

MANDATE ARCHIVE

TRANSHUMAN TECH

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RESOURCES FOR A TRANSHUMAN FUTURE

MORE THAN HUMAN

This Mandate Archive is meant to provide a GM with the tools for modeling several of the tropes beloved of transhuman science fiction. In the following pages, you'll get guidelines and rules for body-swapping, genetic augmentation, post-monetary societies, matter compilation devices, and other artifacts of a future where "humanity" has become more of a habit than a necessity.

To help ground these rules, the example "pocket setting" of Threshold Sector is briefly described. In these isolated, storm-tossed worlds, the technologies of this archive have developed to their full flower, and the men and women who inhabit these worlds are left to struggle over their hopes for the future rather than their immediate material needs. Transhuman fiction often exists within a post-scarcity society, where material goods are no more difficult to acquire than sunshine and oxygen. Conflicts in such a setting require different motivations than the conventional tropes of gold and land.

Transhuman science fiction has its own flavor, and that style isn't always compatible with the feel of the existing *Stars Without Number* game. All of the rules in the following archive should be treated very much as optional additions, to be used if you feel it would improve your game or help you achieve some specific genre emulation. In many or even most conventional games this tech will not fit well and should be avoided save as examples of alien super-technology or perhaps some ancient experimental Mandate science.

CHILDREN OF THE STORM

At the far edge of the galaxy, out on the brink of the deep black empty, humanity has survived for the long centuries of the Silence. Ever since the explosive metadimensional shockwave of the Scream rolled over space, the colonies of the rim have been trapped in a great storm of catalyzed metadimensional energy. The worlds of the Threshold Sector survive in a bubble of less energetic void, surrounded on all sides by tides of inexorable force. Escape is impossible without incredibly powerful spike drives and an intimate knowledge of the Tempest's roiling currents.

Within this hot-house bubble of worlds, human technology has advanced in ways unknown elsewhere on the frontier. The metadimensional surge of the Tempest provides enormous amounts of free energy to the nanofacs and matter compilers of the Threshold, and the rich supplies of raw materials ensured a swift restoration of the civilization that the Scream threatened to destroy. Human researchers in the Threshold have labored on projects unfettered by the dead hand of the Terran Mandate and without the interference of powerful Perimeter agencies bent on stopping maltech proliferation. They have worked wonders, and these wonders have become common on the worlds of the sector.

But the sector remains trapped. Travel between worlds is far more difficult than it is nearer to the core, and exploring the space beyond the sector's limits is impossible with the available technology. The metadimensional currents are too strong, the radiations too fierce for existing spike drives to withstand. Each of the powerful factions that operate within the sector dreads the thought of their rivals escaping first and remaking human society in their image, so cooperation among them is limited and rife with treachery. And all the while, reckless explorers from the Threshold worlds plot perilous courses into the Tempest, trying to find a safer path through the maze of polychrome lightning and star-hot doom.

THE TEMPEST

No one is entirely certain why the Tempest surged in the wake of the Scream. Some hypothesize that the wave of metadimensional energy was a kind of transliminal match to the dry kindling of the rim. Others blame the Tempest on whatever sinister cause provoked the Scream. A few simply credit it to the cold equations of natural law, a cyclical phenomenon that manifested when it did with no concern for the actions of mere mortal creatures.

There is no doubt, however, that the Tempest has sealed off Threshold Sector from the rest of human space. Travel between the stars within Threshold space is dangerous, but possible with sufficiently strong spike drive shielding. No ship smaller than a cruiser can survive the transit, barring rumors of experimental drive shields and hypertech scouts. Some cruiser-class hulls are fitted out as tenders, picking up small system ships in shielded bays and carrying them on regularly-scheduled routes between worlds.

Beyond the borders of Threshold Sector, however, the Tempest is too strong. Nothing the sector can build can withstand the terrible metadimensional currents that whirl around the bubbled stars. Scouts and explorers report small fissures in the energy field and cracks that might lead further outward, but these courses only ever lead to a few isolated worlds before stopping dead. All of the factions in Threshold Sector continue to scout these trails with grim determination. The fact that they almost never share their cartography with their rivals ensures that progress is glacially slow.

The Tempest has provided the humans of Threshold Sector with a blessing, however- almost limitless amounts of energy. Simple nanite power taps can feed directly off of the metadimensional flux, providing the Threshold's technicians with the necessary power density and flow to create devices that would be utterly impractical in more placid parts of the galaxy. One early triumph of their work was the first matter compiler, a device capable of converting any amount of mass into a molecule-perfect replica of any object recorded among its templates. Attempts have even been made to weaponize these power taps, though the disruption in the

extradimensional flux caused by explosive release tends to cripple the taps for large-scale planet-busting.

The Tempest exists solely in the metadimensional space surrounding Threshold Sector. To the naked eye, the space surrounding these bubbled stars is deceptively calm and placid. Persistent experiments have been conducted in slowboat technology in hopes of bypassing disturbed metadimensional space, but the incredible distances of the far rim stars and the unknown perils of the “big empty” have dissuaded all but the most zealous from trying to build the massive slowships that would be required to bridge the gulf of mundane space.

THE FACTIONS

With the coming of the matter compilers, most Threshold worlds were capable of providing any ordinary material possessions for their citizenry. Hunger, want, and privation vanished almost overnight. Naturally, this obliged the citizens of the Threshold to find new things to fight over, and they were not slow in invention.

Some groups were frightened of the potential of the compilers, and wanted their use restricted to a trusted elite who could wisely ensure that nothing catastrophic was created. The explosive destruction of dozens of small colonies and isolated states could be directly traced to sabotage and misuse of the compilers, and these Restrictionists agreed that the power of the compilers had to be managed carefully. Their arch-rivals, the Abundants, believed that every man and woman ought to have access to their own compiler and that any damage so produced was simply a necessary price to avoid the tyranny of selfish elites.

When the body-swapping Hull technology was developed, the Egoists were insistent that each individual mind should have an individual body. Parallel replication of a brain and its identity was an offense against the sanctity of the self and certain to result in the implicit slavery of created minds. The Selfless disagreed, believing that the mind was the possessor’s own property, to be duplicated and embodied as often as desired so as to attain the full scope of human possibility.

Countless other groups formed, often operating in a shifting web of temporary alliances and provisional wars. Every faction fought ferociously for some good and noble cause and deplored some terrible evil- but their goods and their evils were often not viewed in the same light by their neighbors. Wars were fought for ideas rather than plunder, and were all the more vicious for it.

In the end, of course many of the believers in these factions were simply responding to the human need to belong. For all their engineered augmentations and transhuman Hulls, they retained the simple human desire for acceptance and community, and many simply used their superhuman intellects and peerless awareness to construct extremely elaborate justifications for what their hearts told them was true. Some humans pledged allegiance to no single faction, or belonged to paths that sought compromise and negotiated resolutions. Such neutrals rarely found it wise to venture deep into the territories of more zealous factions.

THE CONQUEST OF FLESH

Along with the matter compiler, the Hull transference technology was the greatest accomplishment of Threshold’s scientists. With the help of tools and computing resources boosted by the Tempest’s limitless power, they finally managed to crack the genetic quandaries around the perfect replication and improvement of the human form. No longer would they have to suffer the severe side effects and genetic flaws produced by any significant improvement in the human corpus. They could grant enormous improvements in flesh and mind without crippling the subject with overwhelmingly deleterious side effects.

Even more than this, they could capture the lightning of a human mind in a template of properly-prepared quantum substrate. Using much the same technology used to develop artificial intelligence cores, this quantum substrate could be imprinted with a human mind, taking a perfect copy of the subject’s memories and personality. This template could then be downloaded into a tailor-made body, a Hull, and made to live again. A single template could be downloaded any number of times, so long as a Hull was available to receive it. Updating the template was a simple matter of a few hours of recording time in a properly-equipped laboratory.

Living creatures, however, were much more difficult for the matter compilers to create than inert matter. The constant flux of biochemical and neuroelectric reactions cascading through a macroscopic living body made it almost impossible to replicate successfully. By the time the compiler had created the second half of a body, the first half had died. It was necessary instead to grow Hulls in tanks and vats, carefully constructing them with the aid of automated expert systems. This left Hulls among the few objects that had actual value among the Threshold worlds, as they required human attention and labor to successfully create them.

The ego templates required physical Hulls for successful implantation. Some attempt was made to resurrect templates in purely electronic form, but the results were gravely unsatisfactory. Without a human body, the revived mind suffered progressively worse instability until it collapsed in complete catatonia within a matter of minutes. Exceptionally ruthless researchers willing to perform repeated experiments eventually demonstrated that a full-fledged virtual reality suite could restrain the worst of this effect, but the effort of creating such sophisticated and bulky hardware was more than it took to grow a basic Hull. For this reason, minds without bodies are kept inert on their substrate tablets, “slabbed” until a fresh body becomes available.

WAR IN HEAVEN

Despite the abundance of material goods and the near-conquest of death in the form of the Hulls, there remain profound tensions in Threshold Sector. Just as in the ancient days, when war existed alongside revolutionary technical advance that gave common folk luxuries unknown to prehistoric kings, the simple presence of marvels and wonders has not lessened the human instinct for strife. In a way, every war has become personal- humans no longer fight to obtain wealth, but to crush a choice that is hateful to them. Most of the struggles revolve around three different factors: space, data, and people.

With humanity trapped inside Threshold Sector, there is a limit on the available space. Some distant worlds remain relatively undeveloped, but those stars at the juncture of major travel routes or that possess worlds habitable to minimally-modified Hulls are still valuable. Attempts to seize asteroids, set up space stations in hostile areas, or otherwise encroach on territory claimed by a rival faction must be repulsed with violence. Factions are constantly pushing into rival territories while defending against strikes on their own holdings.

Data is precious to the factions. New tech, secret faction plans, and precious scouting reports of the fringe worlds accessible through the Tempest are all commodities of value. Sometimes factions agree to trade this data with their allies, but most often it must be seized in some cunning coup or covert infiltration. The faction that finally obtains the correct path through the Tempest

and the tech necessary to build a shielded ship to travel it will be the first to escape the storm's prison- and the first to spread their ideals to the waiting human cosmos outside.

The final target of faction struggle are the ordinary people that make up a rival's numbers. Human beings are a faction's most precious resource. Their ingenuity and individual skills are some of the few commodities still valuable in trade, and their inventiveness is the only hope for unraveling the secrets of escape. Granted their importance, they become regular targets in faction warfare. With the prevalence of templating and Hulls, many factions have no qualms whatsoever about the genocidal destruction of entire habitats. True, the end may come in agony and terror for the slain, but they can always be restored from their backups once their faction is able to grow them a fresh Hull. In the meanwhile, their minds are of no danger to the plans of other creeds.

FACTION CREATION

Hundreds of different factions exist within Threshold Sector in a tangled web of cautious alliances, mutual antagonism, and the occasional open war. Because so many of the struggles in a post-scarcity society are about ideas rather than objects, it's often necessary to come up with a quick group of zealots to serve as patrons or targets for the PCs' attentions. Still, not every faction member is equally dedicated, and even members of an extremist faction might be temperate enough to cooperate well with others- for a time.

Some of these creeds are perfectly content to remain minor factions. Their particular belief system may be exclusive to particular phenotypes, body forms, or artistic purposes, and they would no more wish to remake humanity in their image than they would wish to recreate the same artwork in infinite replicas. Others are simply content to live as they do, and hold no universalist belief that must be impressed on the cosmos before their rivals get to it.

The following table is intended to provide several quick traits for a random faction. If you need a name, you can simply use the political party name generator in the *Stars Without Number* core book's resources section. Multiple rolls may result in seemingly contradictory traits; you might choose to simply reroll, or you may find it interesting to come up with some resolution for the seeming conflict.

PLAYERS AND FACTIONS

Depending on the campaign, the GM may already have created a selection of factions for their particular chunk of the Threshold Sector. In most such cases, players should choose their faction from the major players in the sector, selecting creeds that can cooperate with each other with minimal friction. Even in a post-scarcity age, the universe is altogether too dangerous to invite backstabbing motives into an adventuring group.

It may be that the GM is inclined to let players create their own factions, selecting one or more traits from the following table and

brewing up something that fits the player's preferences. There are countless minor factions throughout Threshold space, eking out an existence in some remote asteroid habitat or deep-space mass-mining station, and any conceivable configuration of transhuman society has been attempted somewhere.

GMS AND FACTIONS

As a GM, factions will be providing you with much of the dynamic conflict in your game. Peaceful and ideologically temperate factions are well and good as easy PC sanctuaries, but the major players in your sector should be vigorously dedicated to mutually contradictory goals. With conventional wealth no longer a meaningful source of conflict above the very most impoverished cultures, conflict about land, data, people, and sheer ideological zeal is necessary to provide the needed spark for your game.

This conflict doesn't need to take the form of open warfare. With multiple factions conflicting in an area, going directly to military force invites third parties to wait and leap on a weakened victor. Factions might still accept visitors from ostensible enemies and accept bargains that keep tensions below the brink of outright war. Still, many are simply waiting for a rival to be bled out enough by intrigue and sabotage that a short, victorious war is possible.

As a GM, you might wish to model the various factions with the Faction system from the *Stars Without Number* core book. Existing asset statistics could be retained and the names and descriptions reflavored to suit the transhuman tenor of the game.

The PCs might be offered inducements in status or favors to perform strikes against enemy assets or thieve valuable data, and conflict among NPC groups can be quickly abstracted between sessions. A sufficiently charismatic and resourceful PC might even be able to found his or her own faction dedicated to the beliefs that most deeply define their worldview.

FACTION TRAITS

Roll	Creed	Belief
1	<i>Abundant</i>	Society should strive to maximize access to matter compilers for all members. They hate material want and love the ideal of sharing resources.
2	<i>Architect</i>	Matter compilers offer the key to a new era of wonderful creations. Terraformed worlds, massive space installations, and marvelous devices await their construction. They love building useful marvels and they hate rejection of any technology.
3	<i>Egoists</i>	The human self should be inviolate, and that creating more than one instance of a mind at a time treats humans as mere instruments to be used. They hate using people as tools and love the individual self.
4	<i>Faithful</i>	Some religion provides vital meaning to their existence and to the world around them. They love obedience to the principles of their faith and they hate things and acts that their religion decrees as abhorrent.
5	<i>Godless</i>	They despise all religions and supernatural thinking and are convinced that humanity was meant to rise above belief in non-materialistic phenomena. They love ideals of pure rationality and utilitarian efficiency and they hate beliefs based on religious adjurations.
6	<i>Hedonic</i>	They exist for the sake of personal pleasure and experience, using their Hulls and the wealth of the matter compilers to experience new wonders. They love pleasure and excitement and they hate all abstentions and restrictions against experience.
7	<i>Hierarch</i>	They are convinced that some people are more suited to rule than others, for whatever reason, and that these people should control society. They love obedience to their chosen elite and they hate defiance of their ruling caste's will.
8	<i>Isolationist</i>	They believe that the other factions will contaminate the purity of their society, and contact must be firmly- or violently- rejected. They hate contact with outsiders and love exalting the excellence of their society.
9	<i>Liberated</i>	They despise the idea of an elite and believe that society should be built upon decentralized cooperation rather than submission to a central power. They hate hierarchies of power and they love individual freedom from control.
10	<i>Luddite</i>	They are convinced that transhuman technologies will inevitably doom humanity, and that all of them should be abandoned. They hate any tech more advanced than standard pretech and they love independence from transhuman technologies such as matter compilation and bodyswapping.
11	<i>Passionist</i>	They believe that with the perfection of the mind and body, perfection of the heart must follow. They seek love, beauty, enlightenment, and spiritual exaltation. They love human drama and moving artwork and they hate cold rationality.
12	<i>Perfectionist</i>	Humanity is always intended to be more- superior in mind and body, exploring new ways of being no matter the cost. They they hate any restrictions on pursuing personal excellence and they love exploring the frontiers of human capacity.
13	<i>Psionicist</i>	Revere and develop the powers of the mind. While psitech development has not matched conventional tech's rate of improvement, they retain many powerful arts. They love the potentials within psychic powers and they hate those that would ignore or reject them.
14	<i>Restrictionist</i>	Society needs to prevent the dangers of reckless use of matter compilation and should restrict their control to a qualified elite. They hate dangerous use of compilers and love the ideal of a worthy technocracy.
15	<i>Selfless</i>	The human mind belongs to itself, and should be altered, duplicated, and used in any way the original desires. They hate losing control over their own identities and the love the idea of progressive mental perfection.
16	<i>Superior</i>	They are simply better than other strains of transhuman, and their inferiors must be purged. They hate inferior outsiders and they love demonstrating their own superiority.
17	<i>Swarmier</i>	Their faction must spread at all costs. All efforts must be turned toward creating more Hulls and more adherents and seizing more territory. Some go so far as to create entire groups of ego duplicates. They love expanding their numbers and influence and they hate valuing the individual over the group.
18	<i>Temperate</i>	Success hinges on the cooperative effort of many factions. They are much more willing to compromise and negotiate than most other creeds. They love building negotiated alliances and they hate uncompromising extremism.
19	<i>Unchanging</i>	They are adamantly opposed to radical alterations of the human body or mind, believing that such changes threaten the basic idea of humanity. They hate heavily altered minds and Hulls and they love the idea of humanity as it has been known.
20	<i>Xenophile</i>	They desire to abandon their humanity for the sake of becoming some better species. Alien races in the Threshold Sector are few, but some of them were actually once human. They love pursuing radically different modes of existence and they hate adherence to traditional human norms.

ENGINEERING AND ALIENATION

Transhuman bodies are superior to those mortal forms that nature devised. Even the ordinary man and woman of the Threshold Sector is gifted with a legacy of immunological improvements, genetic repair, and subtle physical augmentations, while those able to obtain the finest Hulls wear bodies that have been painstakingly crafted to perfection. Heritable nanite clusters, genetic alterations, and somatic chemical cues are all used to build bodies that are entirely organic, yet more than mortal flesh could ordinarily allow.

Most of these shapes are recognizably human, though occasionally styled or accented in ways normally possible only with extensive postech cosmetic surgery. Unlike the crude and clumsy augmentations of conventional science, transhuman tech allows for genuinely superior performance without the painful drawbacks and side effects of less sophisticated alterations.

These Hulls breed true as a general matter, falling back to certain baseline protocols of humanity when the biological miscibility is too low. Almost all humans are the product of natural reproduction between two or more Hulls, most being born into the equivalent of the basic Hulls described in the next section. Hulls of the same general type produce offspring of the same body form with the augmentations shared by all parents. Hulls of different types produce offspring of the basic Hull type as the genetic protocols fall back to the lowest common denominator between them, assuming their basic physiology allows such reproduction.

Some xenohulls produce offspring of radically different psychology than is baseline for original humanity. Their developmental neurochemistry and their maturation process in an alien body have a powerful influence over their mental development. Some xenofactions of long standing no longer think or reason in a way comprehensible to their more traditional neighbors, having grown from birth in bodies no longer kin to other humans.

Wearing these perfected forms can sometimes be more than an individual can stand. Every human has an instinctive sense of what their own body and mind should be like- the product not only of early experience but of hardwired evolutionary cues. Adopting a form too drastically different from the one they were born in produces Alienation, which can hamper a form's effectiveness.

Alienation manifests first as a sense of unease and inescapable tension. Then come the phantom sensations from limbs or bodily dimensions that should be there but aren't- "Phantom Body Syndrome", or "the Itch" in common parlance. Severe Alienation can result in sudden breaks of thought, hypnotized fixation on alien sensations, or partial paralysis of limbs. In the very worst cases, the brain dissociates from the body and retreats into a hallucinatory coma of false sensations.

Most Hulls are designed to accommodate baseline human cognitive processes. Swapping from a six-foot male Hull into a four-foot female Hull with multiple prehensile tentacles and aquaform adaptations may be deeply jarring to a mind, but the built-in dampers and adaptation cues will generally allow for a quick physical acclimation to the form. Psychologically, the wearer may or may not appreciate the new body, but it will obey the wearer's will.

Shapes that lack these buffers and cues are more dangerous to a foreign mind. Hulls can have their design margins pushed, comfort and responsiveness sacrificed for pure efficiency and raw utility. Without the genetically hardwired buffer interface between a mind and the raw meat of a Hull, vastly superior performance can be obtained at the cost of increasing Alienation. Some minds are willing to pay that price in exchange for additional power.

In most cases, those who are willing to push the limits are content with relatively minor tightening of the mental tolerances, acquiring Hulls with only 1 or 2 points of permanent Alienation. This can prove problematic when unusual tech effects, a poor mind download, or a hasty backup produces an identity with a few extra points of Alienation. Such an event can turn a relatively minor 1-point Alienation flaw into the complete incapacitation of a 4-point coma. Still, for some, there's no other way to fit all the desired augmentations into the Hull they have chosen.

ALIENATION EFFECTS	
Points	Problem
1	On a natural roll of 2 on a skill roll or 1 on an attack roll, you briefly dissociate, losing your next round's action.
2	As 1, and you also have difficulty accessing your abilities in this body. Every time you fail a skill check, lose access to that skill for 1 hour. Experts may try to prevent failure with their class ability.
3	As 1 and 2, plus your connection to the outside world is growing tenuous. Every fight or scene of mental or emotional stress adds 2 points of System Strain when it begins. If your System Strain exceeds the Hull's Constitution, you fall unconscious until it has dropped below the maximum.
4+	Your mind has completely dissociated from the body. The world is a garbled confusion of images and sensory inputs, and you are unable to perform any physical action. Gain 2 System Strain points per day.

HULLS AND BODYSWAPPING

In common parlance, a Hull is simply the body that a mind wears. Many of them are crafted artificially by skilled technicians or expert artisans, but the term is also often used for the body into which a mind was originally born. All meat is fungible in Threshold Sector, and one's birth-body is more a sentimental foundation than the final destination for a mind.

To implant a mind into a Hull, it must normally be artificially created to serve as a host. In a pinch, bodies created by more traditional biological methods can be used for Hulls, but this requires extensive preparatory treatment to prevent ego rejection and the difficulty is greater than that of simply growing a new Hull. This does not stop some particularly brutal souls from literally wearing the skins of defeated enemies.

Artificial Hulls are created in vats, each one the product of individual effort by a human technician. Mass-produced Hulls are more limited in the sophistication of their augmentations, as extreme improvements require careful attention by a trained biotech. Most people who are not wearing their birth-skin make do with one of these mass-produced models for the sake of economy. A Hull can be kept "fresh" and serviceable for an indefinite amount of time so long as it is kept in a properly-designed storage pod. Hulls without such facilities survive no better than the average coma-stricken human being, and will die soon.

Implanting a mind into a Hull requires a little under four hours of careful uploading from an intact identity tablet or an ego-occupied Hull. Faster uploading is possible, but it comes with a distinct risk of permanent Alienation from the new Hull; the technician must make a roll a Tech/Medical check at a difficulty of 6, +1 for each hour of speed increase. For each point by which the roll is failed, 1 permanent point of Alienation is gained as long as that Hull is worn. If this leaves the body unusable, the transfer fails and must be repeated from scratch. Transfers require a minimum of two rounds to execute. Transferring from an occupied Hull erases the source Hull's ego, whether or not the transfer is successful.

Backing up a mind requires twenty-four hours and the same attention from a technician. Backups that take a full 24 hours are automatically successful, while each 4 hours cut from the time adds +1 difficulty to the base 6 Tech/Medical check. Uploads that fail the Tech/Pretech check produce a flawed identity copy that applies 1 permanent point of Alienation to any Hull into which it is uploaded. Backups require a minimum of ten minutes.

Identity transfer is intended for use with fully-formed human minds. Children and adolescents who have yet to attain full cerebral development often produce flawed and unstable identity tablets. A Tech/Medical roll must be made to record a child at a difficulty of 20 minus their age. Failure means the tablet is imperfectly formed and will produce a deeply disturbed and mentally altered intellect, while success produces a serviceable tablet. The results of the check are not obvious until after the recording is uploaded into a Hull, and in the case of particularly subtle insanities, may not be clear even then.

GAME MECHANICS AND HULLS

A PC wearing their birth-body uses their original, naturally-rolled scores for their attributes. By default, the common human body of the Threshold Sector is equivalent to a basic-type Hull, though some Luddite or exceptionally primitive cultures may lack such advantages. When rolling hit points, take note of the basic roll, unmodified by Constitution- when and if the PC swaps bodies, they'll need to apply their new form's Constitution modifier to their basic hit points.

A PC who adopts a new Hull retains their naturally-rolled Intelligence, Wisdom, and Charisma scores, modified by whatever special cerebral traits the Hull may have. If the Hull has augmented mental statistics, the PC uses whichever is higher. Strength, Dexterity, and Constitution scores are determined by the Hull being worn. System Strain in a new body is always zero.

PCs wearing a new Hull also retain their base hit points, as the great majority of a person's hit points reflect not physical damage, but their luck, wit, and combat savvy. If the Hull has a positive or negative Constitution modifier, apply it to the character's base hit points; a 4th level Warrior putting on a Hull with Constitution 15 would immediately add +4 hit points to his total, while a crippled Hull with Constitution 3 would apply a -8 penalty. Hit points can never drop below 1 due to a Hull's weakness. NPCs without class levels usually simply have the base hit points of whatever Hull they are wearing.

Skills, experience level, class abilities, and other traits are usually retained into a new Hull. Psychic powers are *not* usable unless the new Hull has been designed to contain a psychic mind. Psychic power point totals always progress with the bonuses of the psychic's original body- the Hull's Wisdom and Constitution modifiers do not apply. Psychics can only "torch" their powers while in their original birth-bodies. A feral mind can be backed up, but it will remain demented in any fresh corpus, even one with augmented mental attributes.

A PC who is killed may be restored from their most recent backup. The backup will have all the skills, experience, and memories of the PC at the time the backup was made, but any memories or experiences earned since then will be lost. Multiple copies of a PC can be restored into multiple Hulls, though many factions have taboos against such personal duplication.

Hulls are comparatively expensive, and PCs may not always have access to the best possible bodies. Depending on the GM's discretion, the campaign may begin with the PCs wearing their original bodies, or they may have already swapped out into forms more suitable for their purposes. Acquiring access to backup Hulls once the game begins is likely to be fairly high on the PCs' list of things to do, given the propensity for damage experienced by most adventurers. Factions might well offer such things as an inducement to free agents, either in the form of ready-made Hulls in storage pods or the opportunity to use their facilities to implant as necessary.

CONCEPTS OF THE SELF

The existence of Hull technology has provoked a profound reassessment of the basic idea of the self in Threshold space. Over the past century, a progressive dissociation of intellect from incarnation has spread through most factions, to such an extent that some factions have no deeper attachment to their bodies than they do to the clothes they wear. For these radical “discarnates”, attachment to a particular shell is a sign of primitive, backward thinking and is unbecoming in an advanced species.

Not every faction shares this easy comfort with bodyswapping. Some factions, particularly hard-core egoists and “quintessentials”, view each incarnated mind as a wholly separate individual, one whose existence is circumscribed by the life of their body. For these factions, when a person is brought back from a backup, it is a fundamentally different person who rises from the inception slab. True, they may have identical memories, identical temperament, and a perfect recollection of their shared past, but the quintessential substance of their existence is different from the entity that made the ego template.

This attitude often leads to distinct friction between quintessential and discarnate factions. The latter believe that the mind was meant to be liberated from the flesh, wearing different shapes both to expand their own conception of selfhood and to illustrate their freedom from brutish carnal definition. They consider quintessentials to be hidebound religious zealots or philosophical cranks, defining a self based on history and mystical taboos rather than present, tangible reality. For a discarnate, these strictures threaten to chain them in bodies not of their own devising, shackling their existence to the laws of a dead past.

Quintessentials see new life in each Hull, new selves born with each inception. Their backups may share their intellectual legacy and the memories of their past, but they are fundamentally, profoundly different people. Their own lives end with their Hulls, and casual bodyswapping is no more appealing than casual serial suicide. Some such factions base their beliefs on philosophical ideas about substance and contiguous experience, while others are frankly religious in character, revering the soul within the created flesh. They consider discarnates to be innocent monsters at best, killing off old minds and birthing consecutive new ones with each reckless Hull swap they perform. Instead of using Hulls to

create a legacy of progeny-minds as each original dies in turn, the discarnates turn their own minds into mere tools to be used.

Most factions float somewhere between the extreme poles of this dispute. Men and women are willing to swap into different Hulls if a habitat or important duty requires it, but most would rather retain their birth-bodies as long as feasible. When they do swap out, it's usually sequential, wiping their former Hull as they transition into the new body. Most ordinary people have no desire to have duplicate selves, and some factions ban such “sharding” entirely. This doesn't always prevent it from happening when someone manages to steal or copy an ego template, but punishment for such crimes is swift and brutal.

PCs AND HULL VARIETIES

The following page gives a list of some of the more common types of Hulls available in Threshold Sector. Each one comes with a default status cost, with the details of status-based purchases in a post-scarcity setting described later in this archive. The cost includes implantation services, though there's no discount for omitting such if the PCs have access to their own inception tables.

Hulls may be equipped with augmentations as given on the table on the following page. Each augmentation has a point cost, and a given Hull can handle only so many points of augmentation. Some Hulls allow for pushing this limit at the cost of additional points of Alienation. Add 50% to the status cost if the hull has been modified so heavily as to induce Alienation.

A PC acquiring a Hull from a faction is usually obliged to take whatever suite of augments is available on the Hulls currently being sold. To determine whether or not a Hull with the desired augments is available, the PC should make a Luck saving throw. Add a +4 bonus to the roll if buying from a large, powerful faction, and up to a -4 penalty if buying from a faction with few available Hulls. On a failure, the PC can pick any one augmentation, but the GM picks the others based on the role the Hull was most likely intended to serve. On a success, a Hull is available that matches all the PC's augmentation desires.

Alternately, the PC can commission a Hull to be grown to their specifications. This takes one week, unless specified otherwise by the Hull description, and doubles the status cost of the Hull.

HULL TYPES

Most of the following Hulls can be grown at any major habitat. Some smaller or less influential factions may be unable to produce bespoke hulls, and a few are unable to create anything better than the most basic varieties of body.

BASIC HULL

Status Cost 10

Basic Hulls are the baseline, minimal requisite for a Hull. Simpler forms may exist on some worlds, but they are usually meant to imprison problematic minds or serve some instrumental purpose. Most humans in Threshold Sector wear basic Hulls, either their birth-bodies or replacements acquired after a fatal accident or change of self-perception. Basic Hulls have the Basic Immunity benefit package, but cannot include any other alterations. These Hulls have a base hit point total of 4.

CONTAINMENT HULL

Status Cost 15

An uncommon variety of Hull rarely found outside the dungeons of ego inquisitors, these bodies are designed to keep a troublesome ego contained in a safe shape that can be interrogated at their captor's convenience. Egos must generally be incarnated in flesh before they can be questioned, as the unstable quantum data of an ego tablet cannot be practically analyzed without being embodied. A containment Hull appears as a normal human being, but has the Regeneration and Stabilized Systems augmentations to prevent accidental death during interrogation sessions.

XENOHULL

Status Cost 15

These Hulls have a drastically different shape than that of a standard human being, and are favored for those factions that prefer to live in ways impossible for human bodies. Attempts have been made to create bodies that can actually breed true over multiple generations, but the "children" of such efforts rarely have minds recognizable as human in any sense. Xenohulls can take up to 5 points of alterations related to adaptations and physical modifications, and up to 3 more of any kind at a 1 to 1 cost in Alienation. These Hulls have a base hit point total of 6.

TAILORED HULL

Status Cost 20

These hulls have been modified while still in the vat, and can take a wide range of alterations. Up to 3 points of alterations can be selected from the list in this section. Up to 3 additional points can be taken at a 1 to 1 cost in Alienation and additional purchase expense. These Hulls have a base hit point total of 8.

BESPOKE HULL

Status Cost 60

Everything about this Hull has been individually tailored to the wearer's psychology and preferences, and the cost of this individual development has been added into the listed status cost. Up to 6 points of alterations can be added, and up to 3 more are allowed at a 1 to 1 Alienation cost. Bespoke Hulls usually require a month to produce and add 2 Alienation for any wearer other than their intended owner. These Hulls have a base hit point total of 16.

EXAMPLE HULLS

The following Hulls are a sample of some of the more common choices favored in the Threshold Sector.

The Atlantean

Popular for those factions that inhabit water-worlds, the Atlantean is grown from a tailored Hull base, and includes the augmentations of Basic Immunity and Environmental Adaptation/Aquatic. The final point of augmentation varies with the creator's preferences, but Grace is popular for improved swimming performance, as is a boosted attribute.

The Ripper

A brutally optimized xenohull that owes equal inspiration to a praying mantis, a squid, and a rabid wolverine, the Ripper is favored by minds planning bloody mayhem. As a baseline, it includes Lesser Boosted Strength and Dexterity, four arms as Additional Limbs, Altered Reactions, and Body Armor/AC -1. Most Rippers carry a pair of ranged weapons in their additional limbs, firing whichever is most effective for the situation, and using their two original arms to wield monomolecular weaponry against close combatants. As with any possessor of additional limbs, however, the Ripper can make only one attack per round.

The Voidborn

Favored for asteroid habitats too hostile for conventional basic Hulls, the Voidborn Hull is optimized for deep space operation. Built off a tailored Hull, it includes Self-Sustaining Systems, Environmental Adaptation/Space, and low-gravity Flight.

The Pygmalion

Those minds fortunate enough to inhabit a safe and congenial habitat often favor social optimization over brute survival. The Pygmalion offers this on a tailored Hull base, granting Lesser Boosted Charisma, Cultural Harmonization, and Basic Immunity.

The Voyager

A popular choice among adventurous egos in search of the stellar unknown, the Voyager is a tailored Hull designed for long periods of isolation from habitat support. It has the Regeneration and Basic Immunity augmentations, and many explorers risk a point of Alienation by adding in a boosted physical attribute or altered reactions.

The Tyrant

An upgraded, humanoid version of the Ripper, Tyrant-class bespoke Hulls are always tailored to the wearer's preferences, but commonly include the following augmentations: Major Boosted Dexterity, Altered Reactions, Body Armor/AC -1, Body Weaponry/Mag Rifle, and Stabilized Systems. A few add an additional point of augmentation at the cost of Alienation, but most prefer to simply fit out any weak spots with advanced technology. Even without the advantage of sophisticated tools, however, the Tyrant can mow down a dozen lesser Hulls with nothing more than its integral weaponry and armor plating.

HULL AUGMENTATIONS

Augment	Cost	Effect
<i>Additional Limbs</i>	1	The Hull has up to eight additional arms or tentacles, as many as four of which can manipulate objects with standard manual dexterity. No additional attacks are gained, however.
<i>Altered Reactions</i>	1	The Hull has lightning-fast reactions, automatically winning initiative once per hour.
<i>Body Armor</i>	1	The Hull is remarkably resilient, and has armor equivalent to AC 3 which has been grown so as to be concealed from anything short of a close medical examination. Optionally, the Hull has armor equivalent to AC -1 in a form impossible to conceal.
<i>Body Weaponry</i>	1	The Hull is equipped with implanted weaponry equivalent to a monoblade or a man-portable postech projectile or energy weapon. The body itself creates any necessary ammunition or power. One-handed weapon equivalents can be grown so as to be concealed to anything short of a medical scan when not in use.
<i>Boosted Attribute, Lesser</i>	1	One attribute is set to 14. If a mental attribute, the wearer uses the higher of it or his own.
<i>Boosted Attribute, Major</i>	2	As Lesser, except that the attribute is set to 18.
<i>Cultural Harmonization</i>	1	The Hull is designed to perfectly match a given culture or Faction's tastes in beauty and instinctive social cues. +2 to social skill checks with that group.
<i>Environmental Adaptation</i>	1	The Hull is designed to exist in an environment normally fatal to humans- deep underwater, a methane atmosphere, deep in space, floating in the winds of a gas giant planet, or so forth. It has full normal sensory and movement abilities and can breathe the existing atmosphere.
<i>Flight</i>	1/2	The Hull can fly at a base movement rate of 40 meters per round, either through physical organs or embedded nanite antigrav. For 1 point, this flight functions only in low gravity environments, while 2 points allows its use in any environment.
<i>Fleetness</i>	1	The Hull has a base ground movement rate of 40 meters/round.
<i>Grace</i>	1	The Hull ignores movement penalties due to rough or slippery terrain, never slips or trips, and gains a +2 bonus on skill checks related to running, swimming, climbing, or gymnastics.
<i>Hypercognition</i>	1	Requires at least Intelligence or Wisdom 14. The Hull has subconscious cognitive processes constantly operating. Once per session, the PC can ask the GM for a useful conclusion regarding a topic, and the GM will tell them what he or she thinks is the most useful fact that they might possibly have concluded from their available data.
<i>Integral Hardware</i>	1	For each point spent, two pieces of non-weapon, non-armor equipment are made permanent parts of the Hull. The Hull provides unlimited energy for these devices, but they count against its encumbrance. Items with more than 1 point of encumbrance leave visually obvious signs of their presence. Hardware cannot duplicate the effects of another augment.
<i>Immunity, Basic</i>	1	The Hull gains a +3 bonus on saves versus poison, disease, and radiation. The Hull does not age past physical maturity and has indefinite natural longevity.
<i>Immunity, Superior</i>	2	As Basic, but also immune to radiation, temperatures between -100 and 100 degrees Celsius, and to those poisons and diseases not explicitly created by pretech bioweapon research.
<i>Metamorph</i>	2	The Hull can alter its appearance to that of any creature with the same or fewer number of significant limbs and within 30% of its original size. The change takes one round and grants no special abilities. With a DNA sample, the mimicry is perfect to the genetic level.
<i>Perceptual Acuity</i>	1	The Hull has a wide range of sonar, radar, infrared and other sensors. Its visual perception works normally out to 100 meters regardless of light levels.
<i>Perceptual Omniscience</i>	2	In addition to the effects of perceptual acuity, the Hull's sensory centers have been altered to track a 360' radius at all times, whether asleep or awake. The Hull can even listen in on unencrypted radio traffic. The Hull cannot be surprised and may awaken immediately to react to events around it.
<i>Psychic Compatibility</i>	1	This Hull has been prepared with the necessary alterations to receive a psychic mind.
<i>Regeneration</i>	2	The Hull repairs itself and refreshes spent vigor quickly. Regenerate 1 HP/minute, up to a maximum of one-half the PC's maximum hit points, rounded up. This regeneration does not prevent death at zero hit points.
<i>Self-Sustaining Systems</i>	1	The Hull does not need to eat, drink, breathe, or sleep, gaining all necessary power from implanted metadimensional tap nanites.
<i>Stabilized Systems</i>	1	If reduced to zero hit points, the Hull automatically stabilizes, and revives at 1 hit point ten minutes later. Further injuries while unconscious or damage that could not be cured by a Lazarus patch cannot be overcome by this augmentation and will result in death.

POST-SCARCITY ECONOMICS AND STATUS

The development of matter compilers produced radical changes in the economic order of the Threshold Sector. The ability of the compilers to transmute arbitrary feed mass into molecule-perfect replicas of any object recorded in their databanks was a blow against scarcity in a host of different resources and commodities. A fistful of carbon or silicon could be fed into a compiler and a few moments later, some fantastically complex electronic device would be dropped into the output hopper. Food, water, oxygen, and all the other material satisfactions of life could be produced in virtually limitless supply.

Despite this new era of abundance, there were limits to the capabilities of the matter compilers. They could not create single-piece objects larger than their own compiler chambers, they could not create macroscopic living creatures, and they could not duplicate quantum substrates, a rare few alien artifacts, and some esoteric compounds found on some of the more desolate worlds of the sector. Aside from these limits, an individual or faction with access to a matter compiler and an object description file could have as much of a particular substance or product as could be desired.

Naturally, the new economy of the Threshold Sector found value in what few stores of scarcity were left to them. Instead of prizing mere objects or raw materials, the factions of the sector value four precious resources that the compilers cannot create- Hulls, data, space, and time.

Hulls are among the most universally valued commodities for trade between factions. Even a basic Hull without unusual augmentations is precious to a person who fears the prospect of being “slabbed” for an indefinite time. Hulls are the promise of continuing immortality, and the ability to make mistakes and suffer the attacks of rival factions without being permanently consigned to the cold stasis of a backup tablet. To a lesser extent, this value extends to other complex life forms beyond the compilers’ ability to create, for those scientists or aesthetes who desire the companionship of nonhuman life forms or the decadence of a “natural” meal. Ego tablets and the cores of AIs also require a technician’s personal attention, as their quantum substrate defies the compiler’s dimensional limitations. This inability to replicate tablets and AIs has made individual ego recordings and the cores of braked AIs a regular focus of raiding among rival factions.

Data is another precious commodity between creeds. Small factions are often unable to run serious research programs of their own due to a lack of talented members or time. These factions are forced to trade for the innovations and progressive discoveries made by their more powerful neighbors. In many cases, this data is vital for maintaining security against nanite attacks or hacks of habitat computing systems. Without acquiring the latest security protocols, factions remain vulnerable to any enemy with superior data resources. Even those factions that run their own programs are always eager to buy templates and innovations that improve efficiency and allow new technology. The holy grail of the research programs, of course, is the development of spike drives strong enough to penetrate the Tempest that surrounds the sector.

Space is also at a premium in the Threshold Sector. All the wealth in the world is of limited enjoyment if one’s body is housed in a twenty cubic meter habitat cell. Factions can always dedicate their efforts toward expanding deep-space habitats, but these void-born homes will always be more vulnerable and straitened than factions based on habitable worlds. Most habitable worlds are claimed by single factions strong enough to keep out enemies, but some are partitioned among struggling neighbors who can agree only on fighting any interlopers, or groups who maintain a tenuous peace through purchase and sale of land claims. Finding an unclaimed habitable world somewhere in the dangerous penumbra of Tempest paths around the sector is a ticket to fabulous influence for those explorers who can live to sell their tale.

Yet of the four, time is perhaps the commodity most often bought and sold among members of a faction. They usually have all the material goods they desire and they rarely have a personal need for new information or living space, but service and expertise from their fellows is something that can’t be compiled by a machine. If a person wishes to convince a technician to maintain their matter compiler, or a vat artist to grow them a tailored Hull, or anyone else to exert time and effort on their behalf, they’re going to have to pay for it.

STATUS

The currency used in these transactions is known generally as “status”. Different factions will implement it in different ways. Some maintain running tallies for each member, the totals visible to all. Other factions have physical status tokens that are exchanged along with favors or valuable commodities. Some dislike admitting that status is a consideration at all, and make a civic virtue of universal assistance... that just happens to reward the useful before they get around to helping the burdensome. Status is a catchall term for all these individual systems.

Status is specific to a faction. A PC may be the light and life of her home habitat, able to carpet the floors of her nanodiamond hab bubble with the willing bodies of her neighbors, but a different faction will have no interest in how highly esteemed she is among her own kind. Status measures how much the person has done for the faction and how easy it is for him or her to find someone willing to accommodate their needs.

Status is measured in two scores for each faction- permanent and temporary status. Permanent status represents deep and lasting bonds of mutuality that can be exercised regularly. A person born into a faction, for example, is almost never going to be denied sustenance, shelter, and the ordinary fruits of the matter compilers in reasonable amounts. They have a permanent status score sufficient to earn that much help from their comrades whether or not they’ve done anything useful lately. An outsider, on the other hand, is going to have to beg, trade, or convince someone to give them such necessities.

Temporary status represents recent, particular services performed by a person with the obvious intent to “cash in” on the help. A

person who is clearly racking up favors and building a history of services rendered may have a very high temporary Status score, capable of purchasing extremely large favors or services from members of that faction. Unless she's invested in her relationships, however, she may not have any permanent status at all, and be obliged to call in discrete favors on a regular basis to obtain the kind of help that more committed faction allies get without demur.

The difference between permanent and temporary status is essentially the difference between a proven ally of the faction and a useful hireling. Characters who perform services for the faction with no obvious quid-pro-quo involved will gradually build up permanent status as the faction is further convinced of their sincerity. Other members will respect that dedication, and can be convinced to lend assistance even without the specific exchange of favors.

GAINING, LOSING, AND SPENDING STATUS

All PCs begin with 1 permanent status with their home faction. This is sufficient to draw on any normal amount of equipment, daily necessities, basic lodging space, and other requisites of existence. Most members of the faction are unsatisfied with this de minimis life, and will work to impress their neighbors with their usefulness and dedication to the faction's ideals, earning temporary status that they can use to acquire the services and special assistance of their peers.

The status prices given later in this section assume that the amounts involved are for personal use. Asking for enough for a group or for a small army is going to increase the status cost. Regular demands for the service rather than occasional requests will also increase the price.

PCs earn temporary status based on the services they perform for a faction. Most ordinary work is simply assumed to go towards maintaining the PCs' standing in their faction, and they won't earn temporary status from simply performing the duties that might be expected from all members of the group. However, engaging in risky missions or performing work of an unusually skilled and demanding nature can usually command a price.

As a quick guideline for the GM, an adventure will grant one point of temporary status to a PC for every 100 experience points earned, assuming that experience reflects the danger and complication of the mission. The status gain might be increased for exceptionally good results, earning up to twice as many points

as the baseline award at the GM's discretion. For ease of bookkeeping, it's best to simply award based on the total XP granted, and not worry about deciding which parts of the adventure the faction valued and which were merely personal exploits.

Extreme expertise at a social, artistic or technical skill can also be rewarded. Assuming the PC has an appropriate skill of level 2 or better, they can earn that many temporary status points in the course of a month's work. If they get a special request from an NPC, their patron can usually expect to pay that many temporary status points for the service as a minimum, with more if the job lasts longer than a week or is unusually dangerous.

PCs can convert temporary status into permanent status with a faction. The first point of permanent status costs 10 temporary points, representing the favors and help necessary to convince the members that the PC is genuinely sincere in their alliance. Each point of permanent status after that requires five points of temporary status to purchase. It's always up to the GM to decide whether or not such increased confidence has been justified by the PCs' behavior and general helpfulness.

PCs can also lose status by acting against the faction's interest in provable ways. If a faction member commits crimes or trespasses against the faction's code of beliefs, status penalties are assessed. If the criminal lacks the temporary status to pay for them, points of permanent status are sometimes lost, each permanent point counting for five temporary ones. Most criminals earn back their lost status through months or years of compulsory menial labor and performing the least popular duties for their neighbors. Outsiders who infuriate a faction too greatly might find their egos erased, their Hulls recycled for faction use, and any backup identities banned from faction space.

As might be suggested by the above, people who have performed many great and meritorious services for the faction can get away with a great deal within the society. For truly heinous crimes or profound transgressions against the faction's beliefs, no amount of status can protect the culprit. In such cases, ego execution is common, sometimes with the destruction of any backup tablets. This "full erasure" is an extreme sanction for any faction, as most criminals sufficiently depraved as to earn the penalty have had the foresight to set up offworld backups. It's not uncommon for outsiders or ambitious faction members to be tasked with ensuring that full erasure is carried out completely.

STATUS PRICES

The following status prices assume the standard ubiquity of matter compilers, in which most faction members can get ten or fifteen minutes of unrestricted time on one on any given day. For factions that invest in the maintenance and upkeep necessary to give every member almost unlimited access to a compiler, costs for physical artifacts should be dropped to zero for anything small enough to be compiled without assembly. For factions that sharply restrict access to compilers, double the costs.

Prices assume single objects or amounts suitable for personal use. Conventional equipment and vehicles can be acquired for the entire party at double the listed status cost, and in any amounts the GM finds plausible for quadruple the listed cost.

MATERIAL GOODS AND PROPERTY	COST
Any piece of TL 4 or 5 equipment listed in the <i>Stars Without Number</i> core book, excluding artifacts	1
A man-portable pretech artifact, assuming template availability	2
One metric ton of any substance or standard product	2
A vehicle listed in the core rulebook	2
A fighter-class starship fully equipped with postech	10
A frigate-class starship fully equipped with postech	40
A cruiser-class starship fully equipped with postech	160
A capital ship, assuming the faction even has the manpower necessary to assemble such a massive object	640
A private space station equivalent to a Bannerjee-12	120
A braked AI core	40
A planetary structure smaller than a palace	10
Minimal private living space on an orbital habitat	5
Opulent private living space on an orbital habitat	20
Ownership of one square kilometer on most comfortably habitable worlds	40

DATA	COST
A mildly useful or interesting pretech device template not present in the buyer's compiler banks	5
A very useful pretech device template	10
A pretech artifact template such as those listed in the <i>Stars Without Number</i> core book	40
Research data relevant to the faction's goals and beliefs	1 to 20
Spike drill course to a periphery world unknown to the faction	50
Drill course to a habitable periphery world unknown to the faction	100
Drill course to a habitable periphery world not already occupied by a controlling faction	200
Drill course that can lead a ship through the Tempest and into normal metadimensional space.	Priceless

SERVICES AND COMMON FINES	COST
One week of non-dangerous labor by a person with a given level in a skill.	Skill Level
One week of hazardous labor by a person with a given level in a skill.	Level x2
One week in a job virtually certain to result in Hull death. Add the price of a replacement Hull to this.	Level x5
Creation of a identity backup on an ego tablet	1
Inception of an ego into a hull. This price is included in the default Hull purchase costs.	2
Favors	
A minor favor or assistance, such as overlooking a faction ordinance or granting an unusual appointment	2
A major favor or assistance, such as involves substantial risk to the subject's Hull or social standing	5
A favor that pushes the outer limits of what the subject will consider doing for a proven ally	10
Fines and Penalties	
Fine for disruptive behavior or property damage	2
Destruction of non-replicable property and uninhabited Hulls	Item cost x2
Intentional murder of an occupied Hull	Hull cost x3
Actions threatening a habitat's viability	All status
Murder of a victim with no ego backup	Full erasure

STARTING STATUS AND EQUIPMENT FOR PCs

Player characters begin play with 1 permanent status with their home faction and a tablet with a fresh ego backup. Their beginning permanent status is usually sufficient to kit them out in any material possessions listed in the equipment section of the *Stars Without Number* core book, with the exception of vehicles, pretech artifacts, or starships. PCs have as much of this equipment as is reasonable for a single individual, and can get more with more than a half-hour's effort among their fellow faction members. Their status is sufficient to kit them out, but it's not enough to buy gear for their comrades as well unless further temporary status is acquired and spent to cover the additional cost.

Most PCs will begin play in their birth-bodies, though some GMs may start the campaign with PCs in more advanced Hulls. If the group is new to these rules, it's recommended that the GM design their Hulls for them the first time around to spare the time that might otherwise be spent in mulling over the options. Players will have plenty of time to decide what kind of tentacular horror they want to be between sessions, and can direct their status-garnering efforts accordingly.

NEW EQUIPMENT AND TECHNOLOGY

EQUIPMENT	STATUS	ENC
Ammunition Compiler	1	0
Ego Tablet	2	1
Emergency Backup Scanner	5	0
Eternal Cell	2	0
Inception Table	20	-
Matter Compiler, Personal	20	1
Matter Compiler, Stationary	160	-
Tablet Scanner	5	1
Vat Complex, Basic	100	-
Vat Complex, Tailored	200	-
Vat Complex, Bespoke	400	-

Ammunition Compiler: While transhuman energy weapons simply fuel themselves through integral nanite taps, some weaponry requires physical ammunition. These specially-designed magazines draw in atmospheric feed mass to rapidly create mag slivers or bullets as needed. Ammunition can be created quickly enough to allow constant use of burst-fire mode.

Ego Tablet: Also known as an ego backup or a “slab”, these palm-sized tablets of quantum substrate composite can be used to record a sentient mind with the help of an inception table. Their unstable quantum state makes it impossible to create them via matter compiler, so each must be hand-crafted by an expert Pretech technician. Tablets can be erased and reused as needed.

Emergency Backup Scanner: A last-ditch tool for recovering the mind of a downed teammate, the EBS resembles nothing so much as a collapsible metal skullcap. When applied to a living subject or one who has been dead for no more than five minutes, the cap unfolds, grips, and burrows into the subject’s cranium to translate their ego into a tablet provided by the user. Incepting a Hull with an ego recovered in this messy way is difficult and dangerous to a mind- the technician must succeed on a Tech/Medical check at difficulty 8 or the tablet is ruined and the inception fails. An EBS can only be used once before it burns out.

Eternal Cell: Most transhuman tech is operated by integral nanite taps that siphon the endless power of the Tempest to fuel the device’s operation. Occasionally additional power is needed, or some antiquated device requires a standard power cell. These cells function as normal type A or B cells, but never run out of power.

Inception Table: A shorthand term for the complex equipment necessary to record egos and implant them in suitable Hulls, the inception table requires at least five square meters of space for all the necessary equipment to be laid out. Anyone with at least Tech/Medical-0 skill can attempt to use it to record or implant an ego, assuming they have access to an ego tablet or Hulls.

Matter Compiler, Personal: Most matter compilers are large devices, easily five cubic meters on a side. The large scale of the components makes maintenance easier, and the large compilation

chambers allow the creation of larger objects in a single pass. Some compilers are designed for personal use, however, taking the form of a collapsible box that unfolds into a flexible cell large enough to compile an object of 1 Encumbrance or less in one minute. Any standard object can be replicated, as can unique or unknown object that have been processed with a one-hour scanning pass in the device.

These devices require a month of finicky calibration during creation, and so are more status-costly than most conventional objects. They’re also prone to jamming and going out of calibration. After every 10th object is created, the user must roll 1d6; on a 5 or 6, the compiler jams and requires a difficulty 8 Tech/Pretech skill check to clear, with the check taking a half-hour. Personal matter compilers cannot create other personal matter compilers.

Matter Compiler, Stationary: These massive compilers can fabricate anything of gravcar size or smaller in a single one-minute compilation pass. They do require the constant attention of a half-dozen trained Pretech technicians to keep them functioning, however, with maintenance costs of 24 status per week. Matter compilers can create duplicates of themselves, but such construction requires the compilation of individual pieces and their careful calibration and installation by techs. Total costs usually come to half the price of a compiler bought whole.

Tablet Scanner: This small device is designed to scan and duplicate ego tablets. It requires a minimum Tech/Medical or Tech/Pretech skill of 1 to operate, but can instantly reveal the name and general details of the ego embedded in a given slab. With four hours of careful scripting time, it can also copy a slab onto a blank tablet, creating a duplicate. Faster copying is possible, but runs the risk of spoiled results- the tech must make a Tech/Medical check at difficulty 6, +1 for each hour shaved off the requisite time. On a failure, the copy is unsuccessful. Failed rolls will unsettle the source tablet’s quantum architecture for four hours, making copying impossible until it has had time to settle. Tablet scanners are semi-legal in most factions for fear of identity theft.

Vat Complex: Available in three different complexities of basic, tailored, and bespoke, vat complexes allow for the creation of Hulls. Basic complexes can create only basic Hulls, tailored complexes can create anything less sophisticated than a bespoke Hull, and bespoke complexes can create anything within the technical limits of the host habitat. All of them require the oversight of expert Medical technicians, as Hulls cannot be fabricated through simple matter compilation. They also require large amounts of space, with even a basic vat complex requiring a four hundred square meters of room, and a bespoke complex demanding as much as an entire level of an orbital habitat.

Basic Hulls require Tech/Medical-1 to fabricate, bespoke hulls require Tech/Medical-3, and anything in between requires level 2 expertise. Most Hulls require a week to create, while bespoke models require a month and the active cooperation of the intended wearer. Up to ten technicians can be working in a vat complex.

TRANSHUMAN CAMPAIGNS

Many readers who have picked up this document will be interested in running a transhuman campaign in their own setting. They will already know the kind of conflicts, adventure opportunities, and anticipated PC concepts to expect from their group, and all they need from these pages are the mechanics to translate transhuman staples into their *Stars Without Number* games. They'll strip out the example Threshold Sector setting, tweak the Hulls and status costs to fit their own campaign, and roll on. Such a tactic is an excellent choice, particularly since this brief offering can't hope to encompass more than a few hints as to the full scope of transhuman adventure and potential settings.

Others, however, will need more of guiding hand for making use of the material here. With that in mind, here are some tips for a GM new to the transhuman genre.

TRANSHUMAN RESOURCES

"Transhumanism" is a relatively recent science fiction genre revolving around the exploration of a "post-human" humanity. It considers the ways in which human society and existence might alter once it is possible to surpass the ordinary limits of mortal flesh and limited resources. As such, you will find many different takes on the same general concept, as authors spin out their ideas on human nature, post-scarcity economics, and the consequences of crystallizing minds into transferable data.

A quick search online will lead a reader to a wide variety of science fiction material related to transhumanism. RPGs that explore the topic in greater depth include such games as *Eclipse Phase*, by Posthuman Studios, Steve Jackson's GURPS-powered *Transhuman Space*, or Project Donut's *FreeMarket*.

SETTING UP YOUR SANDBOX

If you're not using a premade setting for your transhuman fun, your first step is going to require creating your own Threshold Sector. Travel between stars is difficult in the energetic space of the sector, so you shouldn't feel obligated to create an entire sector all in one swoop- just one star system, perhaps with its immediate neighbors.

That single star system should have at least three active, powerful factions, all of which have at least one serious point of disagreement with the others. Conflict between these factions should drive the initial play events and provide adventure hooks for groups interested in doing free agent work. As such, it's probably best to ensure that PCs come from minor factions that could feasibly hire out their services to any group, unless the PCs are interested in potentially working against their own home society.

Aside from the factions, you should plant at least three or four interesting exploration locations in the system. Abandoned habitat stations, blasted-out surface colonies, dangerous alien ruins, or derelict faction facilities all offer opportunities for salvaging data, unique artifacts, or personal territory. Not every group will

immediately want to play mercenary free agent, and some will prefer to explore their new home before they start picking sides. Once the exploration sites are settled, set up a means of getting out of the system. A cruiser-class drill tender might be making regular sweeps through the system, operated by its own faction of neutral-minded starfarers, or a local faction might be willing to give a ride to trustworthy agents. Access to this transport should depend on favors and useful services- if the PCs go to the effort of obtaining passage, it will give a GM forewarning that their destination needs to be fleshed out.

CONFLICTS AND REWARDS

Material rewards are much less important for motivating PCs in a transhuman game. Even the rawest new PC can usually just pick whatever gear they care to have, and take advantage of whatever tech suits their purposes. Only unrecorded artifacts and a few rare commodities actually have value in an era of widespread matter compilation. You're not going to be able to motivate your PCs with most forms of loot.

Instead, wealth takes the form of friendship- of favors done, alliances cemented, and services performed for dedicated compatriots. You need to offer this status in exchange for services the PCs might perform for a faction, and you need to be willing to let them spend it in getting help for their own plans. The higher a PC's status, the more convinced a faction is going to be that cooperating with them will advance their own ultimate goals.

This also means that the PCs need to have goals defined by accomplishing things rather than accumulating things. In a convention game, "become filthy rich" is a perfectly good motivation for adventure. In a transhuman game, the PCs are *already* filthy rich. They need to want to create a particular change in the world or accomplish a particular end. As a GM, you need to get them to define the sort of change in the world they want to effect.

This also means that the conflicts you build into your campaign aren't often going to revolve around material objects. Conflicts are about data, or people, or space- not about things that can be replicated with trivial ease. The more extreme factions struggle because they are convinced that their rivals plan a future for humanity that is utterly monstrous, and that preventing their poisonous ideas from infecting the rest of human space is a cause worthy of their devotion. This kind of certainty leads to ruthless, unremitting conflict, and if it doesn't break out into outright war it's only because the combatants don't think the time is right.

Ultimately, your PCs have the ability to set up their own factions and embody their own concept of a good society in their followers and fellows. You should emphasize this ability to choose, this power given by the technologies involved in transhuman undertakings. The PCs really can create a new world in the stillness of the stellar dark, and remake the old ways into something new and bright. Provided, of course, that more powerful rivals do not find their dream to be an abomination to be snuffed.

PLAYER'S HANDOUT FOR THE THRESHOLD SECTOR

The Threshold Sector is a far rim region at the edge of the galactic arm. Six hundred years ago, the Scream swept over the rim worlds, leaving the psychic minds of the sector in smoldering ruin. Even worse, the Scream appears to have catalyzed the metadimensional space around the Sector into a roaring confusion of impassible energy currents and dimensional storms, known commonly as the Tempest. Travel from world to world within the sector is difficult for all but the largest ships, and escaping the sector entirely is impossible. No ship has the drive shielding strong enough or the drill route accurate enough to escape Threshold Sector.

Despite this catastrophe, the Tempest offered opportunities to the survivors. Simple nanite power taps allowed the locals to gain access to an almost unlimited amount of free energy. Combined with the rich resources of the sector, civilization rapidly rallied, and soon inventions were developed that leveraged the unlimited power into incredibly sophisticated technology. The two greatest inventions were the matter compilers and the Hull transplant process.

Matter compilers are capable of taking raw mass and converting it into a molecule-perfect replica of any object recorded in their data banks. With a few exceptions, any inanimate object or microscopic living creature can be created in unlimited amounts by the compiler. As such, even the "poorest" denizens of Threshold Sector have access to almost any personal possessions they might desire.

The Hull transplant process allowed technicians to incept a human mind into specially-grown "Hulls", bodies improved and augmented beyond any ordinary human norm. Human minds, or "egos" could be recorded on special quantum substrate tablets. By "backing up" their mind, a human could return from death, swap bodies freely, or even incept multiple copies of their own intellect into vat-grown Hulls. As Hulls are organisms too sophisticated to be duplicated by the compilers, they form one of the few objects of real worth in Threshold Sector. Most men and women work hard to earn enough status with their faction to afford a backup Hull in case of the death or disabling of their current body.

With the coming of these revolutionary technologies, humanity started to splinter into various ideological factions. Each had their own idea about how human society should be ordered, and the sudden abundance of material wealth allowed them to seek their own paths in deep-space habitats or engineered asteroids. Some were strong enough to take over whole habitable worlds on which to exert their beliefs. Most factions have two or more core beliefs that inform their worldview; the GM will provide you with a list of factions operating in your home system, or allow you to create your own as an origin culture for your PC.

These factions compete to spread their ideas and quell their rivals. The ultimate dream of many of them is to perfect the drill routes and spike drive shielding necessary to escape the Tempest, the better to bring their enlightenment to the remnants of humanity closer to the galactic core. Research data and scout reports are hot subjects of espionage between factions.

WHO ARE YOU?

You are men and women dissatisfied with calm life in your faction, discontent with simply performing your necessary duties and whiling away your hours in idle recreation. You want more. Perhaps you disagree with your faction, and seek to find a more congenial creed- or become influential enough to establish your own. Maybe you think a certain rival faction is growing too strong, and want to crush it before it destroys your home. Maybe you yearn to explore new worlds and see alien sights with your own eyes.

Whatever the specifics, you want to accomplish something big. Work out the details with the GM before play begins so he or she can take your plans into account.

WHAT DO YOU DO?

Often, you work for factions, either your own or others. They need agents willing to go places, retrieve valuable data, or destroy things for the common good. The prospect of death is less frightening when good backups are available, but it can still be hard to find men and women willing to leave their comfortable existence and risk excruciating suffering for the good of their faction. PCs are often those people, willing to risk much to gain much.

At other times, you'll be explorers or freelance adventurers, hunting out valuable data or unreplicable commodities for trade. In the centuries since the factions first formed, countless numbers of them have fallen prey to war, disaster, or cultural collapse. Exploring the ruins can often turn up valuable data files of interest to modern factions, and the occasional technological device unknown to standard compiler databanks.

In the lawless depths of unclaimed space, every faction is its own police and guardian. Some factions are too weak to defend themselves from outside enemies, and are often desperate for men and women with the cunning and strength to strike at their assailants. Adventurers might well be hired to provide that strength.

HOW DO YOU GET PAID?

These favors or commodities buy *status* with a faction. Status is the catchall term to cover the myriad economic systems used among the factions. You earn it by doing favors and convincing the faction that you're a dedicated ally, and you spend it in acquiring help, services, or compiler products from them. Status is individual to each faction- good feeling with the Unified Mind isn't going to cut any ice with the Red Star Collective.

Status comes in two kinds- permanent and temporary. Permanent status represents a deep, confirmed dedication to the faction. You can requisition whatever you need from a faction without cost, provided the price isn't greater than your permanent status with them. Temporary status represents a backlog of favors owed, and you spend it down as you use it. You can convert large amounts of temporary status into small amounts of permanent status if the GM agrees that you've proven your dedication to the faction.