's a good way to handle multiple crises at once. Just step off-screen.

The player must state any "obvious solutions," and the GM must agree with them. A note to GMs: players without Plot Immunity should *not* be treated as if they have a "kick me" sign on their back.

Descriptors:

Tough as Nails, Allies, Badass, Overlooked, Resilient, Invisible, Too Insane, Support Network, Family Ties, Deus Ex Machina, Redshirt Sacrifice, Overconfident Foes

Intrigue

Perhaps the most dangerous Theme, Intrigue embroils your character in politics, intelligence work, and all manner of unethical activities. Admittedly, there are such things as clean politics, and spying for a good cause... but in reality, such things are so rare as to be unheard-of. Each use of Intrigue pulls your character farther and farther into webs of deception and subterfuge, and as they say, once you're in you can never really get out. Buying Intrigue for your character is a sign to the GM that you're interested in cloak-and-dagger stories, with vast conspiracies where layers of truth and falsehood become almost indistinguishable.

Intrigue Scores

1. Gain knowledge which, while not exactly secret, is not publicly known either.
2. Obtain secret information.
3. Obtain highly classified and protected information. Have a few low-placed spies.
4. Have many spies in areas of low and middle importance. Obtain information whose very existence is classified.
5. Secretly direct a major civilization's spy network to your own aims.

Descriptors:

Eavesdropper, Pillow Talk, Digital, Political, Instant Insider, Stumble Upon, Psychohistorical, Spy, Government Newsfeed

Empathy

People trust you and confide in you. Empathy differs from Romance and Intrigue mostly in flavor, rather than in effect. All three connect you with other characters in the game, making them willing to help you or talk to you. Empathy does it through personal insight and sharing feelings. Buying Empathy tells the GM that you want to have NPCs that you can really connect with one-on-one, either for friendship or so you can exploit them.

Empathy Scores

1. Gain an unimportant NPC as a friend. Hear gossip of varying veracity.
2. Help people through emotional trauma.
3. Befriend an important NPC. Hear highly reliable gossip.
4. Befriend major foes or their henchmen.
5. Get someone to start spilling their deepest secrets to you for no good reason.

Descriptors:

Reluctant, Bad News, Matters of Love, Trusting Fools, Shoulder to Cry On, Good News, Day-to-Day, Problems, Digital

Magnetism

People flock to your banner, whether it's ideological, religious, political, or other. Those around you want to be seen with you, or to do things for you. This is the Theme of fame and adulation. Buying this Theme tells the GM that your character is going to be the center of attention.

Magnetism Scores

1. Attract the immediate attention of those around you.
2. Impress groups of people. Gain an unimportant bystander as a devoted admirer.
3. Build a strong but not fanatical following.

4. Attract long-term attention and celebrity. Attract the personal attention of those in high office, and impress them.
5. Attract fanatical attention from thousands locally, or millions across the universe. Gain a high official as a devoted admirer.

Descriptors:

Fame, Friendship, Political, Ideological, Physical, Convincing, Memetic, Cult, Pheromonic, Religious, Bullshit Artist, specific cultures or kinds of people

Comprehension

You have a deep understanding of a particular phenomenon, whether it's part of the human mind or a branch of science. Buying this Theme might tell the GM that you like solving riddles, or it might say that your character will do that for you. Either way, they're coming at you.

Comprehension Scores

1. Learn how to make something perform one of its basic functions. Solve annoying riddles or puzzles.
2. Learn the basic principles on which something is based. Guess a person's Core Values correctly (but not their rankings).
3. Learn all of a device's functions as if you had the user's manual. Correctly guess events in a person's past.
4. Invent new uses for an existing device. See the cause and motivation for someone's behavior.
5. Predict a person's behavior accurately. Break a code or cipher by instinct.

Descriptors:

Intuitive, Logical, Emotional, Forced Monologuing, Explanations Ex Machina, Methods Behind the Madness, Invention, Religious, specific branches of technology, specific profession

Romance

You have a knack for falling in love, and other people fall in love with you easily. It should be noted that the intended uses of the Romance Theme are often difficult to distinguish from romantic Com-

plications! Buying this Theme will tell the GM that you want to be involved in stories of romance, love, and passionate relationships.

Romance Scores

1. Flirt successfully. Reject unwanted romantic advances.
2. Play matchmaker successfully. Find a one-night stand. Make a unimportant NPC fall in love with you.
3. Start a good long-term relationship. Stun someone with your mere presence. Ruin someone's relationship.
4. Find someone worth falling in love with. Get one of the major villains to fall in love with you.
5. Get someone to fall madly in love with you after merely catching your eyes from across the room.

Descriptors:

Long-term, Short-term, Hopeless, Unexpected, Tragic, Legendary, Sexual, One-Night Stands, Devoted, Manipulative, Loving, specific types of people

Twists vs. Other Abilities

When comparing the effects of Twists against the use of Capabilities or Professions, Twists win. Period. The effects of Twists last until counteracted by player actions, so characters who use Plot Immunity to avoid a fight cannot end up back in the fight just because the bad guys are chasing them. They might end up in *other* fights, or return to the fight of their own accord, but the bad guys on their own can't restart the fight.

A character with a Core Value rated at 6 or higher has some resistance to the effect of Twists. Players wishing to make such people act against their Core Values must spend two Twists rather than one.

Technology

Here are a few pieces of technology from the game. We've chosen to include just a few of the more unusual or world-changing ones here.

Biofeedback

A general suite of genetic enhancements, this allows conscious control over normally subconscious faculties. Those with these enhancements can hold their breath longer, turn off their senses (including your pain sense), or even enter a state of hibernation. Characters with a Biotech Capability of 5 or higher almost always have this suite built in.

Decay-Induction Fields

These fields induce normal matter moving above a certain speed to spontaneous decay into weakly interacting dark matter. Any objects moving above the speed of a slow gunshot decay and simply pass through the target without effect, and indeed probably pass through the whole planet. This defense is rated at Stringtech 8. Note that rooms with this field active will slowly be reduced in temperature and pressure, as all of the high-velocity air molecules disappear.

Familiars

Familiars are AIs who assist characters in computer-related actions. Some are merely non-sentient programs designed to emulate a personality and self-awareness. Others are human-built AIs, or even sub-programs for the Aia, a group of unbelievably advanced alien AIs that have little interaction with humanity. A Familiar is an excellent excuse to purchase Comprehension (My Familiar Told Me).

All familiars can use the Programmer Profession, at levels between 3 and 9 depending on their level of independence. Their Cognitech and Metatech are typically within one point of their Programmer scores. The more powerful a familiar is, the more likely it is to demand payment and recognition for its deeds.

The Infosphere

The infosphere is a continual flow of data that blankets the surface of nearly every planet in the civilizations. The data is broadcast by satellites, radio towers, microscopic lidar relays, and nearly anyone with a mesh or dermal microbots. The Stored view analog reality entirely through its interactions with the infosphere. Thankfully, these are copious in most

regions. Since nearly all of the relays included in the infosphere are quantum computers, it is always possible to tell whether your communications have been intercepted. There's just no way around this — if you intercept someone's communications and try to decrypt them, someone will know that it happened, though they may not be able to figure out who was involved.

Inversion Beams

One of the deadlier weapons that is commonly available, an inversion beam switches a small amount of matter into antimatter *inside* the target. The weapon works through a second-order dark matter interaction, and so is capable of firing through almost any solid object. The damage is rated at Stringtech 9.

Neural Meshes

Neural Meshes allow human beings to communicate mentally with computers, controlling them and sending messages through them. Since the infosphere connects nearly all computers, this also allows interpersonal communication and near-instant access to any public information, such as a cultural guidebook to prevent faux pas. Meshes enable the use of Lenses (programs that change one's point of view and/or skill set), and of the human/computer fusions that allow high-level Cognitech to work so well. Meshes are perhaps the most influential technology ever created.

A Neural Mesh with an exterior control unit is referred to as a "slave mesh," since it allows others to control the individual with the mesh. The Cognitive Union installs these in every citizen. It is also possible to have a "spy mesh," which allows you to install a secondary personality and switch between it and your real personality at will. For all purposes this persona is a completely different individual, with its own Metatech and Cognitech scores (rated up to your own). Spy meshes are almost completely undetectable. Only brain surgery will uncover them.

Psychohistory

Psychohistory is the art and science of predicting the course of humanity's future. Whereas memetics is concerned with individuals and resonant ideas, psychohistory is concerned with whole populations. Psychohistorical predictions on groups of less than a million people are somewhat unreliable. On groups as large as the current civilizations, however, they are very accurate. All advanced civilizations use Psy-

chohistory to predict the actions of their foes and be better prepared for their actions.

Replicators

Common devices in every civilization that understands them, replicators "scan in" matter of any type on the atomic level, destroying it in the process. They can then "print out" any number of copies, assuming they have sufficient raw materials and money. Most replicators are small, with the controls built to require two hands to use (thus preventing ordinary people from accidentally "scanning" their hands off). Public replicators are typically "write only," incapable of scanning. Industrial replicators can create multi-ton objects in a single sweep.

All replicators have intellectual property protection circuits built in to prevent free duplication of non-freeware objects and designs. They typically interface with their users' dermal microbots to arrange for an exchange of funds during a sale. There are thousands of different replicator brand names.

Replicators have sufficient resolution and fidelity to create living beings, from virii and microbes up to humans and other mammals. Players who attempt to replicate their characters should give their character sheet to the GM. The original character is dead, and you are not allowed to play clones — they are new people, with their own lives, and even though they remember being their original, they are not that original. The Replicants take a different view of things;

Implanted Gear

Many characters will have equipment implanted in their bodies. When implanting technology, your Capability must be at least equal to the weapon's *effective* capability. For instance, you can't implant an Inversion Beam until you have Stringtech 9.

This is purely a game-balance issue, not a technical limitation. By implanting the Inversion Beam you would effectively be raising your Stringtech to 9. If you just want to carry the thing around instead, that's fine, but then it can be taken away by various means.

You can take full advantage of an implanted item's normal abilities, such as a descriptor or a bonus to damage.

notice that Replicants who keep killing themselves off every few days to “print out a fresh copy” are not playable characters.

Transmutation Chambers

Replicators turn raw materials into finished goods, or vice versa, but they work at the molecular level. If you need a particular element, there’s no way to get around it with just a replicator. Transmutation chambers work at the subatomic level, stripping apart atoms into protons, neutrons, and electrons, and recombining them into whatever raw elements are needed. Transmutation chambers are typically combined with replicators for maximum effect. Most chambers are relatively small, with waste matter “streamed” in one side and raw elements streamed out the other.

Wormholes

Wormholes connect the civilizations of the universe. They allow for almost instantaneous communication, and can transport people and supplies to where they’re needed, making them the favorite tool of the Transcendentals. Wormhole generators draw a massive amount of power when transporting people or human-sized objects. There are no range limitations.

One end of a wormhole must be created at the generation point, which involves heavy Stringtech devices. The other end can be created at nearly any distance, with nearly any velocity. Most major population centers are surrounded by wormhole interdiction fields, making direct transport into the city impossible to help prevent terrorism. “Calling ahead” through the infosphere (which itself uses wormhole links from world to world) is highly recommended.



Fun Things to Do With a Mesh

All of these require some expertise in Programming or Cognitech Engineering (or both), but you can also download Lenses from the infosphere to do these things for you. Think of this as a short list of the ways in which the neural mesh has changed the world.

Filter out any advertising you see.

Keep a database describing the local morals and customs, and set it to warn you if you’re about to break one.

Never forget a name or a face.

Impose directional lines over the road you’re driving on, to get you safely and quickly to your destination.

Relive past victories.

Relive past orgasms.

Access a review/rating system for any book, movie, etc. you see.

Give yourself synaesthesia.

Get used to synaesthesia enough to operate in the dark solely through hearing.

Set up self-analysis routines to tell you what you’re doing wrong at the end of the day. Most people find these annoying; those who listen to them often find great benefit in it.

Listen to a single person in a crowd by filtering out everyone else’s voiceprints.

Spend a day as one of your friends, and have him or her go through your day.

Edit all the annoying people out of your life. While you’re at it, why not make yourself think you’re suave and cool.

Set up a shared mental space for you and your friends to communicate in.

Simulate any environment you like, for historical recreation or for entertainment. Live-action roleplaying will never be the same.

Record and map an environment with microbots, and then “shrink” yourself into it to inspect it yourself.

Superimpose faint constellation lines on the night sky, or “tags” that show your friends’ homes on distant planets.

Standard Missions

Every game has its own set of “fallback” stories. These are classic setups that are seen time and time again, in many different campaigns. Dungeons and Dragons has overland adventures, wars against vast faceless enemies, and the eponymous dungeon crawl. Star Trek games have tussles with various alien species, diplomatic operations, and first contact missions. Here we talk about some of the typical setups for a game of Sufficiently Advanced. Included are a lot of good questions that you as a GM might want to think about when you create a particular type of adventure.

Actual Patent Violations

Hey, they happen once in a while. Ethical dilemmas are often at the core of these stories. Patent violations involving medical equipment or procedures, or involving procedures that are legal in one civilization and not in another, are great places to start. Tie these into the characters’ Core Values. Enforcement issues are often a problem as well, especially when it comes to self-replicating or intelligent devices. When does a factor computer become sentient enough that the law says it should start paying for the devices it creates?

Misunderstandings

Sometimes the whole mission is a mistake. You show up and something has obviously been misreported, overestimated, or falsified. Alternatively, you could have two groups who are yelling at each other for no good reason, not realizing that they have a common cause after all. The first step is typically diplomacy: those involved need to calm down and consider each other’s positions before someone vaporizes a mountain. The second step is to figure out what’s really going on. Who’s causing this problem, and how big is it going to get?

The Enigma

One step up from a plain misunderstanding is a total enigma. The Transcenturals have given the team some sort of utterly incomprehensible instructions and sent them to a place where nothing seems to be happening. Now what?

Expect your players to figure out what’s going on pretty fast. The Comprehension Theme is designed for precisely this kind of thing, and Plot Immunity with the right descriptor will cut through this stalling

in no time flat. Unless the players enjoy wandering around confused (unlikely), they’ll get into the heart of matters in under half an hour. Starting with an enigma can be an excellent way to wring Twists out of your players, though it can be somewhat frustrating for them.

The Villain Problem

This is typical fodder for any RPG, and it makes a great way to start a high-tension session. Lives are typically at stake, so you can often expect a large number of Twists to be used if you have heroic characters on your team.

A key to this sort of mission is keeping the actual villain hidden until the end. If the characters can see the bad guy, he’s basically doomed immediately. Someone will create antimatter inside his brain, or talk him into surrendering, or drop a nanophage down his shorts. To make things more interesting, you can have a villain with some amount of connection to the PCs. Someone from their Civilizations or Societies may play on their loyalties, especially if they believe they’re acting in that group’s best interests.

The Disaster

The Transcenturals have limited temporal bandwidth. There are many thousands of messages they’d want to send backwards through time, but can’t, because other things are more important. Sometimes there are even major disasters that they don’t tell themselves about. When such disasters are technologically oriented, the Patent Office investigates, and sends humanitarian aid.

The End – For Now

This has been only the smallest taste of Sufficiently Advanced. The full version is nearly ten times the length of this demo, including many more civilizations, societies, extra conflict types, more uses for Themes, aliens, much more technology, sample characters, detailed descriptions of Capabilities and Professions, and copious advice for both GMs and players.

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