GURPS Shadowrun

ingeanus

November 2022 (Ver 1.0)

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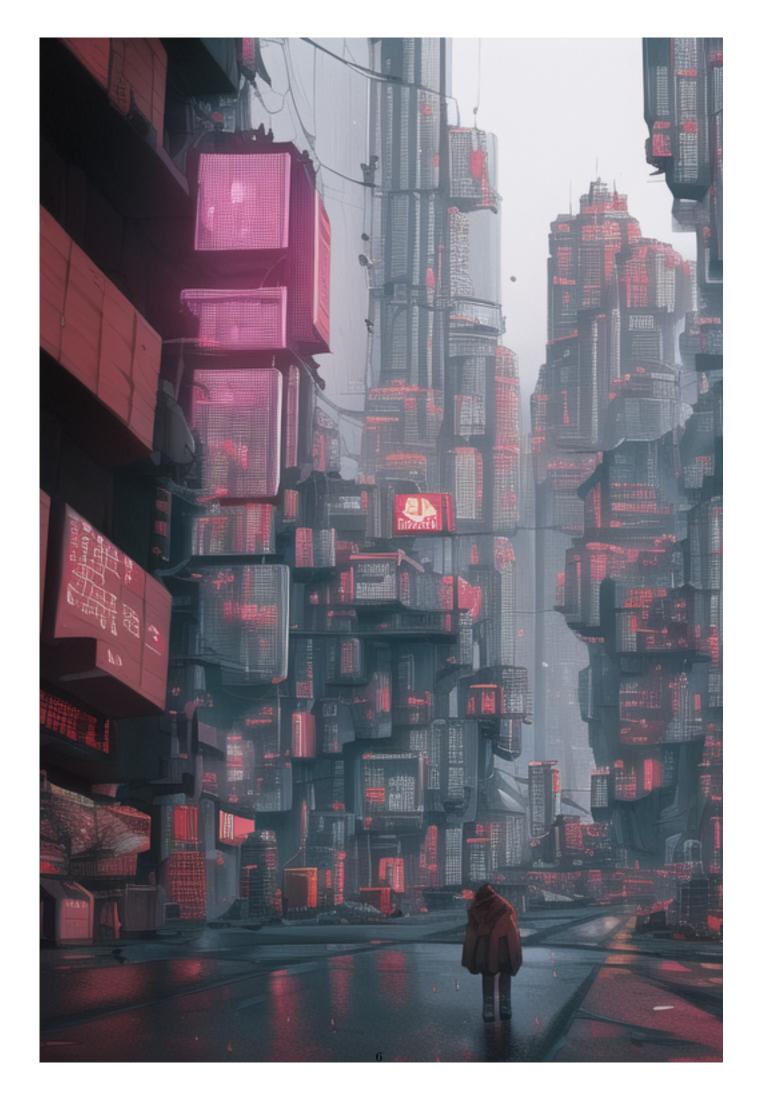
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1 Rules

Due to the nature of Shadowrun's setting, a variety of source books and optional rules are specifically used, along-side some suggested Home Rules (Which are incorporated into the statistics of this ruleset).

1.1 Books and Optional Rules

GURPS Basic Set The core rules.

- Limited Enhancements (BS111): Used in creating complex advantages like Magic.
- Malfunction (BS279)
- Extra Effort in Combat (BS357): Both increases competency and survive-ability in combat.
- Dual-Weapon Attacks (BS417)
- Bleeding (BS420): Lasting threat from damage that requires stabilization.
- Random Hits: Gunfire should default to Random Hit Locations in order to reduce its general lethality.
- Critical Hit Tables

GURPS Gun-Fu: Gun-Fu is an integral part of much of the near-Wuxia styles of combat present in Shadowrun and its slice of Cyberpunk culture. Much of GURPS Gun-Fu however is too cinematic, portraying a John Wu film style. As a general rule, Tactical Shooting is the better source to go to, but Gun-Fu's Perks, Styles, and noncinematic Skills, Techniques, and Advantages are all great sources for Gunbunnies. Seek GM approval for anything from this book however.

GURPS High Tech GURPS High-Tech provides much of the technology for the setting.

- Drawing Your Weapon (HT81): Provides bonuses for the many places one can hide their weapon.
- Stopping the Bleeding (HT162): Makes first-aid more important for certain hit locations.
- "You Shot Me, Mister!" (HT162): Usually only for goons and grunts.
- Explosions in Enclosed Spaces (HT181): Chunky Salsa returns.

- Side Effects of Explosions (HT181)
- Explosive Destruction of Materiel (HT182)
- Sheaths (HT198)

GURPS Low Tech GURPS Low Tech holds a variety of rules useful for all tech levels, such as tools, rules regarding armor and its effects, low tech armor at higher TLs, etc.

- Armor Fatigue (LT101)
- Chinks in Armor (LT101)
- Harsh Realism Armor Gaps (LT101)
- Concealing Armor (LT102)
- Donning Armor (LT102)
- Blunt Trauma and Edged Weapons (LT102): This one is highly up to the GM. It makes cut much less effective against armored targets, but makes it very hard to make it completely uneffective due to blunt trauma. As well, it is fittingly realistic.
- Layered Armor (LT103)

GURPS Martial Arts Martial Arts is the bread and butter for Street Samurai and Combat Adepts. It's more likely that something is used from this book than not.

- Expanded Combat Maneuvers (MA96)
- Limiting Multiple Dodges (MA123)
- Extreme Dismemberment (MA136)
- New Hit Locations (MA137)
- Pain in Close Combat

GURPS Tactical Shooting GURPS Tactical Shooting in general is recommended for providing depth and flavour to a variety of gunfighter styles, alongside providing a multitude of interesting and useful skills and techniques

 Using The Sights (TS13): Provides good definitions on what each maneuver implies when firing. GURPS Social Engineering GURPS Social Engineering is the bread and butter for Faces and Social Infiltrators. While the rules are not necessary to run even social focused characters, almost every non-cinematic rule is extremely fitting for such characters.

• Expanded Influence Rolls (SE31)

GURPS Ultra Tech Ultra Tech provides much of the tech for the setting of Shadowrun. However, much of it is entirely out of place in the setting. See the Tech Level section for more clarification on what technology available

GURPS Pyramid #3/21 - Cyberpunk Used heavily for the Matrix's Decker and Technomancer hacking rules.

• Cowboy Console Matrix Rules

GURPS Pyramid #3/34 - Alternate GURPS 1

- Do-or-Die Bullet Dodging
- He Who Hesitates
- Grazes

GURPS Pyramid #3/55 - Military Sci-Fi Provides a wide variety of equipment that is of plenty of interest to runners. Importantly, updates some of Ultratech's equipment to bring it in line with the standards of High-Tech and Tactical Shooting.

GURPS Pyramid #3/65 - Alternate GURPS 3

• A Full Complement

GURPS Pyramid #3/85 - Cutting Edge Has a great set of perks for all matrix specialist to use!

The GM is recommended to follow the restriction of 1 perk per 10 points in related matrix skills, although can easily expand the default list to include skills such as Cryptography.

• The Perky L33t, with perks allowed for non H4xx0rs.

GURPS Pyramid #3/91 - Thaumatology IV Used as inspiration to incorporate the Technomancer advantage rules with the Pyramid #3/21 - Cyberpunk.

• Technomysticism

GURPS Power-Ups 3: Talents This book provides many useful Talents that can be used by characters in order to fill their niche as a runner. Due to the attribute repricing (See Power-Ups 9), these are much more useful for specializing a character.

GURPS Power-Ups 9: Alternate Attributes GURPS Power-Ups 9 details a system for pricing attributes accordingly to a campaign's setting and assumptions. I have gone through and implemented the rules here in order to provide better costs for the game.

Accordingly, all templates, lenses, equipment, etc. incorporate them; if you do not wish to include them into your games remember to re-calculate the points costs where necessary.

For in-depth details on the choices for the prices, see the Behind the Screen section; in brief: Reducing ST costs to compete with small arms, Increasing DX and IQ costs to match and compete with Talents, Increasing HT costs to be balanced, and Increasing Will and FP costs to account for Magic and Extra Effort. Strength 7 Points / Level

- Hit Points 2 Points / Level
- Striking ST 3 Points / Level
- Lifting ST 2 Points / Level
- Arm ST 2, 3, or 4 Points / Level

Dexterity 25 Points / Level

- +0.25 Basic Speed 5 Points / Level
- Arm DX 12 or 16 point / Level

Intelligence 15 Points / Level
Intelligence no longer includes
Willpower or Perception.

Health 15 Points / Level

- +0.25 Basic Speed 5 Points / Level
- Fatigue Points 4 Points / Level

Hit Points 2 Points / Level Willpower 7 Points / Level Willpower is now Independent of Intelligence.

Perception 5 Points / Level Perception is now Independent of Intelligence.

Fatigue Points 4 Points / Level Basic Move 5 Points / Level Basic Speed 5 Points / Level

GURPS Social Engineering - Keeping Contact This book is extensively used for Contact creation and rules. It is covered in more detail in the Contact Section.

1.2 Home Rules

Critical Hits & Active Defenses: When a critical hit is rolled on an attack, the opponent can still make active defense rolls at an additional -4.

Arm DX and ST: These are priced by their absolute value (DX without Basic Speed and ST without HP).

Costs FP and HP: The first level of these limitations costs double (-10% and -20% respectively).

Extra Effort in Combat: An unmodified Will roll is required to gain the benefits of the Extra Effort. The FP is still spent on a failure.

1.3 Character Creation

A number of rules or guidelines are necessary to prevent characters from being built that do not in any way fit the setting. Like always, the GM should exercises their best judgement when banning psionic aliens from the table, but a list of helpful points are also included:

- Characters should seek approval for attribute levels in excess of $\pm 30\%$ of Racial baselines, and levels in excess of $\pm 50\%$ should generally not be allowed.
- Characters should seek approval for wealth levels of Wealthy [20] and above. Very Wealth [30] should be highly scrutinized as it's extremely efficient for purchasing 'ware. If allowed, consider enforcing the 80% settled lifestyle rules (B26) in order to prevent abuse.
- Independant Income should generally be banned, or at a minimum greatly limited.

- Multiple advantages or enhancements from differing sources should generally not stack. As an example, DR from Adept Powers and DR from Cyberware, should generally be highly scrutinized by the GM, in order to avoid cases that break the game's norms (Or at least, without an Unusual Background!). A good sanity test is to limit levels to be equal or less to a guiding attribute, such as HT or Will.
- Any enhancement for Affects Substantial/Insubstantial, or that which allows effects to cross planes, is strictly banned.

1.3.1 Talents

Talents are heavily recommended, especially the Alternative Talents from Power-Ups 3, which provide excellent flavor and utility.

Talent Levels are limited to 4, with the exception being Talents from special sources, including 'Ware, Magic, and Resonance, which are limited to 6 at character creation, but may be taken higher with permission by the GM.

1.3.2 High Basic Speed

The extreme capabilities of many pieces of 'ware and adept powers unlock the ability to purchase a variety of advantages that are usually unavailable to characters (in the exact same way as with unusual backgrounds).

Characters with a Basic Speed of 7.0 or above (whether through 'ware, magic, or natural ability) can purchase the Extra Attack - up to three times for Basic Speed 8.0 and 9.0 - as detailed below for Cyberware, or Bioware, or Mundanes respectively.

Statistics: Extra Attack (Multi-Strike, +20%) with Power (Technological), -35%, Power (Bioware), -5%; Magical, -10%; or no Power modifier. These cost 22, 29, 28, and 30 points respectively.

For individuals with switchable Basic Speed (Such as Wired Reflexes) that takes them above the necessary, they may add *Accessibility*, *Basic Speed limited*, -5%¹, costing 20, 28, 27, and 29 points respectively.

Optionally, a GM may allow the purchase of Altered Time Rate for charac-

¹Priced according to assumption that you will use in 90% of combat situations.

ters with Basic Speed of 8.0 or more, as detailed below:

Statistics: Altered Time Rate 1 with Power (Technological), -35%, Power (Bioware), -5%; Magical, -10%; or no Power modifier. These cost 65, 95, 90, and 100 points respectively.

For individuals with switchable Basic Speed (Such as Wired Reflexes) that takes them above the necessary, they may add Accessibility, $Basic\ Speed\ limited$, $-15\%^2$, costing 50, 80, 75, and 85 points respectively.

It is not recommended to allow these Extra Attack and ATR together, as their effects are multiplicative and may prove destabilising even despite the prohibitive costs.

1.3.3 Rule of 16

TODO: This

 $^{^2\}mathrm{Priced}$ according to assumption that you can benefit from ATR at all times, but will activate ~67%

2 Setting

Shadowrun is a Cyberpunk / Fantasy / Soft Science-Fiction setting, following the alternate history of the Earth after the takeover of political power by large corporations alongside the remergence of magic, creating what is now known as the Sixth World.

This section covers the mechanical portions of the setting, from Tech Levels to Control Ratings, to character building limitations and suggestions.

2.1 Tech Level

Shadowrun is a TL9 Cyberpunk society (UT9). It has advanced Medical, Biotech, and Cyberware technology, sometimes breaking into TL10. It also somewhat follows the Nanotech Revolution (UT9), allowing the beginnings of TL10 nanotechnology in the setting, largely focused on wet-nanotechnology.

To create an exhaustive list of technology that is included/not included from Ultratech, Traveller, Transhuman Space, etc. would be a superhuman task. As such, it's recommended for GMs themselves to look into what technologies are present in Shadowrun's lore and to what extent they are both mature and commonplace. A list of some examples is provided to give an easy core reference.

As well, many technological equipment in GURPS Ultratech is meant to serve as a generic version (A prime example of this are the entirely standardized firearms). While there is no reason to disallow such things in the setting, it's generally recommended to stick to the equipment created to match the original Shadowrun equipment. The one exception to this are trauma plates; in GURPS trauma plates are extremely effective for their weight (Covering the whole torso!), despite their small size and heavy weight, providing extreme defense for little weight. As such, it is generally recommended to stick to the trauma plates in this book.

2.1.1 Superscience Technologies

Shadowrun makes use of some technologies that are classified as Superscience. While the GM is advised to determine technologies themselves, a list is provided as reference.

• Monowire (UT103, 154, 163)

2.1.2 TL 10 Technologies

TL 10 technologies in Shadowrun are relatively few and far between. Aside from any that the GM wishes to incorporate, here is a list of some of the more common ones. Keep in mind that some of these are easily replaced with TL9 technologies in the lore, so could easily be not included in a game (e.g. Fabricators vs Robofacs).

Plenty of Monad Technology falls into this category (Anti-Grav, Nerve Guns, Railguns, Plasma Guns, Healing Goop, Brainwashing, etc), or even worse into TL 11.

Because the Monad Super-Science is a mentally retarded addition to the setting that flagrantly ignores the consequences such technology would have on the setting even in small amounts (Antigrav drives) alongside playing extremely loose (Even for Shadowrun) with the rules of reality in ways that fundamentally upend any scientific verisimilitude (Anti-grav drives again) - all while pushing the setting towards the sci-fi instead of Cyberpunk - I will not be including it. If you wish to include it as a GM, feel free to on your own accord.

- Fusion Power (UT20)
- Robofacs (UT90)
- Wet Nanofabrication Systems (UT91)
- Gecko Gear (UT96)
- Paralysis Gas (UT160)
- Pheremone Spray (UT160)
- Nanoburn (UT161)
- Vibroblades (UT164)
- Various TL10 Cybernetics (UT212+)

2.1.3 TL 9 Technologies

Most TL 9 technologies are by default included in the setting. While the GM should make judgement calls on any particular item, one of the important facets can be *disallowing* certain technologies; a list of example technologies that are generally not included in the setting (But might still make for interesting megacorp R&D!) is included.

- Quantum Communicators³ (UT47)
- Memory Augmentation⁴ (UT56)
- Virutal Tutors, AI Tutors (UT56, 59)
- Brainwiping (UT109)
- Electrolasers (UT119)
- ETC
- Liquid-Propellant Guns

2.2 Control Rating

Control Rating specifies how difficult it is to get equipment in the setting. Shadowrun varies in its CR, but Seattle is a Control Rating 4, meaning that LC ratings are:

- LC 5 Anyone may carry it.
- LC 4 Anyone but a criminal or SINless may carry it
- LC 3 License is required. Licenses tend to cost 1dx10% of the item.
- LC 2 Prohibited to all but Military, Corporate Security, etc.
- LC 1 Only permitted to Military, Spec Ops, etc.
- LC 0 Usually banned for anyone or organization.

2.3 Character Creation

Character Creation was already daunting in the original Shadowrun, and it can be even more so in a port like this. This section gives guidance, advice, and "new" rules or rulings on how to create characters for the settings.

2.3.1 Starting Points

Starting Points for a campaign can vary wildly depending on the campaign that the GM wants to run:

For most campaigns, this is 200 points, the default assumption being that the players are proven, but somewhat new individuals to the scene. They have passed the barrier of their initial runs without serious fuck-up or death, acquired a number of relevant skills to the field, and bring enough talent to outmatch the everyday competition for a Shadowrunner.

³At least no mature Quantum Communications, due to the high levels of security being unsuitable for the Cowboy style of hacking in Shadowrun.

⁴At least no mature Memory Augmentation due to how disruptive it could be to the setting. It fits the setting perfectly however.

Some campaigns may want to run at Street Level (Because god forbid that was impossible in normal Shadowrun), which is 100 points. These are individuals who have been forced into the Shadows. While they are still above average individuals, they don't necessarily have the expertise to outmatch average runner-level threats, meaning that they are more likely to be hired by non-professionals of the street. As well, they are likely to not be tested and may face their first real run in the beginning levels of the campaign.

Although I do not prepare anything for it in this document, there is also the level of Prime Runners, usually around 300 points or more. These are individuals who have spent a good amount of time in the shadows, usually more than 3-5 years. These are the individuals who hit MCT Zero-Zones, make deals with dragons, and so on.

2.3.2 Advantages

There are plenaty advantages that will give you an edge as a runner. Included here are some of them - alongside descriptions about how they might work in the Shadowrun setting!

Alternate Identity

Basic Set

An Alternate Identity can be a tempting advantage for many runners, due to its relative permanency compared to fake SINs purchased with money. Unlike normal fake SINs, this will never be burned by anything less than conclusive evidence - generally requiring a plot point, not too dissimilar to Signature Gear, Fake SIN (See below), but without the threat of constant rolls and needing to cover up when it fails.

Signature Gear

Basic Set

Signature Gear is useful for all of the normal reasons to take it, but it is somewhat notable for its combination with fake SINs, which must be covered here. Fake SINs usually deteriorate over time - or when being checked against, which can make the idea of giving them plot protection tempting.

Plot protection does not prevent them from deteriorating normally - that is an important part of their value compared to the Alternative Identity advantage; instead, this advantage always gives you the opportunity to fix or rectify the burning. This can come in a variety of ways depending on the situation, but can range from the extreme of having to defraud a SIN registry's review of the SIN (perhaps with the help of a SIN Forger), convice a police officer that the errors popping up on scanner are a fact of life for you - not an indication that he should alert his superiors, or perhaps indication that someone or something is snooping around the ID and you might need to lay low.

While many of these are actions you could normally take to prevent your identity from being burned, the advantage here is that the GM is required to provide you a suitable opportunity like this, and it should be tailored to your runner within reason, no Foundation Dives for the face, unless that's what he wants!

Zeroed

Basic Set 100

Zeroed is something that will likely immediately appeal to most runners, given that the default state of Shadowrun has the characters as SINless. However, as noted here by Kromm, Zeroed is *much more* than just that.

Zeroed implies active maintenance of your utterly recordless existence. This can be a lot of different things, ranging from a SIN Forger or Decker who constantly scrubs the records (maybe even you scrub them!), a corporation or powerful individual who buries any evidence, the SIN holders and other individuals deleting what they believe to be erroneous data, individuals overlooking the strange holes as mistakes, or any combination of the lot! Alternatively, it could even be a dragon or spirit (or any suitable awakened) protecting you from divination magic!

Do note, that you must select *one or the other* when it comes to being Zeroed - High Tech records or Divination - assuming you do not have the Universal enhancement, and if you do you must justify it well or the GM is free to ban it!

Of course, as is mentioned in the Basic Set, your lack of records can still lead to investigation or detention if handled

poorly, but you won't ever start accumulating a paper trail on its own!

There is an additional limitation available for Zeroed however (As mentioned by Kromm above), that allows it to serve as a one-time Zeroing. The One-Use limitation means that you had some reason that you start the game without records - very often being SIN-less in Shadowrun - but your zeroing does not maintain itself!

If your face gets on the news, if you get arrested, if you show up on cameras, if your astral signature is recorded by the police, or whatever records you leave if your wake, they stay. Judicious use of Temporary Identities with fake SINs is a good way to maintain this trait yourself (beyond just wearing a mask!), allowing your fake SIN to get burned, without necessarily exposing your SINless self to society.

Special Modifiers:

Universal: You get both benefits of Zeroed. In a fantasy setting, records and evidence of you disappear; in high-tech worlds, supernatural abilities to divine your presence or true identity fizzle and do not work. +50%. (GURPS Pyramid #3/97, p19).

One-Use: Your Zeroed identity is as a result of some initial incident. Often, this is something such as a hidden or recordless birth, a false death, or spiriting away. Your lack of records do not maintain themselves, meaning that paper trails, security footage, IDs, and more will stick around without any intervention. This can eventually lead to investigation - as with the original Zeroed advantage - however, it is just a matter of when, not if with this limitation! x1/5.

2.3.3 Skills

Certain skills are very useful to a Shadowrunner - and some can mean the difference between life and death.

Area Knowledge

Area Knowledge has an additional specialty that can be of use for deckers, or for an matrix inclined individuals.

Cyberspace: Covers information about how the matrix is entirely organized. Can be used for information on public hosts, grids, matrix architecture, people of important, etc. The area classes for Cyberspace are a bit different, but the GM can usually apply them similarly. Here are some example for inspiration (however the Basic Set rules are still incredibly useful regardless):

Neighborhood: Covers a single host or small collection of related hosts, alongside noteworthy people for it.

Village or Town: Covers a collections of hosts. Can often be the hosts representing a single town, but can also cover non-standard, but similarly sized areas like Arcologies, a single slice of a grid (e.g. the public sector of a city), etc.

City: Covers all the hosts in a single city. Can also cover an amount of closely related hosts similar to this, such as the hosts for a A or small AA corporation.

Barony, Count, Duchy, or Small Nation.: Covers a regional area of multiple town, or a small nation. Can also cover an amount of closely related hosts similar to this, such as the hosts of a AA corporation. The GM may allow this scope for AAA corporations that do not have/run huge matrix operations themselves. Generally only covers people and things of Status 5+.

Large Nation: Covers the hosts of a large nation, such as the UCAS. Can also cover an amount of closely related hosts similar to this, such as the hosts of a AAA corporation. Notably, huge matrix providers such as NeoNet are entirely within the GM's purvue to declare as in the Planet Class. Generally only covers people and things of Status 6+.

Planet: Covers the global matrix. Can also sometimes cover AAA matrix providers, such as NeoNet, at GMs discretion. Generally only covers people and things of Status 7+.

Current Affairs

Current Affairs has some additional specialties that might be useful for runners.

Cyberspace: Covers news about the matrix, GOD, cybersecurity, and general cyberspace.

Shadows: Covers "news" or more accurately, word of mouth, about the shadows, jobs, people in the shadows, etc.

Holdout

Holdout is an invaluable skill for almost every Shadowrunner. It provides the ability to conceal weapons and equipment (B200) alongside armor and clothing (HT66).

Most weapons take a penalty equal to their bulk, while armor takes a penalty equal to its DR/3 if flexible, or DR if rigid, and equipment is assessed by the GM (Although many pieces already have it noted in their descriptions). All armor provides a +3 bonus to Holdout if it covers a majority of the body (Largely only full body or clothing as large as suits), providing a +4 bonus otherwise. This means that even Armor Clothing provides a net +1 to skill, while most others provide net +0 to -3, which can be difficult to keep hidden even with training.

As well, most scanners provide a +4 to skill at TL9 (UT104), although the sometimes go lower (HT206) or higher (HT 207), which can make getting equipment through them near impossible without obfuscation (hiding the equipment among other detectable objects), distraction, or hacking - which makes the skill all the more invaluable.

Some advantages can help with this, such as the Skin Pocket cyberware or simple Payload advantage.

Professional Skill (Shadowrunner)

IQ/Average

Defaults: Streetwise-3

This skill covers all of the practical job knowledge for running in the Shadows.

Successful rolls can provide information of subjects such as: How to safely arrange a meeting with a Johnson or Fixer, how to vet a mission or Johnson, what general actions might be dangerous for a Shadowrunner or their career (As it pertains to direct threats such as bullets or tracking, or more vague ones such as reputation and public exposure), standard operating procedures, generalized or well known Shadowrunner tactics, etc.

The GM should not let this skill replace other, more specialized skills, especially ones that are particularly close like Streetwise; it should represent general knowledge of the job and its practicalities, in contrast to Streetwise's ability to get along with people on the Street and in the Shadows.

Magical Skills

These skills are only meaningful to Awakened, although technically anyone could take them - representing knowledge of fundamentals and practicalities, without any meaningful experience.

Assensing

Per/H

Defaults: None

Assensing allows a user to interpret the auras of individuals seen with Astral Perception (or any other strange ability, such as Astral Rifts). You can roll Assensing for any aura that you can see.

Success can provide any information Empathy (Sensitive) can (See: Social Engineering p36, 53, 56, 71), alongside magical information based on Margin of Success, with some examples ordered from easiest to most difficult: The subject's emotional state, the subject's general health, whether they are awakened or not, the class of magic, or whether you have seen this aura before, the presence and location of cyberware (with better grades being even harder to detect), the subject's essence and magic and force, diagnosis of maladies affecting the subject, the presence and location of bioware, and whether the subject is a technomancer.

Success also provides a +1 to all Detect Lies, Fortune-Telling, and Psychology rolls to analyze the subject.

Binding

10/H

Defaults: None

Covered under the Binding advantage section.

Spellcasting

10/H

Defaults: None

Spellcasting allows an Awakened to channel their magical abilities into certain short term effects. Spells have 5 categories, indicating their overall purpose, however there is often much overlap between the two.

When casting a spell, you must select its Force, which can range from 1 - 2×Magic. The higher the force, the more powerful the spell, but the more Drain you must resist. Drain is the strain put on your body from casting spells. It costs 1 FP per Force, up to your Magic, after which is costs 1 HP per Force.

You can resist Drain, rolling against either (IQ + Will)/2 or (HT + Will)/2, depending on your magical tradition. You reduce the amount of FP or HP damage by your Margin of Success.

Summoning

10/H

Defaults: None

Covered under the Summoning advantage section.

Emerged Skills

Threading

10/H

Defaults: None

Covered under the Threading skill section.

Compiling

10/H

 $Defaults:\ None$

Registering

10/H

 $Defaults:\ None$

2.4 GURPS Awakened

One of the things that many players will quickly come to notice is that their Awakened characters are *much* less competent (or at least have less options and lower numbers) than in the original Shadowrun game. This is by design.

There was a reason that Shadowrun was called Mage-Run; Awakened had access to superior options to most other characters at the table, spirits were extraordinarily open to abuse - even without being built into, spells provided wholly unique capabilities which were sometimes literally impossible to counter (High Force mind control for instance), magic as a whole has very little mundane counters beyond Gray Mana, line of sight blocking, and a bullet.

Because I have tried to maintain as close as I can to the original game in this port, only comprimising where it either did not fit the GURPS system or would make things feel overall better - Awawkened are **expensive**. The capability to summon near endless minions with Summoning, easily scout far

away and secure locations with Astral Projection, perform budget mind reading with Astral Perception (which also countered many forms of stealth), create spell effects ranging from humongous area death bombs, to near unresistable control or debilitations, to near unresistable effects.. those are things that could define a *single* character in GURPS.

This is additionally exacerbated by GURPS' dice system, meaning that have a default of Magic 6 would likely mean a skill of 16, which is extremely high in combination with the already expensive systems. From my limited idea, it seems that Magic 3 or 4 in this port is the equivalent in terms of intra-party competency to Magic 6 in Shadowrun.

Lastly, a lot of things are simply much more potent in GURPS due to the game system, largely due its emphasis on realism. In Shadowrun, it's not difficult to make a character that survives a handgun - or a handgun level Combat Spell. In GURPS, handguns are an existential threat, even to people with armor. Non Combat Spells also have much more powerful assumptions and capabilities - Invisibility provides +9 to stealth, Detection spells explicitly give more information, and so on. While these are capabilities that were possible in Shadowrun, they often did not have these explicit and extremely powerful modifiers and effects layed out for the player to use and abuse,

All around, players should expect to either make much more tamed generalists or much more specialized Awakened compared to Shadowrun. As well, don't forget that players can take magical advantages at a level lower than their Magic, potentially allowing for large savings on points.

As an aside, this perhaps helps with one of the stranger questions in Shadowrun, being the oddity of tons of highly trained Awakened individuals, demographically amounting to under 1 in 10 million people, always making their ways into the shadows in large numbers for some reason. Instead, runners would now keep to the above average Magic levels of 3 and 4, with some savants and specialists mixed in. They are still competent enough and mandatory on many runs, but they aren't the equivalent of PhD Professors or Olympic Athletes turning to a life of crime in staggering numbers.

2.4.1 Lenses

Lenses are templates that can be applied to characters in order to streamline the character creation process or to provide inspiration.

Shadowrunner

6 Points

This lense describes a somewhat experienced Shadowrunner, who has picked up a number of basic skills far better than the average joe to allow him to survive in the Shadows.

Many Shadowrunners have lower Status and sometimes Wealth as well. $\,$

Advantages: Zeroed (One-Use, x1/5) [2]

Disadvantages: Social Stigma, Second Class Citizen (SINless) [-5]

Skills: Professional Skill (Shadowrunner) (A) IQ+1 [4]; Streetwise (A) IQ [2]; Urban Survival (A) Per-1 [1] Choose 2 points from:

Acting (A) IQ-1 [1]; Carousing (E) HT [1]; Fast-Talk (A) IQ-1 [1]; Intimidation (A) Will-1 [1]

Decker

102 Points, 36,000\mathbf{Y}

A middlingly competent Decker, with the skills to be able to provide a wide variety of Matrix support and services. A decker of this caliber should be able to take on Hosts up to around Rating 7 to 9, while also being able to provide a general support of any matrix skill that would come up on most runs. As well, his Comfortable Wealth provides him enough funds to land a Cyberdeck of Complexity 6 with a good amount of programs, or a cherried-out Complexity 5 with every program he could want. He may have to place some aspects under settled lifestyle if he is not a wanderer, but that shouldn't be too difficult with his Status.

This lens specializes into his field with the Talent (Born to Be Wired), which provides bonuses to all of his core skills, while reducing both the familiarity penalty for unknown systems and allows him to lower the *No Equipment* penalty (B345) for not having software by rapidly improvising.

These benefits allow him to make use of most systems with no penalty - despite what strange design a corpo has set up for their host - and also gives him a hail-mary backup option if he finds that he needs specific software for a certain niche task, which can help for hacking, on-site analysis, technical skill use, etc.

Attributes: IQ+1 [15]; Per +1 [5]

Advantages: Born to Be Wired 2, Alt⁵ [12]; Comfortable [10]; Status 1 [5]

'Ware: Datajack (Base Grade) [3, 6,000¥]; Cerebral Booster 1 (Cultured Bioware, Base Grade) [5, 30,000¥]

Primary Skills: Computer Operation (E) IQ+1+2 [2]-15; Computer Programming (H) IQ+1+2 [8]-15; Computer Hacking (VH) IQ+1+2 [12]-15; Cryptography/TL9 (Cryptanalysis) (A) IQ+0+2 [2]-14; Electronics Operation/TL9 (Security) (A) IQ [2]-12; Electronics Operation/TL9 (Surveillance) (A) IQ [2]-12; Electronics Repair/TL9 (Computers)

(A) IQ+0+2 [2]-14; Expert Skills (Computer Security) (H) IQ+1+2 Research/TL9 (A) IQ+1 [4]-13

Secondary Skills: Area Knowldge (Cyberspace) (A) IQ [2]-12; [8]-15; Mathematics/TL9 (Applied) (H) IQ-2 [1]-10; Mathematics/TL9 (Computer Science) (H) IQ-1 [2]-11;

Perks: Console Monkey [1]

2.4.2 Face

99 points, 12,000¥

A middling competent and generalist Face, this individual has to skills to run a wide variety of cons, negotiate with the Johnson, detect and social threats to the group, and work the Shadows for services and info. Their appearance lets them gain a reasonable edge at the start of any interaction, and their multitude of social skills makes it possible to recover from many bad reactions and situations.

They make use of the Alternative Benefit for Smooth Operator, letting them resist Influence skills better, however many players may opt for the better influence rolls of the original trait, which can greatly improve the moods of Johnsons, contacts, runners, and so on!

While they will have enough money for basic gear, they will likely find themselves wanting if they want to perform complex social infiltration. As well, having lots of liquid cash is great for props - an important part of every con!

Attributes: IQ +1 [15]; Per +1 [5]; Will +1 [7]

Advantages: Appearance, Attractive [4]; Smooth Operator, Alt⁶ 1 [13]; Tailored Pheremones 2 [2, 12,000 Υ]

Skills: Acting (A) IQ+2+1 [8]-14; Carousing (E) HT+1+1 [2]; Current Affairs/TL9 (E) IQ [1]-11; Detect Lies (H) Per+0+1 [4]-12; Diplomacy (H) IQ+1+1 [8]-13; Fast-Talk (A) IQ+2+1 [8]-14; Intimidation (A); Oberservation (A) Will+1+1 [4]; Panhandling (E) Fast Talk-2+1 [0]-13; Politics (A) IQ-1+1 [1]; Public Speaking (A) IQ+0+1 [2]; Savoire-Faire (Any) (E) IQ+0+1 [1]-12; Sex Appeal (A) HT+1+1 [4]-12 7 ; Stealth (A) DX+1 [2]-10; Streetwise (A) IQ+2+1 [8]-14

2.4.3 Magician

186 Points

This Magician represent for a 200 point individual with middling competency. Their Magic 3 provides them with skill 13 in almost every major magical role, Spellcasting, Summoning, Binding, and Assensing. This allows them to acquire a selection of capabilities that can make them a good generalist, but lack in specialist capabilities.

Their spells will be powerful enough to supplant or replace many technological measures (Especially invisibility), while their summoning and binding allow them to have a collection of mid-tier spirits around them at any given time. None of these are amazingly stellar - their combat spells will often deal 3d-3 damage (As much as a handgun), only held up by their special abilities of incendiary or armor-bypassing; their spirits will often amount to 75 points, able to specialize into some aspect of their powerful abilities, or to take somewhat generalist approaches. However, their abilitiy to bring things

⁵Power-Ups 3 Talents p8

 $^{^6}$ Power-Ups 3 Talents p15

⁷Bonuses For Appearance not included.

to the table that no one else can, especially Astral Projection, 3 spirits, Invisibility, Heal, and so on, make up for it.

They will likely be lacking in many other skills without taking more disadvantages, which can limit the magician's usefulness in other aspects of a run. The player should make sure to acquire the minimum necesities for being in the Shadows regardless!

Some players may compare this to the original Shadowrun and find it baffling that they can only take this much as a Magician, compared to their old awakened with 10 spells, multitudes of spirits, and Magic 6. This is specifially addressed in the GURPS Awakened section.

Attributes: 36 IQ +1 [15]; Will +3 [21]

Advantages: 73 Astral Perception [12]; Astral Projection [20]; Binding 2 [6]; Magician [5]; Magic 3 [24]; Spark [1]; Summoning [5]

Disadvantages: -15 Choose [-15] points from appropriate mental disadvantages such as: Disciplines of Faith (Mysticism or Ritualism) [-5]

Skills: 16 Assensing (H) Per [4]; Binding (H) MAG [4]; Spellcasting (H) MAG [4]; Summoning (H) MAG [4]

Spells: 76 Manabolt (Magic 3) [9]; Fireball (Magic 3) [7]; Heal (Magic 3) [52]; Invisibility (Magic 3) [8]

2.5 Contacts

Contacts are a common tool for Shadowrunners to gain vital information and services for their jobs, however they can be somewhat deceptive in their usefulness in GURPS, alongside requiring some rules from GURPS Social Engineering - Keeping Contact (SE:KC) in order to function as expected in the setting.

The source book also provides many modifiers for contacts that are extremely useful in fleshing out their abilities in order to better fit a player's ideas.

Social Engineering also provides some useful resources, notably under *The Benefits of Status* (SE59). As well, Pyramid #3/47 Who's Gonna Buy This? covers very useful information for realistic fencing.

2.5.1 Contacts!

One of the more useful tools when creating contacts that is allowed is the new Contact! advantage. This lets a contact have a wide breadth of skills and resource (e.g. Business skills for a CEO) to a level similar to a Contact Group, allows access to some things limited to Contact Groups normally, but lacks the bonuses related to multiple questions or survivability.

It also provides a small number of *Contact Points*, which allow a character to automatically succeed on FoA rolls, assist in related tasks, or so on. This should be generally kept on a somewhat tight leash, to avoid the advantage feeling too cinematic, even for the shadows.

2.5.2 Fixers

Shadowrunner groups often times share Fixers, who set the entire group up for their jobs. In cases like these, the GM should use the *Sharing the Load* rules on SE:KC6.

2.5.3 Using Contacts

As noted in *The Benefits of Contacts*, a Contact's skill is an abstraction and not necessarily the hard limits on their abilities. They should be freely sought after to provide Secret Information related to their profession (Very useful for organized crime members, corporation employees, infobrokers, etc.), Convenient Information (Often used with Infobrokers specifically), or Information Synthesis (Most useful for contacts skilled in technical fields). As well, don't pass up on Organized Knowledge for Group Contacts.

Not all of these often fall under a strict skill. Instead, the skill should influence what type of information might be supplied by the contact.

When players are asking for favors, it's highly recommended that the GM makes use of the Alternative to Rejection (SU:KC13) optional rules, which allow for rolls to be made at penalties (or sometimes bonuses) based on the favor. This allows for penlties to skill or reliability to be applied instead of favors outright being denied, which lets the Contacts perform favors of a level of difficulty that would seem reasonable in Shadowrun, but would be unavailable in GURPS.

These penalties should be able to be counteracted through the *Boosting Skill* (SE:KC18) section, allowing for bribes, extra time, or their own skills to assist with difficult favors. As well, *Managing Risk* (SE:KC20) can provide similar benefits, allowing runners to trade favors in return for lowering penalties - a very common tactic for building a reliable network in the shadows.

As well, players should remember to take advantage of the *Common Skills* (SE:KC23) section, which describes a number of skills that contacts are considered to be able to make use of at all times, many of which can be very useful for a runner.

2.5.4 Example Contacts

A selection of Shadowrun focused contacts are provided here, however the *Contact Categories* (SE:KC23) section provides a great list of inspiration for any characters making their associates. It also provides a number of rulings for specific categories that can enhance their capabilities (e.g. the Criminal/Street category allowing double value for monetary favors if the character is okay with being complicit with it being illegal).

Arms Dealer: This Contact represents an Arms Dealer that is able to provide information regarding the legal and more often, less than legal weapons community alongside providing favors in regards for acquiring weapons. He is less helpful than a contact with Streetwise otherwise, only being able to use his capabilities in regards to the Arms Dealing community.

Statistics: Contact, Streetwise (Skill 15; FoA 12; Somewhat Reliable; Less Helpful, Single Category, Arms Dealing, -60% [2]

Fixer: A well connected individual who sells a groups talents to Johnsons, acting as the trustworthy middleman between the two. When selected, the GM should specify whether the Professional Skill (Shadowrunner) or (Fixer) are necessary for the job. Many Fixers vary in the Frequency of Appearance, but they usually are not less than 12 and rarely less than 9, due to their job consistent of lots of network-

ing. Many runners only use their Fixers for favors setting up jobs, but they can also be a valuable source of information on working in the shadows, especially when it comes to things like networking, etiquette, people of note, general advice, and - seeing as many Fixers were once runners themselves - general tactics.

Statistics: Contact, Professional Skill (Shadowrunner) or (Fixer) (Skill 15; FoA 12; Usually Reliable) [8]

Infobroker: A classic infobroker, this Contact! provides their skill for anything that might be related to general information gathering. This can be overly vague, so the GM is entirely within their purvue to provide more vague information than normal for other Contact!s.

Statistics: Contact!, Information (Skill 18; FoA 9; Somewhat Reliable) [9]

Detective: A small time detective, able to provide Forensics analysis, tamper with evidence, answer questions the runners may have about information they found, etc. He is limited in scope to portions of the city for which is police company has contracts, as such a Knight Errant would not be able to tamper with evidence gathered by Lone Star. For a relationship where the detective will willingly provide his assistance for tasks outside of his company's purvue, remove Limited Scope.

Statistics: Contact, Forensics (Skill 15; FoA 9; Usually Reliable; Limited Scope, -50%) [2]

Knight Errant: You have some inns with the officers and detectives of Knight Errant (Or any other big time police company in the city), allowing you to call upon many of their members for information and favors. They are able to provide any information that a beat cop or detective might be able to about the organization, its general goals, investigations, etc. They can also provide information and services that any police group could, such as holding off patrols and responses, arresting certain individuals, looking the other way, tampering with evidence, etc. They are limited in effect to the areas on their contracts, unable to affect places that are under the control of other companies, such as Lone Star. For a relationship in which the group will step out of their own domain to help you, remove Limited Scope.

Statistics: Contact Group (Organized), Police Skills (Skill 15; FoA 12; Somewhat Reliable; Limited Scope, -50%) [10]

AA CEO: This represents a big player, such as a CEO, CTO, etc. for a AA Corporation. They're able to call upon anything that their company reasonably could, from research, to supplies, to information, to jobs, to whatever - assuming you can get in contact with them of course, seeing as they're booked for the next week. They're notably capable of certain feats that a *unusual* for their capabilities, whether this be access to powerful or large numbers of wagemages, secret R&D technology, magical or matrix artefacts, or more.

Statistics: Contact!, Business Skills (Skill 21; FoA 6; Somewhat Reliable; Unusual Connections) [8]

AAA CEO: This contact is about as big as they come. They are some form of Chief Officer for one of the big ones, able to muster the expertise and resources of an entire megacorp, assuming they ever respond to your calls of course. They're even harder to get in touch with than their Frequency of Appearance would suggest, as all attempts to contact them are also two steps less convenient than normal (SE:KC19), meaning that their average convenience is *Seriously Inconve*-

nient. However, when they come through, they come through. Like any AAA CEO, they're capable of certain feats that are unusual for their capabilities, whether this be access to powerful or large numbers of wagemages, secret R&D technology, magical or matrix artefacts, or more.

Statistics: Contact!, Business Skills (Skill 24; FoA 6; Somewhat Reliable; Unusual Connections; Inaccessible 2, -20%) [8]

Best Buds with Damian: For the players that want to have Damian's personal number (Or any other key player in the setting), able to call upon them like any other contact, this is the place for you. Exactly as above, they're capable of certain feats that are *unusual* for their capabilities, whether this be access to powerful or large numbers of wagemages, secret R&D technology, magical or matrix artefacts, or more.

Statistics: Contact!, Business Skills (Skill 24; FoA 12; Usually Reliable; Unusual Connections) [72]

2.6 Lifestyles

Lifestyles represent the costs associated with living. The rules for how to run this are already covered in GURPS B265, but this section provides some context for it in the Shadowrun setting.

Status	Lifestyle	Cost of Living
Status 4	Luxury	60,000¥
Status 3	Luxury	12,000¥
Status 2	High	6,000¥
Status 1	Medium/High	1,200¥
Status 0	Medium	600¥
Status -1	Low/Squatter	300¥
Status -2	Squatter/Street	100¥

When creating a character, the player must select between one of two options:

Settled: You have 20% of your starting money for hand-picked personal gear that you'll use on runs. You also start with *What Cost of Living Gets You* (B266) for your Status – even if 80% of your starting money couldn't possibly cover that – because that abstracts a lifetime of accumulation.

Wanderer: You have all of your starting money for hand-picked gear that you'll use on adventures. You do not get What Cost of Living Gets You (B266). Moreover, spending cost of living each month does not automagically feed, clothe, and shelter you... you have to buy food, clothing, and lodging explicitly, out of whatever money you earn on your adventures, see Temporary Accommodations section on B266.

GMs are highly recommended to enforce Settled Lifestyles for individuals with levels of Wealth of Wealthy [20] and above

As well, it is possible for settled characters to have equipment that falls into both categories (e.g. a Rigger's vehicle, a Decker's microframe, and some reagents for a Magician are all covered under *What Cost of Living Gets You* alongside counting as Adventuring Gear). In such cases, it's recommended for the GM to decide what aspects are adventurous and charge for those aspects only (e.g. Charge for the upgrades to a Rigger's vehicle or a Decker's microframe).

A character with higher levels of Status and/or Wealth can talk to their GM about paying for some 'ware with their settled income. In such cases, the GM is highly advised to limit them to a reasonably sized selection of fully legal or licensed 'ware that is capped in its grade, that is not extremely expensive (up to 15/20% starting wealth) which is explicitly useful for the character in a mundane lifestyle.

For most characters Status 0 or 1, this takes the form of things like Standard or Used Grade Datajacks, Sleep Regulators, perhaps some Cyber-replacement parts without many upgrades.

If a character acquired 'ware through their settled income, they must still may the CP values as normal, but the nuyen prices are already abstracted out and payed for by their settled income.

Often times, a player will talk to the GM about whether certain expensive equipment may fall under a settled income, and the GM might find it possible, but perhaps too valuable. A good example of this may be a rigger - especially one who say, had previous police work as a rigger - who wants to include a Control Rig in their settled income. The GM might consider the high price tag too much to reasonably provide, but should consider making comprimises. They can for instance, allow it at a lower grade than normal - if that would bring it low enough to be reasonable. As well, they can add additional disadvantages to compensate (That reduce point totals, not provide points), although they are cautioned against doing this too much. Most importantly, they can also remove other benefits from the settled income; the rigger gets his Control Rig, but in return his Status 1 house only has the security of a Status 0 house, or anything else the GM and player deem reasonable.

While this can be difficult to balance for a specific character, the most important thing for a GM to keep in mind is to mainly balance among the party. While it may be a bit powerful to allow a Control Rig Rating 2 in return for downgrading the security of a lifestyle, it is nothing compared to allowing that while denying similar benefits to other players - especially magical ones, who should be given ample opportunities to include things like foci and reagents. The most important part of any purely GM driven character design is to limit favoritism as much as possible (especially unconscious favoritism). GMs may find it valuable to attempt to enumerate the value gained from the equipment compared to the value lost from changing the lifestyle (or whatever method they use), and attempt to equal those out.

When in doubt, remember that despite the fact that TL8 Wealth gives 20,000\$, most TL8 individuals own cars that cost around 20,000\$ (Perhaps used), mortgage houses, have decent support for their hobbies, and more. It's not unreasonable for settled individuals to have gross wealth that well exceeds the starting wealth shown in the Basic Set.

Some cybernetics and equipment may be taken with or require the Maintenance trait. Character with suitably high Status and Cost of Living (usually at least Status 1)can include some or all of these costs in their lifestyle, otherwise the GM should reference B484 for the possibility of breakdown, continuing costs of repairs/maintenance, and so on.

What Cost of Living Gets You in the Sixth World

Here are a couple examples of what you can expect to have at a given Status and corresponding lifestyle:

Status 4:

Status 3:

Status 2: Depending on where the character lives, their residence can range from a large house with grounds to a prime location apartment to multiple small residences.

They will have any amenity within reason, such as multiple fast Matrix services, every service or membership within reason, most any piece of novel technology - and some gimmick ones too, recreational services that require physical areas (such as a pool), and so on.

They have one expensive vehicle, which can either be simply Good Quality or have a number of legal modifications, alongside a small number of other decent vehicles.

They can be expected to have any resources to fund their hobbies that they want, which can often overlap with runner specialties. The area itself will be quite secure, likely including private security for the community, security services for the house itself, and some services that are meant to "clean up" their neighborhood and prevent undesirables from accumulating.

They can expect quality equipment - most of which can be Good Quality and a select few can even be Fine Quality - including but not limited to: well stocked First Aid Kits and Supplies, most any drug they could want - legal or not, more food than could last them, any legal home defence weapon(s) they want, plenty of emergency supplies, an expensive commlink (Small Computer with Fast and more) alongside some other commlinks, a Microframe with many upgrades or even a Mainframe with a few minor upgrades.

The equipment can very easily incorporate illegal items, such as drugs, firearms, and especially fake SINs and licenses, for which the character would like have either one good SIN (Rating TODO) or multiple worse SINs (Rating TODO).

They will almost certainly have a good selection of 'ware, which often includes some Alphaware Grade, or could have a fairly expansive set of Standard and Used Grade 'ware. At the GM's discretion they might be able to have a small number of Used Grade 'ware that does not follow the rules aligned before in some way (Which often means it is a piece of 'ware that is not explicitly mundane).

Status 1: The character has a comfortable house or condo, with any reasonable amenity they could want, including fast - or multiple - Matrix connections, plenty of services and memberships, a good selection of technology to make things easier - such as a labor drone, and so on.

They have a nice vehicle - which may have a few legal modifications - or perhaps multiple older ones. They can be expected to have expendable resources to support their hobbies well, which could overlap with some runner specialties.

The area itself will be fairly secure, through bribes to police and/or gangs, perhaps gated community, and their house itself might have a small selection of above average security resources.

They can expect a great selection of handy equipment - some of which may be taken as Good Quality - including but not limited to First Aid ${\rm Kit}(s)$, a good selection of drugs - legal and not, plenty of food of good quality, a good quality commlink (Small Computer, perhaps with Fast or High

Capacity) and any specialized software they need, supplies for emergencies, a reasonable home defence weapon, they can easily afford a Microframe with some cheap upgrades or a possibly cheap Mainframe.

Some of the equipment can easily be illegal, such as some drugs, a firearm or two, and likely a fake SIN, which is likely of good quality (Rating TODO).

They will likely be able to afford some standard grade 'ware, such as Wireless Datajacks, Sleep Regulators, etc or a somewhat larger selection of used grade 'ware.

Status 0: The character mortgages or rents a nice little house, condo, or apartment with a good selection of comforts, including common services such as Matrix connections, matrix services and physical memberships, average technology like autocookers, and so on.

Usually they will have a vehicle of their own, often a car or truck, in decent condition.

The area itself can be expected to be average security, not lacking in gangs, but well kept enough by police to be considered "safe".

As well, they can expect to have a good selection of equipment that may come in handy, including but not limited to: First Aid supplies, plenty of clothing and even some quality clothes, food of all kinds - sometimes even natural food, a commlink (Small Computer) and sometimes some specialized software, perhaps a small home defence weapon, possibly a Personal Computer or Microframe, general repair equipment for many items, hobby equipment, etc.

Some of the equipment will likely be illegal, such as some drugs, maybe a firearm, or they might have a decent fake SIN (Rating TODO).

They may even have some Standard or Used Grade 'ware, such as a Datajack or Sleep Regulator, to make their lives more convenient.

Status -1: The character is likely squatting in some place ranging from a small or shared apartment to a derelict house.

They can expect little in the way of amenities; eating nutrisoy, power and water during rationing periods, limited Matrix connection, etc.

The area itself is not explicitly dangerous, as long as the door is bolted and regular bribes are given.

They likely have no vehicle, but if they do it is poorly maintained or if not, stolen.

They may have some equipment of note: Improvised First Aid supplies, poorly kept clothing and perhaps one good pair, limited food and water, a poor quality commlink (Small Computer w/ Slow or similar qualities), etc.

While some of the equipment can be illegal, it's likely limited to drugs or maybe a firearm. If they're a bit lucky they might have a low rating SIN (Rating 1) available for purchasing from Stuffer Shack's.

The GM is free to assign conditions or penalties to characters living in such conditions, some examples being: Missing FP from missed meals, water, or sleep, penalties or issues arising when healing such as infection, burglers, etc.

If their extremely lucky, they might have a Used Grade piece of 'ware.

Status -2: The character has - at most - a room in a

flophouse or shelter, and is much more likely to have a tent in a D or Z Zone.

In terms of amenities, there are no amenities; food and water are whatever can be bought, scavenged, or stolen, protection from the elements is rudimentary at best, matrix access is nonexistant, etc.

The character only has themselves for security - and if they don't make enough to pay off the gangs will have to contend with those issues as well.

They will likely have the utter minimum in terms of equipment, including base toiletries and urban survival equipment, a very poor quality commlink (Small Computer w/ everything the GM wants to throw at it), limited resources, etc.

Much of their limited equipment is likely illegal in that it was stolen or scrounged since they both won't make enough, nor have a SIN (Unless they are a SINner) to pay for anything.

The GM is recommended to assigns conditions and penalties as appropriate, with examples being: Missed FP from missed meals, water, and sleep, health issues from the environment, environmental effects such as pollution and acid rain, thieves and police harassing them, etc.

2.6.1 Magic and Technology

TODO: Talk about getting Resistant (Magic) / Magic Resistance for robots & from cyberware.

2.7 Equipment

2.7.1 GURPS Pyramid #3/55 - Military Sci-Fi

This article painstakingly updates many of the Ultratech firearm accessory systems to the High-Tech and Tactical Shooting standards. In general, all of it should be *available* by default, however accessories are not immediately included on firearms by default, and should be decided upon by the GM. As usual, a list of items that should be included for the setting is provided:

A Better Gun covers some of the advances that TL9 firearms have over their predecessors, including electrical ignition, reduced moving parts (which lower volume), caseless cartridges, higher density magazines, ETC guns, Liquid-Propellant guns, and taggants. All of these are fitting for Shadowrun, except for ETC, Liquid-Propellant, and taggants.

Malfunctions and Other Issues covers the improved reliability of firearms.

Camouflage covers Chameleon Coating for weapons.

Smartchokes details how multiple-projectile guns (like shotguns) are fitted with auto-adjustable chokes.

Lockouts and Tags are sometimes in use, largely only for Military and Security firearms - and only ever through additional expenses. These options are generally available to be added to particularly paranoid runner's weapons. One part of note, is that due to the profitability of black ops for corporations, most forms of forensic aiding taggants are not included in their public designs.

Handgrips and Stocks, Accessory Rails both cover conventional changes for weapon ergonomics and accessories, and are easily included.

Diagnostic Computers explains the many benefits provideable by the Diagnostic Computers that can be found in Smartgun Systems.

Easy Hitting is a critical overhaul to many of the Ultratech accessories that had fallen behind the norm of development and is a must to include. Most notably, this includes the updating of the HUD Link to provide +1 Guns within LoS (5,000 yards), negate up to -3 in darkness penalties when shooting, and provide both the benefits of sighted and unsighted shooting simultaneously.

It also details the rule specifics for using a HUD Link to fire around corners, details the effects of back glow on non DNI HUDs, details the HUD Link's devaluation of Masked Shooting (TS44), and covers how it stacks with the Targeting Software of Smartgun systems.

Iron Sights gives the option to save money by removing iron sights.

Laser Sights covers how TL9 technology combines with laser sights to provide increased capabilities such as Rangefinding, detection, lighting, and dazzling.

 $IFF\ Interrogators$ covers the bonuses to Situation Awareness (TS11) from IFF and TacNets.

Targeting Scope covers the specific usage of the Compact Targeting Scope (UT149).

2.8 World Design

2.8.1 Security Devices

When designing security, it's important to have a good grasp of the tools at their disposal, how they are implemented, and how they are circumvented. GMs should look into Security and Surveillance (HT202) and Covert Ops and Security (UT93) for examples.

Locks Locks (HT203) are still a standard facet of security are are a topic in Pyramid #3/47 Safes and How to Open Them. Whether it comes to their use as deterrents, slowing down, or simply keeping track of who has access to what, they are here to stay.

The average lock is Standard Construction and Basic Quality, providing locksmiths relative ease to bypassing it. Security focused installations (less common that you would think!) might make use of Good Quality locks with Tough Construction for those that are hard to monitor or catch people trying to break off. Fine Quality locks are very uncommon, simply because electronic methods tend to do it better - however sites that are paranoid of deckers may still implement these, or better yet mix them in! Sufficiently important locks are likely to trigger additional security devices, such as alarms, relockers (PY47:33), and so on. As well, some high Quality or large locks can have larger timeframes (PY47:34), such as an hour.

The obvious way to circumvent these are to lockpick them using the Lockpicking (B206) skill, usually requiring a set of Lockpicks (HT213) or their modern counterpart the Electronic Lockpick (UT95). For a basic lock, a Lockpick Gun (HT213) is invaluable for saving time! As well, many locks are old, simply due to cost or the fact that they can just be left on. This can lead to Tech Level bonuses (HT203) or lowered HT (see below). Additional tools are found in Pyramid #3/47 p35.

For particularly important locks, it can be important to research their working (PY47:34), often by determining its make and model with Sense rolls, Observation, social engineering, Expert Skill (Locks and Safes), or Mechanic (Locks and Safes). Research can generally be used as well, although it will likely require a successful Sense or Observation roll to find info that is noteworthy to research. This can also turn up drill points (PY47:35), secret locations intentionally or unintentionally left weakened that can be exploited to access the mechanisms, which are a great assist to lockpicking.

For combination locks, brute forcing and guessing (PY47:34) is an option (given there is no penalty for trying), and can be assisted by Research (to determine likely candidates), Search (to find records of the code), or just by luck. Certain machines can automatically iterate through combinations, but often have to be built for a specific lock using Mechanic (Locks and Safes).

Sensors can provide valuable assistance, such as fiber optic scopes or X-ray machines to image the mechanism (PY47:45).

Brute force to the mechanism is a favourite option as well. Locks themselves tend to have low HP and reasonable DR if left outside accessible outside a reinforced barrier (such as a safe (HT203, PY47:33) or armored door (HT202, UT101)). If you wish to attack the lock itself, you should have Forced Entry (B196) and use specialized equipment, such as rams (HT29), frangible rounds (HT103, HT167, TS78), or at least a boot. Door Breaching from Tactical Shooting p24 covers how to do this without ruining the lock! Explosives work perfectly well too, making use of the Explosives (Demolition) (B194) skill; see Demolition (B415) for rules on calculating damage, Demolitions (UT88) and Explosive (PY51:3) for Ultra Tech explosive options (Including TL9 Thermite!), and the Explosives and Incendiary (HT181) section. Make sure to use explosives designed for the job!

Electronic Locks Electronic Locks or Maglocks (HT204, UT102) are relatively standard locking systems that rely on digital authentication rather than and physical key. This is very beneficial for ease of use and maintenance, however it can also open them up to other vulnerabilities.

These locks come in the same grades as Locks, with the addition of Simple and Complex locks from Ultratech (The GM should choose which he cares to use). They tend to be more expensive themselves, but their saving in maintenance and administration tend to make up for that, leaving locks that are not as old or outdated alongside being easier to secure

The straightforward way to bypass an electronic lock is to tamper with the circuits controlling it. This requires some method of gaining access to them, usually popping open a case, however that might not be easy for every model. With access, an individual can use Electronic Repair Tools (HT23, UT82). an Electronic Lockpicking Kit (HT213) or its modern brother the Electronic Lockpick (UT95) to perform an Electronics Operation (Security) (B189) to bypass the circuit. Particularly valuable circuits will have anti-tamper systems, which can provide effects such as penalties to checks (HT), requiring a second roll to avoid setting off the alarm (HT206) requiring being disabled first, or simply triggering systems on failures.

Indirect methods work extremely well here, depending on

the type of lock. Keycard locks can be fooled by cloning the Keycards of individuals. This often requires knowledge of the type of keycard, sometimes obtainable through Observation, Expert Skill (Computer Security), social engineering, Electronic Operation (EW or Security) (To simply detect the format yourself), or suitable Research rolls from bits of information. Then, a tool can be set up to clone keycards within a small range using Electronic Operation (EW or Security) (For store-bought tools), Engineer (Electronics) (to put one together), requiring suitable Stealth, Savoire-Faire, and so on (to get close enough), etc. Skimmers are another route, which are used to cover the actual Keycard Scanner and scan the keycards alongside them, requiring suitable Engineer (Electronics) (to design and make it) alongside a suitable skill for hiding the appearance of the Skimmer.

Keypads are easier. One can simply watch an individual put in their PIN and write it down. Some keycards have shields blocking sight to them. You can also wipe the screen clean, wait for someone to enter, and then dust for fingerprints (A Forensics roll at +4 or more) in order to determine what numbers were pressed - and try to work it out from there. Skimmers can be put over the keypad as well, reading the button presses while transferring them to the real system below, requiring suitable Engineer (Electronics) (to design and make it) alongside a suitable skill for hiding the appearance of the Skimmer.

Biometric locks (HT205, UT104) are the most difficult, requiring things like fingerprints, retina or face scans, or sometimes even more invasive tests. Biometric Cracker Tools (UT95) are invaluable here, providing sensors and decoders that can be used to scan an individual's biometrics and implement them in ways to spoof the lock. For Fingerprint and Retina biometrics (HT205), an Electronic Thumb (UT96) is a perfect way to bypass, although more mundane ways work on cheap versions (Breathing on fingerprint scanners to scan the last fingerprint for instance.

Secure locks will require multiple of these systems, making accessing the circuits a much more viable option. The best electronic locks will make use of two or even three of the following categories: Something you know (A PIN), Something you have (A keycard, phone, or fob), and Something you are (Your body).

Failure to bypass electronic locks can have more dangerous consequences. Their digital nature makes it much easier to sound the alarm, often through hard-wired control systems - because wireless ones would be very vulnerable to deckers, although they are still extremely convenient and ergo still used. They can also record logs of who opened them and when, which can prove very suspicious to anyone watching them. For extremely secure facilities, just opening a door might be reason to investigate. At the same time, being interconnected with the facility can make them easy prey for Deckers who have hacked a host, allowing control, spoofing, disabling, and more of any locks that are even hard-wired to the host's systems.

Lastly, all the same brute force methods for normal locks apply here! In addition, a common method is to cut the power! Most locks are necessarily "fail-safe" locks, meaning that they open with a lack of power, due to emergencies like fires. Some extremely secure doors, such as prison doors, are "fail-secure" and will stay shut when power is lost, which is

very dangerous!

Doors Doors are as important a consideration to security as locks are. Having an extraordinary and fancy maglock means nothing if the opposition simply knocks out the hinges on your door. Additionally, armored doors (HT202, UT101) or safes (HT203) can be used to greatly improve the security of the door itself.

Doors are homogenous objects with varying DR and HP based on their size (B558). Their common materials are plastics, woods, and metals, for increasing levels of durability and cost.

Hinges should be responsibly placed on the interior to prevent removing them (Requiring only a small metal stick and hammer-like object) or shooting them (TS24), although it's still commonplace to have them anywhere. Some doors that are required to have hinges externally (usually for space considerations) may include covers for them, weld or secure their pins inside, or provide other security to protect them. As well, even if they are inside, if the door is not made of a strong material, one can still simply shoot through to door to hit the hinges (With blind-fire penalties of course).

Many doors are sliding instead, removing the issue of hinges, but inserting one of both power and control. The system that controls the door can be hacked (if wireless) or spoofed as normal. One of the most common system is an IR Motion Sensor that automatically activates the door, often only placed on the secure side. If there are any opening, an intruder can wave tools through or spray smoke behind the door to trigger such a sensor.

By far, the easiest way to bypass doors is through social engineering. Because they are a constantly used public tool, piggybacking behind people with access is a common technique, requiring a simple Savoire-Faire roll. Obstructions can be placed so that they prevent the door from shutting, although secure doors can have warnings that trigger if they fail to shut entirely.

An indirect method is to simply ignore the door and go for the wall. If your intention is to destroy the door to enter, make sure that the wall is just as strong as it, because a metal door won't be near as strong as a brick wall to its side.

Fences and Walls Security Fences (HT204) Wires and Fences (UT102)

Portal Scanners Instrusion Detection Devices (HT205) Screening Systems (HT206) Surveillance Sensors (UT104) Portal Scanners (UT104)

Scanners Instrusion Detection Devices (HT205) Surveillance Sensors (UT104)

Traps Traps are an extremely uncommon form of security, for the simple reason that they don't discriminate. Most any place of important has people that are working there are creating the things of import, meaning that leaving claymores, buzz saws, automatic turrets, and so on can be extremely dangerous because *somebody*.. eventually.. will be stupid or unlucky enough to set them off.

They should only be used in cases where the risk of intrusion heavily outweighs the threat to workers (MCT Zero

Zones), the area where they are set up does not see traffic (Faux sites, fake entrances, honeypots - however these are still risky as people wander!), or are extremely good at discriminating (Keycard and facial recognition based turrets that are fail-safe).

The only real professional option are traps that are manually triggered in emergency situations. Some common examples of these are raising bollards or nets to stop cars, Electromagnetic Car Stoppers (HT203), closing security doors, etc.

2.8.2 NPCs & Power Levels

Shadowrun and GURPS both leave the fine parts of balancing up to the GM, giving general guidance over something as complex and useless and Challenge Ratings. In general, the most useful metric is simply how competent and well paid the bad guys are, described by a Professional Rating from 1 to 6.

Below is a list of examples, however keep in mind that most NPCs will not be as focused on Shadowrunning or Security as the player characters are - even those in the business! Make sure to not put all of their points towards being an obstacle to the players, as they have lives, mundane 'ware, hobbies, wealth, social advantages, etc that are less present in the SINless. If you find it so helpful, I have included Pyramid #3/77's Combat Effectiveness Rating, although note that I find it highly variable and largely flawed.

While one might looks at the *Power Level* section (B487) in order to either compare or create their own ranges, there should be some additional concerns to keep in mind! TL9, even in a cyberpunk dystopia, will naturally have higher point ranges than one's intuition of TL8.

In the same way that a TL8 character receives better education, nourishment, opportunities, and so on than a TL7 character, the same is (partially) true for TL9, especially when one includes cyberware and bioware which can each cost as much as a small advantage. All of these qualities cost points, and that naturally raises the average point level. This is combined with the relatively cinematic world of Cyberpunk and Shadowrun, which naturally raises the points as well.

For a hyperbolic example, a TL0 hunter gatherer might have some decent ST, HT, and perhaps even DX, from training, but will have a very limited selection of skills, training, wealth, so on. This means that the hunter gatherer will have a much lower point count.

Of course, all of these are before this document raised most attribute costs, which also should increase the Power Levels. All of this together is why each PR category seems to be around 1 to 2 categories *above* their respective Power Level categories (e.g. Beat Cops being 150 Points here and 50-100 points in Power Levels).

- PR 1 (50 Points): Street Trash; This consists of muggers, wageslaves, and so on. Runners should be able to take on large numbers of these individuals in competition.
- PR 2 (100 Points): Mooks; These are poorly trained, but at least experienced individuals when it comes to things. These might be Script Kiddies, Corpos or College Students, Gang Enforcers, Street-level Runners and

- so on. They can be dangerous in larger numbers, but are overall speed bumps.
- PR 3 (150 Points): Professionals; These are individuals that have either received large amounts of training, large financial backings, or a mild mix. This can be Beat Cops, Organized Crime Members, Security Guards, Social Defender Staff, Scientists, many Contacts, and so. While these people aren't major threats individually, they are often well organized and supported by security layers and backup, making them genuine threats if not approached carefully.
- PR 4 (200 Points): Experts; These are individuals who have either tons of expert training and experience, lots of financial backing and resources, or more often some milder mix of the two. This is corporate private security, Shadowrunners, leading scientists, diplomats and leads, DemiGODs, etc. These people can pose genuine threats to runners in an individual situation, however the GM should note that while they are the same point levels these NPCs should not be as competent as runners (e.g. make sure to set aside a portion of points for their non-security lives!) without security to back them up.
- PR 5 (250 Points): Specialists; These are the individuals that can match or exceed runners. These people have tons of expert training and experience and the financial backings of powerful players. Some Special Operators, some Corporate Black-Ops, leading R&D scientists and engineers, high ups on the food chains, GOD, many infected, so on. When combined with security they can present an extreme challenge.
- PR 6 (300+ Points): Pinnacles; These are individuals that are meant to challenge part of if the the whole runner team. Prime Runners, named individuals or organization such as the Red Samurai, the high ups higher ups, tech leads for GOD, and even worse. like drakes and free spirits. These individuals are centerpoints of security or are flags to tell your players they're in over their heads!

2.8.3 Example NPCs

Special Operator, PR 5

257 points, 141,000¥, CER: 130.5 (85/45.5)

Attributes: 132 ST +1(+2) [7]; DX +2(+1) [50]; IQ +2 [30]; HT +1 [15]; Per +2 [10]; Will +2 [14]; HP +1 [2]; FP +1 [4]

Advantages: 45 Combat Reflexes [15]; Fit [5]; Military Rank 2 [10]; Patron (Megacorp, FoA 6) [30]; Status 1 [5]; Comfortable [10];

'Ware: ⁸ 14 Cybereyes (Deltaware; Protected Vision; Nictating Membrane 4; Hyperspectral Vision; Acute Vision 1) [2, 24,000¥]; Dermal Plating 2 (Betaware; Steel) [1, 15,000¥]; Muscle Replacement (Deltaware, Invasive) [6,

⁸CP:¥ Ratios may vary, as I didn't consider heavily the GM dependant features such as invasiveness.

42,000¥]; Wired Reflexes 2 (Deltaware) [3, 36,000¥]; Wireless Datajack (Deltaware) [2, 24,000¥];

Disadvantages: -50 points chosen from the following: Bad Temper []; Bloodlust [-10*]; Code of Honor (Soldier's) []; Code of Honor (Officer's) [-10]; Code of Honor (Professional's) []; Fanaticism []; Honesty []; Sense of Duty [];

-7 points from Essence Loss Disadvantages: Bad Temper [-10*]; Bloodlust [-10*]; Fearfulness [-2e]

Perks: ⁹ 3 Style Perk (Assaulter) [1]; Battle Drills [1]; Barricade Tactics (Rifle) [1]; Cool Under Fire [1]

Primary Skills: 76 Armoury (Small Arms) (A) IQ-1 [1] - 11; Brawling (E) DX+1 [2] - 14; Climbing (A) DX+1 [4] - 14; Explosives (Demolition) (A) IQ+1 [4] - 13; Explosives (EOD) (A) IQ-1 [1] - 11; Fast Draw (Pistol) (E) DX+1 [1] - 14; Fast Draw (Ammo) (E) DX+1 [1] - 14; Forced Entry (E) DX [1] - 13; Guns/TL9 (Pistol) (E) DX+1 [2] - 14; Guns/TL9 (Rifle) (E) DX+3 [8] - 16; 8 points chosen from other Guns and Gunner specialties; Shield (E) DX [1] - 13; Soldier (A) IQ+1 [4] - 14; Stealth (A) DX+1 [4] - 14; Tactics (H) IQ+1 [8] - 13; Throwing (A) DX-1 [1] - 12; Traps (A) IQ [2] - 12;

Secondary Skills: Acting (A) IQ-1 [1] - 11; Body Language (A) Per-1 [1] - 11; Camouflague (A) IQ [2] - 12; Driving (Automobile) (A) DX-1 [1] - 12; Electronics Operation/TL9 (Communications) (A) IQ [2] - 12; Electronics Operation/TL9 (Security) (A) IQ [2] - 12; First Aid/TL9 (E) IQ [1] - 12; Hiking (A) HT [2] - 11; Lockpicking (A) IQ-1 [1] - 11; Navigation (Land) (A) IQ [2] - 12; Savoire-Fair (Military) (E) IQ+1 [2] - 13; Savoire-Faire (Corporations) (E) IQ+1 [2] - 13; Search (A) Per-1 [1] - 11; Streetwise (A) IQ-1 [1] - 11; Urban Survival (A) Per [2] - 12;

Techniques: 17 Close Quarters Battle (Guns (Pistol)) (A) Guns (Pistol)+1 [1] - 15; Close Quarters Battle (Guns (Rifle)) (A) Guns (Rifle)+4 [4] - 20; Immediate Action (Armoury (Small Arms)) (A) Armoury (Small Arms)-3 [1] - 8; Quick Shot (Guns (Rifle)) (A) Guns (Rifle)+0 [6]-16; Targeted Attack (Skull) (H) Guns (Rifle)-3 [5]-13

Equipment: Full Body Armour w/ Plates; Ares Alpha

⁹Pretty much all of these perks are from Tactical Shooting.

3 Metatype

In the Sixth World, humanity has awakened a variety of differing subspecies, generally collectively referred to as Metatypes and Metahumans collectively. A wide variety of these are available to players, ranging from the 'mundane' Human or Elf, to the more outlandish Nartaki or Oni. Alongside this, a number of sapient Critters known as Metasapients are available for players, such as Pixies and Sasquatch.

3.1 Unusually Sized Metatypes

Many metatypes are of an unusual size compared to standard humans, generally ranging from SM+2 to SM-1. This can have some interesting considerations to account for, largely in equipment sizing and cost alongside Cost of Living.

TODO: This.

3.2 Metahumans

Metahumanity serves as the prevalent — albeit debatably dominant — species on the planet, with a wide variety of subspecies and variants. Metahumans serve as the most common and original subspecies humans split off into during the Awakening.

Metatype	CP
Human	15
Elf	39
Dwarf	32
Orc	25
Troll	65

Human

15 Points

Advantages: Choose one of: Luck [15], Serendipity [15]

Elf

39 Points

Attributes: DX+1 [25] Advantages: Appearance (Attractive) [4], Charisma 1 [5], Extended Lifespan 2 [4], Longevity [2], Night Vision 5 [5] **Disadvantages:** Social Stigma (Minority Group) (Accessibility, 10% Population, -35%) [-6]

Dwarf

32 Points

Attributes: ST+1 [7], HT+1 [15], Will+1 [7], HP+1 [2], FP+1 [4], Basic Move-1 [-5]. Basic Speed -0.50 [-10]

Advantages: Extended Lifespan 1 [2], Infravision [10], Resistant (+3, Pathogens and Toxins) [9], Resistant (Immunity, Chloroform) [1], SM+0 Proportions¹⁰ [1], SM-1 [0]

Disadvantages: Increased Consumption (x4/3, 4 meals a day) [-5], Social Stigma (Minority Group) (Accessibility, 5% of the population, -40%) [-6]

Orc

25 Points

Attributes: ST+3 [21], IQ-1 [-15], HT+2 [30], HP+2 [4], FP+1 [4]
Advantages: Night Vision 5 [5]
Disadvantages: Appearance (Unattractive) [-4], Short Lifespan 1 [-10], Social Stigma (Minority Group) [-10]

Troll

65 Points

Attributes: ST+6 (SM+1, -10%) [38], IQ-1 [-15], HT+3 [45] HP+3 [6], FP+2 [8], Per-1 [-5]

Advantages: Crushing Striker (Horns) (Cannot Parry, -40%; Front Arc Only, -40%) [1], Damage Resistance 2 (Tough Skin, -40%) [6], Infravision [10], SM+1 [0]

Disadvantages: Appearance (Ugly) [-8], Social Stigma (Minority Group) [-10], Distinctive Features (Horns) [-1], Short Lifespan 1 [-10]

3.3 Metavariants

There are many variant species for the different types of Metahumans. They are often much rarer than their original counterparts alongside often being

geographically restricted to certain areas and cultures.

Metatype	CP
Human Metavariants	
Nartaki	2
Dwarf Metavariants	
Gnome	48
Hanuman	24
Koborokuru	41
Menehune	40
Elf Metavariants	
Dryad	50
Nocutra	35
Wakyambi	46
Xapiri Thëpë	32
Orc Metavariants	
Hobgoblin	18
Ogre	18
Oni	48
Satyr	27
Troll Metavariants	
Cyclopean	36
Fomorian	46
Giant	52
Minotaur	89

3.3.1 Human Metavariants

Nartaki

2 Points

Advantages: ¹¹ Extra Arms 2 [20] May additionally take: Enhanced Tracking 1 [5] and/or Extra Arms 2 [20]

Disadvantages: Social Stigma (Minority Group) [-10]¹², Appearance (Unattractive) [-4], Unnatural Features 4 (Skin Pigmentation, Extra Arms) [-4]¹³

3.3.2 Dwarf Metavariants

Gnome

48 Points

Attributes: ST -2 [-14], DX +1 [25], IQ +1 [15], HT -1 [-15], Will +7 [7], Basic Move -1 [5] **Advantages:** SM -2 [0], Extended Lifespan 1 [2], Infravision [10], Magic Resistance 1 (Improved, +150%) [5]

¹⁰SM+0 Proportions: Dwarves can use SM+0 equipment for the upper body (Such as swords and firearms) without any penalties.

¹¹Due to Hindu culture honoring Nartaki, consider looking into advantages related to priesthood.

¹²Most Nartaki, especially those part of the Hindu priesthood, can buy off their Social Stigma. In places like Seattle, however, it is very likely to still be present.

¹³Debatably, Unnatural Features should not apply due to it being Unnatural for your race, which would be Nartaki. In such a case, simply replace it with Distinctive Features.

Disadvantages: Social Stigma, Minority Group [-10]

Hanuman

24 Points

Attributes: ST +1 [7], DX +1 [25], IQ -1 [-15], Per +2 [10], Basic Move -1 [-5] Advantages: SM -1 [0], Brachiator [5], Extended Lifespan 1 [2], Extra Arm (Extra-Flexible, +50%; No Physical Attack, -50%) [10], Night Vision 5 [5] Disadvantages: Appearance, Ugly [-8], Social Stigma, Minority Group [-10]

Koborokuru

41 Points

Attributes: ST +1 [7], HT +1 [15], Will +7 [7], Basic Move +1 [5] Advantages: SM -1 [0], Extended Lifespan 1 [2], Infravision [10], Resistant, Pathogens and Toxins +3 [9]

Disadvantages: Appearance, Unattractive [-4], Social Stigma, Minority Group [-10]

Menehune

40 Points

Attributes: ST +1 [7], DX +1 [25], HT +1 [15], Basic Speed -0.50 [-10] Advantages: SM -1 [0], Extended Lifespan 1 [2], Infravision [10], Nictating Membrane 1 [1]

Disadvantages: Social Stigma, Minority Group [-10]

3.3.3 Elf Metavariants

Dryad

50 Points

Attributes: ST-1 [-7], DX+1 [25] Advantages: Appearance (Very Beautiful) [16], Charisma 1 [5], Extended Lifespan 2 [4], Longevity [2], Night Vision 5 [5], Symbiosis: Modular Ability 8 (Environmental, Home Ground, -30%; Requires Will Roll, -5%; Magical, -10%; Uncontrollable, -10%; Unconscious Only, -20%; Nuisance Effect, Can give negative points in a bad environment, -5%) $[7]^{14}$

Disadvantages: Distinctive Features (Glamour) [-1], Social Stigma (Minority Group) (Accessibility, 10% Population, -35%) [-6]

Nocturna

35 Points

Attributes: DX+2 [50], HT-1 [-15] Advantages: Acute Sense (Hearing) [2], Charisma 1 [5], Extended Lifespan 2 [4], Longevity [2], Night Vision 5 [5] Disadvantages: Social Stigma (Minority Group) [-10], Susceptible, Allergy 5 (Extremely Common, Sunlight & Very Bright Light; Moderate Pain, -80%) [-8]

Wakyambi

46 Points

Attributes: DX+1 [25], Per+1 [5] Advantages: Extended Lifespan 2 [4], Longevity [2], Night Vision 5 [5], SM+1 [0] Choose one of: Luck [15], Serendipity [15]

Disadvantages: ¹⁵ Social Stigma (Minority Group) [-10]

Xapiri Thëpë

32 Points

18 Points

Attributes: DX+1 [25]

Advantages: Charisma 1 [5], Extended Lifespan 2 [4], Longevity [2], Night Vision 5 [5], Reduced Consumption 3 (Trigger, Very Common, Sunlight, - 10%)[6]¹⁶

Disadvantages: Social Stigma (Minority Group) [-10], Susceptible, Allergy 5 (Common, Pollutants, Moderate Pain, -80%) [-4], Unnatural Features 1 (Photometabolism Patches) [-1]

May take Unnatural Features (Photometabolism) up to level 6, as the patches grow with age.

3.3.4 Orc Metavariants

Hobgoblin

Attributes: ST +1 [7], HT +2 [30], HP +1 [2], FP +1 [4]

Advantages: Acute Hearing 1 [2], Night Vision 5 [5], Teeth, Sharp [1] **Disadvantages:** Bad Temper, SC 15¹⁷ [-5], Short Lifespan [-10], Social Stigma, Minority Group [-10], Ap-

pearance, Unattractive [-4], Unnatural Features 4 (Skin Pigmentation, Eyes, Fangs) [-4]

Ogre

18 Points

Attributes: ST +3 [21], IQ -1 [-15], HT +3 [45], HP +3 [6], FP +2 [8], Basic Speed -0.50 [-10]

Advantages: Night Vision 5 [5], Reduced Consumption 4 (Cast-Iron Stomach, -50

Disadvantages: Short Lifespan 1 [-10], Social Stigma (Minority Group) [-10], Social Stigma (Monster) (Accessibility, Disproven, but held by around 33

Oni

48 Points

Attributes: ST +2 [14], DX +1 [25], IQ -1 [-15], HT +2 [30], HP +1 [2], FP +1 [4]

Advantages: Charisma 1 [5], Night Vision 5 [5], Striker (Crushing Horns; Cannot Parry, -40

Disadvantages: Short Lifespan 1 [-10], Social Stigma (Minority Group) [-10], Unnatural Features (Skin Pigmentation, Protuberant Eyes) [-2], Distinctive Features (Horns) [-1]

Satyr

27 Points

Attributes: ST +1 [7], HT +1 [15], FP +1 [4], Basic Move +2 [10], Basic Speed +0.50 [10]

Advantages: Hooves [3], Night Vision 5 [5], Longevity [2], Striker (Crushing Horns; Cannot Parry, -40

Disadvantages: Appearancs, Unattractive [-4], Short Lifespan 1 [-10], Social Stigma (Minority Group)

¹⁴Symbiosis provides up to 8 points for a single mental advantage or skill related to your home ground, as chosen by the GM. Symbiosis can change at the GMs discretion, taking 1 day and a successful Will roll - or a failed Will roll if you are not willing - to change abilities and usually dose so from the environment changing. If your home ground environment degrades drastically enough, you must roll Will. If you fail, your ability will change to a mental disadvantage or loss of a skill up to 8 points.

 $^{^{15}\}mathrm{Consider}$ advantages, quirks, and skills to reflect Wakyambi's common lack of education.

¹⁶Reduced Consumption 3 should reduce Cost of Living by roughly 10%.

 $^{^{17}\}mathrm{Feel}$ free to lower the Self Control number for your Hobgoblin.

 $^{^{18}\}mathrm{Consider}$ obesity related traits for Ogres.

¹⁹Digitigrade legs sometimes prevent proper mobility of the user when interacting with Plantigrade Leg equipment, such as when climbing ladders or operating certain vehicles physically, providing a -1 to -4 penalty as appropriate.

[-10], Unnatural Features (Satyr Legs) [-4], Distinctive Features (Horns) [-1], Digitigrade Legs¹⁹ [-1]

3.3.5 Troll Metavariants

Cyclopean

36 Points

Attributes: ST +8 [45], IQ -2 [-30], HT +3 [45], HP +3 [5], FP +2 [8]

Advantages:²⁰ Infravision [10], SM +2 [0]

Disadvantages: Appearance, Ugly [-8], One Eye²¹[-15], Short Lifespan 1 [-10], Social Stigma (Minority Group) [-10], Unnatural Features (Cyclopean Eye, Bronze skin) [-4]

Formorian

46 Points

Attributes: ST +6 [38], IQ -1 [-15], HT +2 [30], HP +3 [6], Per -1 [-5], Will -1 [-7], FP +2 [8]

Advantages: Infravision [10], Magic Resistance 1 (Improved, +150%) [5], SM +1 [0], Striker (Crushing Horns; Cannot Parry, -40

Disadvantages: Appearance, Unnatractive [-4], Short Lifespan 1 [-10], Social Stigma (Minority Group) [-10], Distinctive Features (Horns) [-1]

Giant

52 Points

Attributes: ST +6 [34], IQ -1 [-15], HT +3 [45], HP +3 [5], Per -1 [-5], FP +2 [8], Basic Speed -0.50 [-10]

Advantages: Infravision [10], Damage Resistance 3 (Tough Skin, -40%) [6], SM +2 [0]

Disadvantages: Appearance, Unattractive [-4], Short Lifespan 1 [-10], Social Stigma (Minority Group) [-10], Unnatural Features (Bark Skin) [-2]

Minotaur

89 Points

Attributes: ST +6 (SM +1, -10%) [38], IQ -1 [-15], HT +4 [60], HP +4 [8], FP +4 [16]

Advantages: SM +1 [0], Infravision [10], Striker (Impaling Horns; Cannot

Parry, -40%; Front Arc Only, -40%) [2] **Disadvantages:** Appearance, Ugly [-8], Short Lifespan 1 [-10], Social Stigma (Minority Group) [-10], Unnatural Features (Facial Structure) [-1], Distinctive Features (Horns) [-1]

3.4 Metasapients

Metaspaients are non-human sapient creatures, such as Centaur or Naga. They're just as intelligent (for the most part) as any person you'll find on the street, although that doesn't mean that they necessarily think the exact same way! Lesser Centaurs for example, are cast out by their tribe for looking part human, and only a few of them will still willingly interact with human society to survive.

While much of the templates in this book are tuned to be close to their original game stats and lore descriptions, metasapients are a hard departure from this. Many of them would have extraordinarily strange stats compared to their (presumed) non-awakened counterparts. Once again, a prime example of this is the Lesser Centaur, who should end up with something close to a ST 14 racial average based on Shadowrun's statistics, however horses have 22-25 ST in GURPS (And with good reason, you will die if a horse kicks you!).

Metasapient	CP
Awakened Creatures	
Centaur	113
Naga	
Pixie	
Sasquatch	

Lesser Centaur

113 Points

Attributes: ST +10 (SM 2, -20%) [56], HT +2 [30], HP +2 [4], Will +7, FP +1 [4]

Advantages: SM +2 [0], Detect, Magic (Occasional; Magical, -10%) [9], Search [29²², Extra Legs (4 Legs) [5], Spark [4], Magic 1 [8], Hooves [3], Infravision [10], Night Vision 5 [5]

Disadvantages: Appearance, Unattractive [-4], Missing Digit (Fingers, Both Hands) [-4], Social Stigma, Minority Group [-10], Unluckiness [-10]. Naga

118 Points

Attributes: ST +6 [38], IQ -1 [-15], HT

+1 [15], HP +2 [4]

Advantages: Infravision [10], Striker (Impaling Horns; Cannot Parry, -40

Disadvantages:

Pixie

134 Points

Attributes: ST -8 [-56], DX +1 [25], IQ +1 [15], HT -2 [-30], Per +1 [5], Will +2 [14], Basic Move -1 [-5], Basic Speed +0.25 [5]

Advantages: SM -4 [0], Appearance, Attractive [4], Charisma 1 [5], Flight (Planetary, -5%: Magical, -10%; Nuisance Effect, Cosmetic wings, -5%) [32], Magic 1 [8], Obscure, Vision 1 (Defensive, +50%; Extended, Infravision, +20%; Stealthy, +100%; Magical, -10%) [6], Spark [4]

Choose one of:

Luck [15], Serendipity [15]

Disadvantages: Social Stigma (Minority Group) [-10]

Sasquatch

X Points

Attributes: Wah Advantages: Wah Disadvantages: Wah

3.5 Artificial Intelligences

Artificial Intelligences	CP
Protosapient	90
Metasapient	107
Xenosapient	109
E-Ghost	96 base

Building an Artificial Intelligence character is an extremely involved process. Due to their ecclectic combination of traits, they end up becoming very expensive characters that are not as intuitive to build as others. As such, it's highly recommended that GMs do not let the faint of heart attempt creating these. Much of the systems for these characters are drawn from GURPS Transhuman Space, so please do give that a read if you are considering this.

If an AI wishes to have a corporeal body to interact with the physical world,

 $^{^{20}}$ Rarely, Cyclops grow singular horns, in which case simply take the horn advantage from the Troll base Metatype.

²¹Cannot be replaced via Cyberware, etc because the Cyclopean brain lacks the fundamental structure for binocular vision.

²²If you increase Magic, you must increase the cost of the Search power!

they must buy one separetly, and the GM must make some decisions. When allowing AI characters, the GM must decide on one of two options, with the recommended one being the latter:

• Points: The AI must pay the full point price for their most expensive body, even if they are in a less expensive body most of the time. Additional bodies are bought as an Ally with the Minion enhancement, and a Puppet or Puppet Group. Most drones can be bought without Pilot Programs, giving them no mental scores, and dropping Ally costs massively.

As well, more granular ally costs from Social Engineering p42 are recommended, especially for bodies with large negative costs. These bodies will often have a FoA of Constant, unless for some reason they are not available at any given time.

This option tends to make AIs extremely expensive, as robot bodies tend to be well over 60 points, and can leave AI with little in the way of spare points. However, it keeps the power levels relatively equal among AI and non-AI characters.

Conversely, it can be unfair to charge AI points for their comptuers, cars, etc. simply because they have the Possession advantage (Especially since that advantage should cover the cost itself!) - a rigger can accomplish many of the same things as the AI can, but with money!

• Money: The AI must only pay points for bodies that are unavailable to an average runner. No buying Mitsuhama's classified combat anthro-drone with cash! Otherwise, they pay for their bodies with money, as does anybody else, alongside upgrades. They will still need to stat out their bodies, however these are only for game purposes.

GMs should be wary of characters using this to eek out additional options on their bodies with limited cost (Such as deciding on

their lonesome that their drone is rugged and has 12 HT).

This tends to make AI somewhat more powerful (Least of all because they require high Wealth in order to play at all, however such feats are not impossible for a similar rigger or decker.

The GM should consider loosening restrictions on Wealth (As for Deckers and Riggers), alongside allowing the AI to consider stock drone or computers for Settled lifestyle items, as they are in many ways their domiciles (Although they should not forget that they will still require a house to store many of these things, or suffer HT loss through decay!).

It's not entirely unfair to attempt a middleground option that has AI paying points for their main (or most expensive) body, and money for all others. However, this option tends more towards acquiring all the negatives of both alongside little of their positives.

Some traits are split between the AI and the robot/computer body. This is generally just a quirk of Transhuman Space allowing AI to inhabit biological cybershells. This may cause some small point differentials in cases where multiple bodies are owned, so feel free to move some traits between the AIs and the bodies.

AI are limited by the complexity of systems that they reside on (This is the Taboo Trait (Complexity limited IQ).), which restricts them to systems with a complexity of at least half their IQ. If the system does not have the necessary power, the AI can run at extremely slow speeds compared to their normal, lowering their IQ to the system's maximum possible while on it. Not that this does contradict UT25, which is good, because those estimates are insanely high (Complexity 9 for a human brainscan!?) and contradicted by later articles!

This does mean that most AI will be limited to running on Microframes - and sometimes expensive Microframes or Mainframes - if they wish to keep their full IQ. GMs who find this deviates too far from original Shadowrun, can apply a modifier to the restriction (as seen in Ultratech p25, although in the opposite direction), making it IQ/2-1 or less. Alternatively, the Matrix is often characterized as a highly distributed network of processing power, meaning that it could be justified that the Matrix picks up the slack when running an AI due to its unique nature.

AI must buy computers that they can run on. This means that, if they run on a laptop, they must buy that as a body. If they run on a mainframe, they must buy that as a body as well. These rules work exactly like robot bodies, because computers are literally just really restricted robot bodies.

AI do have DX scores, representing their programming's overall precision when operating components. This is the same as pilot programs, which have their own DX scores based on their rating. When in physical bodies, the body itself also provides a modifier to its DX, representing the body's own capabilities. Wherever necessary, an AIs DX is a mental attribute, not a physical one.

AI do not have ST or HT scores, including their derivative traits. These traits are determined by the computer or robot the AI is running on. Do note, that computers do not have ST scores themselves, which is generally not an issue due to most instances requiring ST choose between ST or HT. However, some instances are dependant on ST, such as Knockback (B378). Those instances usually have specific rules stating what to do in those cases, e.g. Knockback says to use HP instead of ST for things like walls.

Do note that AI do note take any electrical or hardware related advantages or disadvantages, those are left to the bodies. They can take software related ones as normal, which many mental disadvantages can easily serve as.

For AIs that run on distributed systems, do not forget to include themselves among the programs, which can greatly limit the available program space on the network.

Als may also buy a number of normally impossible traits due to their digital nature, however the GM should feel free to limit these as they see fit:

• Enhanced Time Sense [45]. Provides the AI with extreme perception speeds by increasing the processing of visual data past biological limitations. This includes all of

²³Stop Motion details the mechanical benefits of ETS' high perception speed. It lets you read text at IQx25 word per second, before speed

the normal benefits found on B52 and also includes the benefits of the Stop Motion advantage from GURPS Powers Enhanced Sense $\rm p30^{23}$

- Computer Brain [6 + 4/pt]. Lets you download skills and run them as programs, similarly to skillsofts.
 The GM should usually restrict this to 6-8 points per slot or less.
- Compartmentalized Mind (No Mental Separation, -20%) [40]. By running subroutines and daemons, an AI can massively increase their mental speed, allowing for additional mental maneuvers. The GM should usually restrict this to 1 or 2 levels.

Protosapient

90 Points

Attributes: DX +1 [25]; IQ -2²⁴ [-30]; Per +3 [15]; Will +1 [7]

Advantages: Absolute Time [2]; Digital Mind [5]; Doesn't Sleep [20]; Extra Life (Copy, -20%; Body, -20%) [15]; Possession (Digital, -40%) [60]; Talent, Born to Be Wired 2²⁵²⁶ (Alternative Benefit, Improvised Software) [12]; Unaging (IQ Only, -75%) [4]

Disadvantages: Bestial [-10]; Obsession (Original Programming) [-10]; Reprogrammable [-10]; Social Status (Valuable Property) [-10]

Quirks: Take Incompetence in 5 skills from the list²⁷, representing Real World Naiveté²⁸:

Area Knowledge, Acrobatics/Aerobatics, Acting, Body Language, Detect Lies, Diplomacy, Fast-Talk, First-Aid, Guns, Physiology, Savoire-Faire, Sex Appeal, Streetwise, etc.

Features: Complexity 4 Program [0]

Metasapient

107 Points

Attributes: IQ + 1 [15]

Advantages: Absolute Time [2]; Digital Mind [5]; Doesn't Sleep [20]; Extra Life (Copy, -20%; Body, -20%) [15]; Photographic Memory [10]; Possession (Digital, -40%) [60]; Unaging (IQ Only, -75%) [4]

Disadvantages: Reprogrammable [-10]; Social Status (Valuable Property) [-10]

Perks: Console Monkey [1]

Quirks: Take Incompetence in 5 skills from the list, representing Real World Naiveté:

Area Knowledge, Acrobatics/Aerobatics, Acting, Body Language, Detect Lies, Diplomacy, Fast-Talk, First-Aid, Guns, Physiology, Savoire-Faire, Sex Appeal, Streetwise, etc.

Features: Complexity Limited IQ [0]

Xenosapient

109 Points

Attributes: IQ +2 [30]; Per +1 [5]; Will +1 [7]

Advantages: Absolute Time [2]; Digital Mind [5]; Doesn't Sleep [20]; Extra Life (Copy, -20%; Body, -20%) [15]; Intuitive Mathematician [5]; Photographic Memory [10]; Possession (Digital, -40%) [60]; Unaging (IQ Only, -75%) [4]

Disadvantages: Low Empathy [-20]; Obsession (Original Programming) [-10]; Reprogrammable [-10]; Social Status (Valuable Property)

Perks: Console Monkey [1]

Quirks: Take Incompetence in 5 skills from the list, representing Real World Naiveté:

Area Knowledge, Acrobatics/Aerobatics, Acting, Body Language, Detect Lies, Diplomacy, Fast-Talk, First-Aid, Guns, Physiology, Savoire-Faire, Sex Appeal, Streetwise, etc.

Features: Complexity Limited IQ [0]

E-Ghost

96 Points base

Attributes: The same as the original metatype (ignore ST and HT), although DX can differ as decided by GM.

Advantages: Absolute Time [2]; Digital Mind [5]; Doesn't Sleep [20]; Extra Life (Copy, -20%; Body, -20%) [15]; Photographic Memory [10]; Possession (Digital, -40%) [60]; Unaging (IQ Only, -75%) [4]

Choose one of:

Luck [15]; Serendipity [15]

The GM may also include mental/social advantages from the original metatype at their discretion.

Disadvantages: Reprogrammable [-10]; Social Status (Valuable Property) [-10]

Take -15 Points from 29 :

Bad Temper [-10*]; Chronic Depression [-15*]; Cowardice [-10*]; Flashbacks, Mild or Severe [-5/-10]; Guilt Complex [-5]; Nightmares [-5*]; Post-Combat Shakes [-5*].

The GM may also include mental/social disadvantage from the original metatype at their discretion.

Features: Complexity Limited IQ [0]

3.5.1 Non-Standard Robot Bodies

This is a section dedicated to bodies that are usually not thought of as bodies. AI can technically live in any computer system, given enough complexity, so the actual range of possible bodies is well beyond something like an anthrodrone.

Microframe

-248 Points, 10,000¥

Attributes: ST-10 [-70]; HP +14 [28] Advantages: Absolute Direction (Requires Signal, -20%; Mundane Countermeasures, -10%) [4] Damage Resistance 5 (Can't Wear Armor, -40%) [15]; Doesn't Breath [20]; Injury Tolerance (No Neck, No Eyes) [10]; Machine [25]³⁰; Telecommunication, Cable

reading. It provides a +5 (as if taking the maximum Extra Time) to any purely perception based tasks or skill, including Observation, Body Language, Connoisseur, Lip Reading, and Tracking.

²⁴Most Protosapients are IQ 6 or below, this template represents ones more suitable for PCs.

²⁵Power-Ups 3 p8. Provides bonuses to Computer Hacking, Computer Operation, Computer Programming, Cryptography, Electronics Repair (Computers), and Expert Skill (Computer Security), and replaces reaction modifiers with the Alternative Benefit: Computer Programming lets you improvise code that removes -1/level from the penalty for not having proper software for a task that requires it (p. B345).

²⁶This Talent is used to compensate for the low IQ that protosapients have and can increase or decrease as necessary.

²⁷The list of skills is not exhaustive. Any skill that relies on intuition regarding the world's physical laws, physical technology, body movement, and human society and social customs.

²⁸Incompetence in the chosen skills should be ones that reasonably come up for your character. No Acrobatics for a Decker.

²⁹E-Ghosts tend to have all sorts of mental issues baked in after their 'deaths'. Almost any mental disadvantage works here, but this list is just a selection of the best. Some of these have FP costs, and as such should have their effects worked out by the GM for AI.

³⁰Machine Meta-Trait is B263, including Immunity to Metabolic Hazards, Injury Tolerance (No Blood, Unliving), Unhealing, and a selection of 0-point features.

Jack (Video, +40%; Reduced Range, x1/2, -10%; Mundane Countermeasures, -10%) [6]; Telecommunication, Radio (Secure, +20%; Video, +40%; Reduced Range, x1/10, -30%; Mundane Countermeasures, -10%) [12]

Perks: Accessory (Computer) [1] **Quirks:** Affected by Magnetism [-1]; Cannot Float [-1]

Disadvantages: Blind, [-50]; Cannot Speak [-15]; Deafness [-20]; Electrical [-20]; Increase Consumption 4 (1/2 hour endurance if detached from power) [-40]; Maintenance (1 Person, -10; Monthly, x1/5) [-2]; No Legs (Sessile) [-50]; No Manipulators [-50]; No Sense of Smell/Taste [-5]; Numb [-20]; Restricted Diet, Electricity (Very Common) [-10]; Short Lifespan 1 [-10]; Unnatural Features 5 (Detectable by scanners) [-5]

Features: SM+0 [0]; Complexity 6 Hardware [0]; Sterile[0]; Taboo Trait (Physical Changes) [0]

Variants

Not all computers are made alike. These are a number of variants that can be used to further refine the computer body.

As well, the computer may be modified using the GURPS Ultratech section Customizing Hardware (UT23), which affects cost as normal. However, you must take into account how these might also influence statistics (Such as Compact likely lowering HP and SM). Some useful references are B558 for calculating HP from weight and B550 for SM for boxy objects.

Camera: While most computers have some form of camera attached to them, they are not default on Ultratech computers, remove Blind [-50] and Injury Tolerance (No Eyes) [5], and add One Eye [-15] unless the camera is designed to perceive depth (Or is set in binocular). Certain cameras may not be high quality or might be highly specialized, add Bad Sight[-25]³¹ and/or Restricted Vision [-1530] as well.

Microphone: While most computers also have microphones, they are not default on Ultratech computers, remove Deafness [-20]. Some microphones are low quality or highly specialized, add Hard of Hearing [-10] instead.

Case Sensors: Some valuable computers have pressure and tactile sensors

that can alert owners about various situations, remove Numb [-20].

Speakers: Many computers, often larger ones, do not have speakers for audio. They can still make beeps and such, for diagnostic purposes which is the Cannot Speak [-15] disadvantage. If it has proper speakers, remove Cannot Speak [-15]. In some cases, the speakers are not high quality or optimized for speech, which can be Disturbing Voice [-10] instead. Certain low-quality computers cannot even make diagnostic beeps, replace Cannot Speak [-15] with Cannot Speak [-20].

Rugged: Some computers have better core designs and durability, for these cases simply buy up higher HT. A usual value is HT 12.

Megaframe: Insanely powerful computers the size of entire buildings, that could possibly run entire countries. Change SM to SM+7 [0] (Although it can easily vary). Change Complexity to Complexity 9 Hardware [0]. Increase cost to 10,000,000¥. Increase HP to +136 [272]. They often also include a large amount of upgrades due to their value.

Macroframe: Giant, extremely power computers usually used to run entire government systems. Change SM to SM+5 [0]. Change Complexity to Complexity 8 Hardware [0]. Increase cost to 1,000,000¥. Increase HP to +64 [128]. They often also include a large amount of upgrades due to their value.

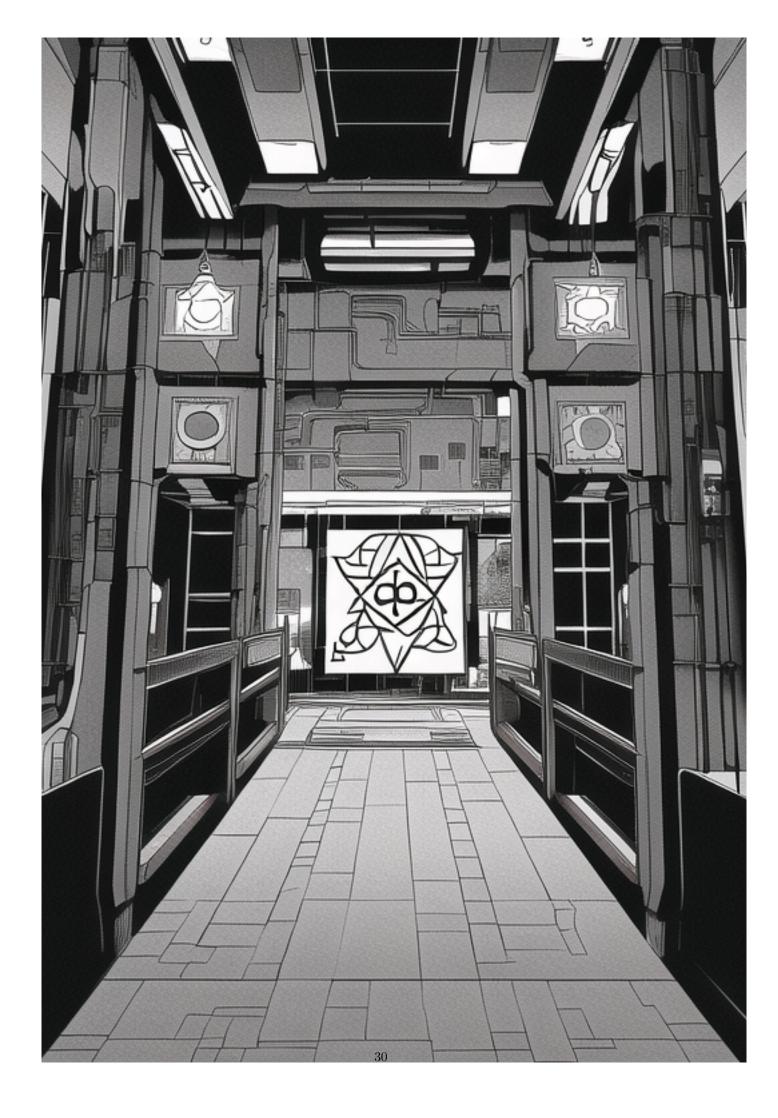
Mainframe: Large, powerful computer body. Change SM to SM+3 [0]. Change Complexity to Complexity 7 Hardware [0]. Increase cost to 100,000¥. Increase HP to +30 [60]. Will often have additional upgrades.

Personal Computer: A laptop or small desktop sized computer. Change SM to SM-2 [0]. Change Complexity to Complexity 5 Hardware [0]. Reduce cost to 1,000¥. Decrease HP to +7 [14].

Small Computer: A small, wearable computer, the size of a notebook. Change SM to SM-4 [0]. Change Complexity to Complexity 4 Hardware [0]. Reduce cost to 100\forall Decrease HP to +3 [6].

Tiny Computer: Miniscule computer, usually a tiny part of gadgets or microtech. Change SM to SM-10 [0]. Change Complexity to Complexity 3 Hardware [0]. Reduce cost to 10\forall Decrease HP to +1 [2].

³¹See Visual Impairment from Powers: Enhanced Senses p12 for more Bad Sight varieties.



4 Magic

Magic is broadly broken up into two main categories of Awakened individuals: Magicians and Adepts. Magicians channel their magic to create spells and similar outwardly effects. Adepts channel their magic to empower their bodies, which is why they are often called Physical Adepts. Mystic Adepts are a rare combination of the two.

Magicians and Mystic Adepts can further break down their capabilities into Spellcasting, Summoning; with Magicians also able to do Alchemy and Enchanting alongside Astral Projection. Magicians, Mystic Adepts, and some Adepts also have Astral Perception.

When creating an Awakened, you have a variety of Unusual Backgrounds you may purchase. Some of these build upon each other, while some are mutually exclusive, as mentioned in their descriptions.

4.1 Awakened Types

Spark

1 Point

You have extremely limited magical abilities, allowing the purchase of Astral Perception (Which would classify the character as an 'Aware'). Otherwise, this counts as Magic 0.

Magician Prerequisite: Spark, Astral Perception, Astral Projection

5 Points

This advantage allows you to take the Sorcery, Conjuring, Enchanting, and Alchemy skills alongside their respective advantages (Such as spells for Sorcery). It is mutually exclusive with Adept and Mystic Adept.

Adept Prerequisite: Spark

2 Point

This advantage allows you to take the Adept Powers. It is mutually exclusive with Magician and Mystic Adept.

Mystic Adept Prerequisite: Spark

6 Points

This advantage allows you to take the Sorcery and Conjuring skills alongside their respective advantages (Such as spells for Sorcery). They can purchase Astral Perception through the Adept Power. It is mutually exclusive with Adept and Magician.

Aspected Magician Prerequisite: Spark, Astral Perception

5 Points before limitation

There are a wide variety of Aspected Magicians, serving as highly restricted magicians. Choose from the list below and apply their noted limitations to this advantage and the Magic advantage as noted.

- Aspected Sorceror: Can only take Sorcery, -20%; Apply to magic: Can only cast spells, -10%.
- Aspected Conjuror: Can only take Conjuring, -40%; Apply to magic: Can only summon, -20%.
- Enchanter: Can only take Enchanting, -60%; Apply to magic: Can only enchant, -30%.
- Explorer: Can only take Astral projection, -60%; Do not take Magic.
- Apprentice: Can only use one category of spells and one category spirits, -40%; Apply to magic: Can only cast and summon one category, -30%

4.1.1 Magical Traditions

An Awakened's magical tradition defines their approach to magic. It's an extremely personal one that can range from ethical and moral ideas, spiritual experiences, religious beliefs, personality types, and so on. They can largely be broken into two extremely broad categories however, being Hermetic and Shamanic traditions.

Hermetic traditions overall tend towards intellectual experiences with Magic. This can manifest as simply as a scientific view of the Sixth World and its peculiarities, but can have much more complexity elsewhere. Religions such as Zoroastrianism, which focuses on strict and stark moral ideas and active participation in life, falls under this banner. As well, Chaos Mages fall under this banner, mixing and matching styles and parts of traditions as they see fit. Hermetic mages resist drain with (IQ + Will) / 2.

Shamanic traditions tend towards empathetic or natural focused experiences with Magic. A common example of this are those focused on Magic's interaction with the environment and nature, classical shamans. Religions fall under this regularly as well, such as Christianity. Many darker ideals count as this as well, such as Black Magic - a hedonistic ideation that often treads the line between healthy indulgences and fulfillment of wants and darker spirals of abuse and danger. Shamanic traditions resist drain with (HT + Will) / 2.

Certain traditions place more or less emphasis on the IQ/HT versus Willpower aspects of their drain resistance, with scientific versus philosophical hermetics appealing to IQ and Will respectively and natural versus religious shamanic appealing to HT and Will respectively as well.

These are by no means hard and fast rules, as the GM and player should work out where their tradition falls on the spectrum; however, it's ill-advised to start including things like Per and the Charisma advantage into the mix when resisting Drain. IQ + Will and HT + Will are worth the same amount of points, making the two types equal, while a (Per + Will)/2 or ((10 + Charisma) + Will) / 2 drain would cost 10 points less!

If a player is dead set on such a case, the GM can charge an additional Unusual Background to their Per or Charisma, increasing its cost to be relatively on par with IQ or HT (although keep in mind that IQ and HT are valuable in and of themselves, while Unusual Background is not). A good heuristic is an additional +5 to +7 points; e.g. making Charisma (Affects Drain, +7) [12] and Per (Affects Drain, +7) [12]. It's still overall cheaper than the IQ and HT variants, but the mage misses out on the larger benefits that IQ and HT bring.

4.2 Magic Advantages

Magic Prerequisite: Spark

7.5 Points / Level

Magic serves as the core of an Awakened character's capabilities. Add your Magic to all rolls to use Magical skills well (Just like a talent or Magery); this means that all Magical skills, activation rolls for powers, and so on. As well, the GM should look for indirect ways for Magic to apply to passive abilities with many Adept Powers, as described in GURPS Supers p22; this can take the form of adding to Power Blocks, to crippling rolls for Unbreakable Bones, to Stealth for invisibility, etc.

Magic also serves as a cap for various magical advantages: For Sorcery, Enchanting, Alchemy, and Conjuring, can only buy spells, formulae, and the conjuring advantage up to a level equal to your Magic. For Adepts, you can only buy levels up to your Magic as well.

When purchasing magical advantages such as spells, Adept Powers, and so on, you must only pay full cost for your most expensive spell, formula, and adept power; for all other ones you pay only 1/5 cost. However, you can only sustain one spell or power at a given time; if you want to sustain multiple different effects, you must pay full price for each of your next most expensive spell or ability for the amount of additional effects you wish to sustain. Some abilities are possible to cast multiple times (such as those based on Afflictions), which can allow you to sustain the same spell multiple times. Instances of these abilities are noted in their description.

Additionally, anything that affects or disables your abilities affects them as a whole. As such, anti-magic effects, critically failed rolls, magical abilities that are recharging or being sustained, etc. can all prevent your from using any magical effects at all while they are happening.

When casting spells or activating powers, you must usually make a single Concentrate Maneuver. However, when switching between classes of spells (Combat to Detection, etc), you must make a separate Concentrate Maneuver before casting!

An Awakened's relationship with their magic is always very complex and personal, often delving into religion, philosophy, ethos, and psyche. As such, it's heavily recommended that Awakened add enhancements and limitations as found in Basic Set pg 66, Thaumatology, Magic, and more, in order to better reflect their character's approach to Magic.

The GM should use their best judgement when determining whether a given enhancement or limitation works properly with the system and setting, although most - in not all - should work fine. If you do this, do not miss the built in limitation, as described in the Statistics below.

 $Statistics: \quad Magery \quad (Astral, -15\%) \\ \ \ [7.5]$

Astral Perception Prerequisite: Spark

12 Points

With a Ready maneuver, you can open your mind to the Astral Plane, allowing you to "see" auras. All living beings and magical effects have auras, while nonliving - especially technological - objects and creatures appear muted, opaque, and dark gray. This makes navigating while Astrally Perceiving a difficult task, providing a -4 penalty to all Vision rolls while perceiving (Except as it pertains to auras).

While Astrally Perceiving an aura, you can analyze it using the Assensing Skill, which can see an individual's aura, showing their emotional state, magical effects, and more.

While Astrally Perceiving you are dual-natured, meaning you exist on both the Physical and Astral plane at the same time. This means that creatures on either plane can affect you. You can affect the Astral Plane with any Mana spells as normal, however Physical spells do not affect anything purely on the Astral Plane.

Statistics: See Invisible, Astral (Partially Exclusive, -20%; Nuisance Effect, Dual-Natured, -10%; Magical, -10% [9] and Empathy, Sensitive (Astral Only, -30%; Magical, -10%) [3]

Astral Projection Prerequisite: Spark, Magic 1+, Astral Perception

20 Points

You can project your consciousness onto the Astral Plane, allowing you to move about the plane at the speed of thought. To do so, you must concentrate for 1 minute, spend 1 FP, and make an IQ roll. On a failure, you go nowhere. On a critical failure, you arrive at the wrong destination. If there is no "safe" corresponding location on the Astral Plane, your projection will fail and you will know why. You always arrive naked and without any equipment, although your astral form may "clothe" itself, this provides no protection.

You may also "hitch-a-ride" or follow other projectors, allowing you to either be taken to specific parts of the the astral plane, or - as is often the case in initiations - be taken to the metaplanes! If you have not bought off *Limited Acces (Astral Plane)* during such a case, the GM can allow you to spend unspent CP to buy it off immediately.

The Astral Plane works similarly the Astral Perception. all living beings and magical effects have auras that can be assensed as with Astral Perception (See above). Unliving creatures or objects area a muted, opaque, dark gray, providing a -4 penalty to all Vision rolls while projecting (Except as it pertains to auras). You can affect the Astral Plane with any Mana spells as normal, however Physical spells (that is: spells that create physical effects as opposed to affecting a target's aura directly via Malediction) do not work. As well, you cannot target or attack creatures purely on the Physical Plane. However, you may also not be affected by anything purely on the Physical Plane.

You can traverse the Astral Plane at the speed of thought, phase through matter, and fly. You cannot pass through auras however, meaning that living beings (or clumps of large living beings), and certain spells such as mana barriers can impede your movement. The Earth also has an aura, preventing you from traversing very far into the ground. Lastly, you cannot fly out of the atmosphere (or, more specifically, the Earth's Gaiasphere).

While you are on the Astral Plane, your body lays unconscious where you left it. You must navigate back to it yourself in order to stop Astrally Projecting (Meaning that hucksters moving your body can create quite a dangerous situation for you).

You can only stay on the Astral Plane for a number of hours equal to your Magic. After that, your Essence slowly disconnects from your body. For every hour you remain past that, lower your Magic by one. If your Magic drops to 0, you die. Lost Magic returns at a rate of 1 per hour, after you have reentered your body.

Modifiers: +6 for reliable, +1 per Level of Magic, -1 per 6 seconds less concentration.

Particularly skilled Magicians can buy off *Limited Access (Astral Plane)*, -20%, replacing it with *Limited Ac-*

cess(Astral Plane, 1 Metaplane), -15% for 5 points. This allows the Magician to travel to the Metaplanes for initiation purposes - assuming they can make it past The Watcher of course. Travel to the Metaplanes directly may cost up to 10 FP as opposed to the standard 1 FP.

Further experience may increase the amount of Metaplanes they can visit, eventually removing the limitation entirely for a grand total of 20 points. Sometimes it is replaced with the limitations Cannot Escort, -10% [-10] and/or Cannot Follow, -20% [-20].

Statistics: Jumper, Astral (Improved, +10%; Reliable 6, +30%; Immediate Preparation Required (1 minute), -30%; Maximum Duration, (Magic) Hours, -5%; Naked, -30%; Nuisance Effect, Die after (Magic) additional hours, -5%; Projection, Physical -25%; Limited Access (Astral Plane), -20%; Magical, -10%) [20]

Spell Defense Prerequisite: Spark, Magic 1+

5+(Magic) Points / Level

By disrupting the effects of other magician's spells, an Awakened can provide magical defense to themselves and their teammates.

To do so, they make an Active Defense of (Counterspelling + Magic) / 2 + 3. For each successive attempt in a turn, this is made at a -4. If successful, the Awakened and a number of individuals up to his Magic all gain Magic Resistance at the level of his Spell Defense against the effect. This does not interfere with allied spellcasting.

Statistics: Magic Resistance 1 (Affects Others (Magic), +50×(Magic-1)%; Improved, +150%; Increased Range, LOS, +40%; Ranged, +40%; Active Defense, -40%) further levels increase Magic Resistance, while higher Magic increases the level of Affect Others by one.

Summoning Prerequisite: Spark, Magic 1+

Campaign Dependant points

An Awakened can summon spirits from the astral Plane with promise of small gifts in return for their services. As for what these are, metahumanity can only guess, but the value that spirits provide cannot be underestimated.

By Concentrating for 1 second for every force, the user can attempt to summon a spirit from their tradition. This requires a Quick Contest between the Awakened's Summoning and the spirit's Force+ 5^{32} , with the Awakened gaining favors equal to their Margin of Success.

The spirit's time in the Physical Plane is limited however. It can only stay until the next sunrise or sunset, upon which it automatically departs regardless of remaining favors.

Attempting a summoning requires the Awakened to resist FP loss equal to the spirits Force - or HP loss if the Force is great than their Magic. They can summon up to double their Magic in Force.

The summoner can use their favors for any discrete task, such as: scout this location, help in combat, use this specific power. However, the summoner's treatment of the spirit does not go unnoticed. Extremely long tasks, forced services, tasks that go against the spirit's nature, cruel treatment, and anything else the GM decides can be taken note of by the spirit world. A character with a bad reputation will find it harder to summon and bind spirits, whether for less respondants, harsher FP costs, steeper requests, or harsh resistance. If bad enough, spirits may even attack the user

A character may only ever have one slot for Summoning, and ergo one Spirit summoned at a time.

Because campaigns do not all start at the same amount, it's not possible to provide a definitive table for summoning costs based on Magic. The table here provides costs for 200 point and 100 points campaigns, using the table for spirit ally costs. If you want a sufficiently different campaign level, you will have to recalculate the cost. For instructions on how to do so see the Spirit Math Section.

Note that it is more expensive for lower point characters because higher Force Spirits will be a higher percentage of your points and ergo more impactful.

Magic	200 Points	100 Points
Magic 1	3	3
Magic 2	4	6
Magic 3	5	13
Magic 4	8	21
Magic 5	12	29
Magic 6	16	37
Magic 7	20	45
Magic 8	24	53

Statistics: Modular Ability, 4 per slot, 4 per point³³ (Reduced Time 1³⁴, +20%; Social Only, +0%; Magical, -10%; Nuisance Effect, Ends on Sunrise or Sunset, -5%; Requires Summoning Roll, -35%³⁵; Trait-Limited, Only Allies with Summonable, Special Abilities, and Favor, -50%), each Force has it appropriate levels of points alongside FP and HP drain.

Binding Prerequisite: Spark, Magic 1+

Campaign Dependant points

TODO: Determine binding services. Also time and nuven.

A summoner can attempt to bind an already summoned spirit in or to both keep it around semi-permanently and to keep a larger number of spirits on call.

Binding a spirit takes 1 hour per Force and 1500 nuyen. Afterwards, the Awakened must succeed on a Quick Contest between his Binding and the spirit's Force+8, gaining additional favors equal to the Margin of Success.

Attempting a binding requires resisting FP loss equal to the spirits Force or HP loss if the Force is higher than the Awakened's Magic.

After binding, the spirit stays until all of the favors are used up, although keeping it around too long will also incur negative responses from the spirit world. Otherwise, the services can be spent exactly as in Summoning, but with the added benefit of time.

A character may have as many slots as the GM wishes to permit. Any spirit that becomes bound takes up a bound slot and no longer takes up the summon slot.

As mentioned in Summoning, these costs are dependent on the Campaign Starting Points level. Costs for 200 points and 100 points are provided here.

 $^{^{32}\}mathrm{Determined}$ by average starting Will for a Spirit being 6.

³³External Influence only.

 $^{^{34}}$ Because campaign points would affect a 1 sec / point change, we'll apply this and take a middle ground of 1 second per Force. If you wish, you can calculate a time to summon per Ally point cost.

³⁵This modifier is made up of: Requires Attribute (10) Roll, -20%; Requires Skill Roll (Summoning), -0%; Quick Contest, -15%

Magic	200 Points	100 Points
Magic 1	2	2
Magic 2	2	4
Magic 3	3	7
Magic 4	4	11
Magic 5	5	15
Magic 6	6	19
Magic 7	8	23
Magic 8	10	27

Statistics: Modular Ability, 4 per slot, 2 per point³⁶ (Reduced Time 1, +20%; Social Only, +0%; Hard to Use, -5%³⁷; Magical, -10%; Requires Binding Roll, -35%³⁸;; Trait-Limited, Only Allies with and Summonable, Special Abilities, and Favor -50%), each Force has it appropriate levels of points alongside FP and HP drain.

4.3 Spells

Spells are cast using the Spellcasting Skill. They are priced according to your Magic, with higher level Magics allowing for more powerful spells.

Each section of spells has their own class specific modifers, however one that you will see often is: Requires (Spell-casting) Roll, -20%. This is made up of the Requires (10) Roll, -20% and Requires (Spellcasting) Roll, -0% limitations. For abilities that already have Attribute rolls, such as IQ or Will, it costs to difference between this and the respective Requires (Attribute) Roll limitations (-10% and -15% in those cases).

4.3.1 Concentration versus Concentration

Many spells here have a small, but subtle distinction between two types of Concentration that they have. Spells that simply have the Terminal Condition, Loses Concentration, -20% Limitation do not require constant Concentrate maneuvers. They are still subject to Will rolls to drop them, drop when the user goes unconscious, and so, as for normal abilities that requires constant Concentrate maneuvers.

In contrast, some spells specify that they need constant Concentrate Maneuvers, which require the user to spend their maneuver manipulating or controlling the spell, as normall described in the Basic Set.

Combat Spells focus on one primary goal: dealing damage. How they do so varies, with different ranges of effect, damage and damage types, etc.

All Combat Spells have one of the following modifiers:

Physical Spell, +15%: (Increased Range, LOS, +40%; Variable, +5%; Magical, -10%; Requires (Spellcasting) Roll, -20%)

Direct Touch, +40%: (Malediction 1, +100%; Variable, +5%; Magical, -10%; Melee Attack, C, No Parry, -35%; Requires (Spellcasting) Roll, -20%

Direct Spell, +160%: (Malediction 3, +200%; Variable, +5%; Magical, -10%; Requires (Spellcasting) Roll, -20%; Sense-Based, Reversed, Vision & Touch, -15%

Acid Stream A powerful corrosive spray covers the target, causing chemical burns. The attack has a range of Line-of-sight, accuracy of 3, and each Force does 1d-2 cor damage, with 1 Cycle after 10 seconds, evaporating soon after. Every 5 points of basic damage reduces the target's DR by 1.

Magic	Base Cost
Magic 1	10
Magic 2	20
Magic 3	29
Magic 4	37
Magic 5	44
Magic 6	50
Magic 7	54
Magic 8	57

Statistics: Innate Attack, 1d-2 Cor (Cyclic 1, 10 sec, +50%; Physical Spell, +15%)

Toxic Wave Creates a powerful burst of corrosive chemicals, able to cause chemical burns. The attack has a range of Line-of-sight, accuracy of 3, and each Force does 1d-2 cor damage, with 1 Cycle after 10 seconds, evaporating soon after. Every 5 points of basic damage reduces the target's DR by 1. As well, the corrosive sprays out in an sphere, diving damage by 3×The number of yards from the center of the spell's effect.

Magic	Base Cost
Magic 1	13
Magic 2	26
Magic 3	38
Magic 4	49
Magic 5	59
Magic 6	68
Magic 7	75
Magic 8	81

Statistics: Innate Attack, 1d-2 Cor (Cyclic 1, 10 sec, +50%; Physical Spell, +15%; Explosive 1, +50%)

Punch Quite literally casting fist, this spell smacks the target with concussive force. You must successfully touch the target to affect them, dealing 1d+1 cr damage for each Force, with basic damage double for the purposes of determining knockback.

Magic	Base Cost
Magic 1	13
Magic 2	25
Magic 3	36
Magic 4	45
Magic 5	52
Magic 6	57
Magic 7	60
Magic 8	64

Statistics: Innate Attack, 1d+1 Cr (Double Knockback, +20%; Physical Spell, +15%; Melee Attack, C, No parry, -35%)

Clout This spell smacks the target with psychokinetic force. The spell has and range of Line-of-sight, accuracy 3, and deals 1d cr damage for each Force, with basic damage double for the purposes of determining knockback.

Magic	Base Cost
Magic 1	14
Magic 2	27
Magic 3	38
Magic 4	49
Magic 5	58
Magic 6	65
Magic 7	69
Magic 8	72

^{4.3.2} Combat Spells

 $^{^{36}}$ External Influence, Expensive, and Long Time.

 $^{^{37}\}mathrm{Applied}$ as bonus to resist.

³⁸This modifier is made up of: Requires Attribute (10) Roll, -20%; Requires Skill Roll (Binding), -0%; Quick Contest, -15%

Blast This spell smacks the target with psychokinetic force. The spell has and range of Line-of-sight, accuracy 3, and deals 1d-1 cr damage for each Force, with basic damage double for the purposes of determining knockback. As well, the blast explodes out in an sphere, diving damage by 3×The number of yards from the center of the spell's effect.

Magic	Base Cost
Magic 1	13
Magic 2	26
Magic 3	38
Magic 4	48
Magic 5	58
Magic 6	66
Magic 7	73
Magic 8	78

Statistics: Innate Attack, 1d-1 cr (Double Knockback, +20%; Physical Spell, +15%; Explosive 1, +50%)

Death Touch By channelling destructive magical power directly into the cells of an opponent, the spellcaster can cause effects reminiscent of radiation or necrosis. You must first successfully touch a target to affect them, then roll a Quick Contest of Spellcasting+Magic vs. HT. Success deals 1d tox damage to the opponent for each Force. This damage ignores DR.

Magic	Base Cost
Magic 1	12
Magic 2	22
Magic 3	32
Magic 4	41
Magic 5	48
Magic 6	54
Magic 7	58
Magic 8	61

Statistics: Innate Attack, 1d tox (Direct Touch, +40%)

Manabolt By channelling destructive magical power directly into the cells of an opponent, the spellcaster can cause effects reminiscent of radiation or necrosis. You may affect any target that you can see or touch, rolling a Quick Contest of Spellcasting+Magic vs. HT, with Long-Distance modifiers for range. Success deals 1d-1 tox damage to the opponent for each Force. This damage ignores DR.

Magic	Base Cost
Magic 1	15
Magic 2	29
Magic 3	43
Magic 4	56
Magic 5	68
Magic 6	78
Magic 7	88
Magic 8	96

Statistics: Innate Attack, 1d-1 tox (Direct Spell, +160%)

Manaball By channelling destructive magical power directly into the cells of an opponent, the spellcaster can cause effects reminiscent of radiation or necrosis. You may affect any target that you can see or touch, rolling a Quick Contest of Spellcasting+Magic vs. HT, with Long-Distance modifiers for range. Success deals 1d-2 tox damage to the opponent for each Force. As well, the energy suffuses into the surrounding area, dealing the same damage to those nearby, divided by 3×The number of Yards from the center. This damage ignores DR.

Magic	Base Cost
Magic 1	10
Magic 2	20
Magic 3	29
Magic 4	38
Magic 5	47
Magic 6	55
Magic 7	62
Magic 8	68

Statistics: Innate Attack, 1d-2 tox (Direct Spell, +160%; Explosion 1, +50%)

Flamethrower This spell births a flash of explosion and flame into existent, burning the target with blisteringly heat. It deals 1d burn damage for each Force. Additionally, it treats all Flammability Classes (B433) as one lower!

Magic	Base Cost
Magic 1	13
Magic 2	25
Magic 3	35
Magic 4	45
Magic 5	53
Magic 6	59
Magic 7	62
Magic 8	65

Statistics: Innate Attack, 1d burn (Incendiary 1, +10%; Physical Spell, +15%) Fireball This spell births a flash of explosion and flame into existent, burning the target with blisteringly heat. It deals 1d-1 burn damage for each Force. Even more so, the fire explodes outwards in a sphere, dealing the same damage to those nearby, divided by $3\times$ The number of Yards from the center. Additionally, it treats all Flammability Classes (B433) as one lower!

Magic	Base Cost
Magic 1	13
Magic 2	24
Magic 3	35
Magic 4	46
Magic 5	55
Magic 6	62
Magic 7	68
Magic 8	72

Statistics: Innate Attack, 1d-1 burn (Explosion 1, +50%; Incendiary 1, +10%; Physical Spell, +15%)

Lightning Bolt This spell creates and directs dangerous electricity. It deals 1d burn damage for each Force. While it cannot set things on fire, it does surge - which can cause electronics to short and die out.

Magic	Base Cost
Magic 1	13
Magic 2	25
Magic 3	35
Magic 4	45
Magic 5	53
Magic 6	59
Magic 7	62
Magic 8	65

Statistics: Innate Attack, 1d burn (Physical Spell, +15%; Surge, +20%; No Incendiary, -10%)

Ball Lightning This spell creates and directs dangerous electricity. It deals 1d burn damage for each Force. Additionally, the electricity explodes outwards in a sphere, dealing the same damage to those nearby, divided by $3\times$ The number of Yards from the center. While it cannot set things on fire, it does surgewhich can cause electronics to short and die out.

Magic	Base Cost
Magic 1	13
Magic 2	24
Magic 3	35
Magic 4	46
Magic 5	55
Magic 6	62
Magic 7	68
Magic 8	72

Statistics: Innate Attack, 1d burn (Explosion 1, +50%; Physical Spell, +15%; Surge, +20%; No Incendiary, -10%)

4.3.3 Detection Spells

Detection Spells specialize in data capture and analysis. This can range from looking at technology to looking at life signs, but their common trait is information.

Detection Spells, unlike Combat Spells, are longer lasting and require an uninterrupted series of Concentrate Maneuvers (P155).

When using a Detection Spell, it's important to remember that while you can usually only sustain one spell at a time, Detection spells are based on Afflictions, which means that you can apply the same spell to different targets multiple times simultaneously, should you so wish, however you must still maintain concentration or lose them all!

This means that you can give the entire crew Analyze Magic at the same time (if you don't pass out first!), but can still not mix spells among them without paying the extra cost!

Most Detection Spells are grantable to other individuals, and as such need a special modifier to represent those capabilities:

TODO: Recalculate costs, because lowered the percent

Detection Spell, +145%: (Cancellable, +10%; Extended Duration, $\times 500$, $+110\%^{39}$; Malediction 1, +100%; Variable, +5%; Fixed Duration, +0%; Magical, -10%; Melee Attack, C, No Parry, -35%; Requires Spellcasting Roll⁴⁰, -15%; Terminal Condition, Loses Concentration, $-20^{41}\%$)

Analyze Device This spell allows the user to analyze the composition, makeup, and design of devices. It can be cast on any individual by touch. To use it, make a Concentrate maneuver and you must win a Quick Contest of IQ+Magic (The Spell-caster's) vs. the device's HT. Success gives general information about the device based on Margin of Victory. Some examples of information, from easiest to hardest, are: general purpose, general design, identifying information (VIN, PID, etc), operation use, obscure information and usage, etc. Critical Success can yield advanced information as below.

Success on the Spellcasting Roll by 5 or more, greatly improves the capabilities of it! The user *automatically* succeeds on the IQ roll for general information, and can instead roll the same Quick Contest to gain advanced information. Some examples of advanced information, from easiest to hardest, are: chemical composition, advanced design (hardware design for instance), detailed forensic information, hidden information and functions, etc.

The user must maintain line of sight or touch to the object throughout analysis, even if they know where it is via other senses.

Highly technological devices can be much harder to analyze, providing a -3 penalty for devices such as basic electronics, composite materials, etc. and a -6 penalty for devices such as computers, cameras, highly advanced metamaterials, etc.

Higher Force spells add a +1 per Force above 1 to all IQ rolls to analyze or use to ability well.

Magic	Base Cost
Magic 1	41
Magic 2	44
Magic 3	47
Magic 4	49
Magic 5	51
Magic 6	52
Magic 7	53
Magic 8	54

Statistics: Affliction (Analyze Device, +150%; Detection Spell, +140%) [39] further levels add +20% to Analyze Device [2].

Analyze Device, +155%: (Detect, Devices (Very Common; Analyzing (Marqin-Based, 5 MoS, -50%), +50%;

Analysis Only, -50%; Hard to Use 2 (Accessibility, Only High Tech Devices, -0%), -10%; Magical, -10%; Resistable vs HT, -15%; Sense-Based, Reversed, Sight & Touch, -15%) [15] further levels give Reliable [1.5]/+5%

Analyze Magic This spell allows its user to analyze spells, powers, and other magical effects, even without being able to astrally perceive.

It can be cast on any individual by touch. To use it, make a Concentrate maneuver and roll an IQ+Magic (The Spellcaster's). Success gives general information about the magic, exactly as if it were Assensed.

Success on the Spellcasting Roll by 5 or more greatly improves its capabilities! The user automatically succeeds on the IQ roll for general information, and can instead roll the same roll to gain advanced information. Some examples of advanced information, from easiest to hardest, are: Any information Empathy could provide, detailed information about the subjects emotional state (Provides +3 to the listed skills), hints about the awakened tradition, detailed analysis of the magical effect or astral signature, detailed health and diagnosis, detailed information about most cyberware, greater information about bioware, and hints against the style of technomancer if they are one.

The user must maintain line of sight or touch to the object throughout analysis, even if they know where it is via other senses.

Higher Force spells add a +1 per Force above 1 to all IQ rolls to analyze or use to ability well.

Magic	Base Cost
Magic 1	34
Magic 2	35
Magic 3	36
Magic 4	37
Magic 5	37
Magic 6	38
Magic 7	38
Magic 8	38

Statistics: Affliction (Analyze Magic, +75; Detection Spell, +155%) [33]

Analyze Magic, +75%: (Detect, Magic (Occasional; Analyzing (Margin-

 $^{^{39}\}mathrm{Gives}$ around 8 hours per Margin of Success, which allows for 1 day timeframes.

 $^{^{40}}$ Since Malediction already has a Will roll, this just switches it to a flat 10 roll + Requires Spellcasting, -20%, priced for difference between them.

⁴¹Taken from Kromm's Suggested value here for losing concentration, since Requires Concentration is not allowed on Afflictions.

Based, 5 MoS, -50%), +50%; Analysis Only, -50%; Magical, -10%; Sense-Based, Reversed, Sight & Touch, -15%) [7.5] further levels give Reliable [1.5]/+5%

Analyze Truth This spell allows its user to analyze statements to determine whether they are intentional falsehoods.

It can be cast on any individual by touch. To use it, you must make a Concentrate maneuver and win an IQ+Magic (The Spellcaster's) vs the target's Will.

Success will give general information about the falsehood (As long as they believe it is false of course!), determined by the Margin of Victory. Some examples of information, from easiest to hardest are: Vaguely whether the statement is a lie or not, vague intention regarding the falsehood, which parts of the statement are lies, etc. These should generally provide, at a minimum, a +1 bonus to rolls that would benefit from knowing it is a lie, such as Law, Detect Lies, Psychology, etc.

Success on the Spellcasting Roll by 5 ore more greatly improves the spell. The user *automatically* succeeds on the Quick Contest for general information, and can instead roll the same Quick Contest for advanced information. Some examples of advanced information, from easiest to hardest, are: Definitively whether the statement is a lie, good ideas as to the intentions behind the lie (Vibe check), which parts of the statement are lies and in what ways, etc. These should generally provide greater bonuses to rolls that would benefit from knowing it is a lie, from +1and above.

The user must maintain line of sight or touch to the object throughout analysis, even if they know where it is via other senses.

Higher Force spells add a +1 per Force above 1 to all IQ rolls to analyze or use to ability well.

Magic	Base Cost
Magic 1	29
Magic 2	30
Magic 3	30
Magic 4	31
Magic 5	31
Magic 6	31
Magic 7	31
Magic 8	31

Statistics: Affliction (Analyze

Truth, +30%; Detection Spell, +155%) [28.5]

Analyze Truth, +30%: (Detect, Intentional Falsehoods (Rare; Analyzing (Margin-Based, 5 MoS, -50%), +50%; Analysis Only, -50%; Magical, -10%; Resistable vs Will, -15%; Sense-Based, Reversed, Sight & Touch, -15%) [3] further levels give Reliable [1.5]/+5%

Clairaudience

Magic	Base Cost
Magic 1	41
Magic 2	51
Magic 3	59
Magic 4	67
Magic 5	73
Magic 6	78
Magic 7	80
Magic 8	83

This spell allows you to project your senses out to a

Statistics: Affliction (Clairaudience, +100%; Detection Spell, +155%) [35.5]

Clairaudience, +100%: Clairsentience (Accessibility, No Technological Senses, -10%; Clairaudience, -30%; Magical, -10%; Takes Extra Time 3, 8 seconds, -40%) [10] further levels add Increased Range, +10% each [5]/+50%

Clairvoyance

Combat Sense

Detect Enemies

Detect Enemies, Extended

Detect Individual

Detect Individual, Extended

Detect Life

Detect Life, Extended

Detect Magic

Detect Magic, Extended

Mind Probe

4.3.4 Health Spells

Antidote

Cure Disease

Decrease (Attribute)

Increase (Attribute)

Increase Reflexes

Resist Pain

Heal This spell allows the caster to heal the physical injuries of individuals. It works somewhat differently than many spells.

To use, concentrate for 1 second and roll a Spellcasting+Magic roll. Success lets you heal 2 HP for every Force of the spell, at the cost of having to resist FP Drain for every 2 HP healed. Even 1 HP of healing stops bleeding. If the Force is higher than you magic, this Drain is HP instead. Failure causes you to lose 1d FP or HP unresisted immediately, instead of normal Drain. Critical Failure causes the subject to lose 1d HP.

You can heal a crippled, but whole limb by making your Spellcasting at a -6 and spending an additional 2 FP or HP as necessary. If you completely heal the HP lost to the crippling injury, the limb will no longer be crippled. The magician only gets one attempt per crippled injury.

If this spell is used on an individual multiple times, it has a cumulative -3 for each *successful* use. This penalty lasts for 24 hours after the *last successful attempt*. This means that multiple small healings can be extremely difficult, even if they do have easily managed drain!

You can heal any creature that is carbon-based (No healing robots unfortunately!), however individuals with lots of 'ware are more difficult. The GM should assign a penalty up to -6 for individuals with impacted essence. A good heuristic is a -1 for every 10 points in 'ware caused disadvantages.

Higher Force spells provide a +1 to all rolls for every Force above 1.

Modifiers: -2 if you subject is unconscious, -3 per successful healing (Lasting for 24 hours since the latest healing), -6 to repair a crippled limb

TODO: Recalc costs, changed limitations.

Magic	Base Cost
Magic 1	43
Magic 2	48
Magic 3	52
Magic 4	57
Magic 5	61
Magic 6	66
Magic 7	69
Magic 8	72

Healing (Affects Self, Statistics: +50%; Carbon-Based Xenohealing, Life.+60%: Resistable $Drain^{42}$: Capped⁴³; Hard to Use 2 (Accessibility, Low Essence Only, -40%), -6%; Injuries Only, -20%; Injurious Magic (Accessibility, Force over Magic, -20%)44, -24%; Magical, -10%; Requires Spellcasting $Roll, -10\%^{45}$)

4.3.5 Illusion Spells

Ranged Illusion Affliction, +175%: (Cancellable, +10%; Malediction 3, +200%; Variable, +5%; Magical, -10%; Requires Spellcasting Roll, -15%; Sense-Based, Reversed, Vision and Touch, 15%)

Touch Illusion Spell, +145%: (Cancellable, +10%; Extended Duration, $\times 500$, $+110\%^{46}$; Malediction 1, +100%; Variable, +5%; Fixed Duration, +0%; Magical, -10%; Melee Attack, C, No Parry, -35%; Requires Spellcasting Roll⁴⁷, -15%; Terminal Condition, Loses Concentration, -20⁴⁸%)

Agony The Awakened causes terrible illusory pains in their target. They can target an individual they can see or touch, with no penalties for range.

Concentrate for 1 second and roll a Quick Contest of Spellcasting + Magic versus Will. Winning causes the target to feel great pain, providing a -1 penalty per Margin of Success to all DX, IQ, and self control rolls, double for those with Low Pain Tolerance and halved for those with High Pain Tolerance. This lasts for a number of minute equal to their Margin of Success, or until the Awakened loses or drops concentration.

Higher Forces make the pain even more terrible, providing a +1 bonus to side the target, heavily distracting their

Magic	Base Cost
Magic 1	31
Magic 2	32
Magic 3	33
Magic 4	34
Magic 5	35
Magic 6	35
Magic 7	35
Magic 8	36

Statistics:Affliction (Based on Will, +20%; Ranged Illusion Affliction, +175%; Margin-Based, 1/2 Moderate Pain⁴⁹, +30%; Terminal Condition, Loses Concentration, -20%) further levels add Reliable +5%

Mass Agony This spell works exactly as Agony above, while also affecting a large area as opposed to a single target.

When casting this spell, it affects all targets within a number of Yards of a point of the caster's choice equal to the Force of the spell. The power of the spell dissipates as it goes, making it easier to resist; add a +1 bonus to their resistance roll for every yard of distance a target is from the center.

Magic	Base Cost
Magic 1	31
Magic 2	37
Magic 3	41
Magic 4	43
Magic 5	45
Magic 6	46
Magic 7	46
Magic 8	47

Statistics: Affliction ((AoE, 1 yard, +25% Based on Will, +20%; Ranged Illusion Affliction, +175%; Margin-Based, 1/2 Moderate $Pain^{50}$, +30%; Dissipation, -50%; Terminal Condition, Loses Concentration, -20%) further levels add Reliable +5% and a Linear AoE

Bugs The Awakened causes their target to feel terrible sensations of creatures and insects crawling over and in-

the Spellcasting roll for each Force above mind and lowering their abilities to react to threats.

> Concentrate for 1 second and roll a Quick Contest of Spellcasting + Magic versus Will. Winning distracts the target, lowering their Basic Speed by 0.5 per Margin of Success. This lasts for a number of minute equal to their Margin of Success, or until the Awakened loses or drops concentration.

> Higher Forces make the sensation even more terrible, provid
ng a +1 bonus to the Spellcasting roll for each Force above 1.

Magic	Base Cost
Magic 1	31
Magic 2	32
Magic 3	33
Magic 4	34
Magic 5	35
Magic 6	35
Magic 7	35
Magic 8	36

Statistics: Affliction (Based on Will, +20%; Ranged Illusion Affliction, +175%; Margin-Based, -0.50 Basic Speed, +30%; Terminal Condition, Loses Concentration, -20%) further lev $els\ add\ Reliable\ +5\%$

Swarm This spell works exactly as Bugs above, while also affecting a large area as opposed to a single target.

When casting this spell, it affects all targets within a number of Yards of a point of the caster's choice equal to the Force of the spell. The power of the spell dissipates as it goes, making it easier to resist; add a +1 bonus to their resistance roll for every yard of distance a target is from the center.

Magic	Base Cost
Magic 1	31
Magic 2	37
Magic 3	41
Magic 4	43
Magic 5	45
Magic 6	46
Magic 7	46
Magic 8	47

 $^{^{42}}$ Guesstimate at +5% per Force.

 $^{^{43}}$ It is capped at 1 FP per Force, which is calculated as -30+2.5% per FP cap.

⁴⁴This is based of Thaumatology p25's Injurious Magic. This makes FP Cost HAVE to be HP, limited only to FP over Magic.

 $^{^{45}\}mathrm{Priced}$ as difference between Requires IQ Roll and Requires (10) Roll

 $^{^{46}}$ Gives around 8 hours per Margin of Success, which allows for 1 day timeframes.

⁴⁷Since Malediction already has a Will roll, this just switches it to a flat 10 roll + Requires Spellcasting, -20%, priced for difference between

⁴⁸Taken from Kromm's Suggested value here for losing concentration, since Requires Concentration is not allowed on Afflictions.

 $^{^{49}}$ Since Pain easily scales by +20% per -2 penalty, this is simply 1/2 that for Margin-Based, giving -10% per -1.

 $^{^{50}}$ Since Pain easily scales by +20% per -2 penalty, this is simply 1/2 that for Margin-Based, giving -10% per -1.

Statistics: Affliction ((AoE, 1 yard, +25% Based on Will, +20%; Ranged Illusion Affliction, +175%; Margin-Based, -0.5 Basic Speed, +30%; Dissipation, -50%; Terminal Condition, Loses Concentration, -20%) further levels add Reliable +5% and a Linear AoE

Confusion The Awakened causes confusion in their target, making them uncertain and slow in their actions for most situations.

Concentrate for 1 second and roll a Quick Contest of Spellcasting + Magic versus Will. Winning gives the target the Confusion disadvantage (B129) with a Self Control of 15. Each further Margin of Success lowers the Self Control by one category (e.g. MoS 3 is 15- ξ 9), to a minimum of Automatica Failure. Individuals with Confusion are prone freezing up under strange places, during commotions, or whenever there's a need for deicisive action, which often preculdes any Tactics rolls or similar strategizing. The GM should also modify the Self Control roll by the situations, as described in the Basic Set. If the target fails their Self Control Roll, they freeze up, taking to Do Nothing maneuver or at least taking little of any effect. This does not prevent them from reacting, such as with Active Defenses, but they cannot act.

Higher Forces make the sensation even more terrible, providing a +1 bonus to the Spellcasting roll for each Force above 1.

Magic	Base Cost
Magic 1	25
Magic 2	26
Magic 3	27
Magic 4	28
Magic 5	28
Magic 6	29
Magic 7	29
Magic 8	29

Statistics: Affliction (Based on Will, +20%; Ranged Illusion Affliction, +175%; Margin-Based, Confused, +15%; Terminal Condition, Loses Concentration, -20%) further levels add Reliable +5%

Mass Confusion This spell works exactly as Confusion above, while also affecting a large area as opposed to a single target.

When casting this spell, it affects all targets within a number of Yards of a point of the caster's choice equal to the Force of the spell. The power of the spell dissipates as it goes, making it easier to resist; add a +1 bonus to their resistance roll for every yard of distance a target is from the center.

Magic	Base Cost
Magic 1	30
Magic 2	36
Magic 3	39
Magic 4	42
Magic 5	43
Magic 6	44
Magic 7	45
Magic 8	46

Statistics: Affliction ((AoE, 1 yard, +25% Based on Will, +20%; Ranged Illusion Affliction, +175%; Margin-Based, Confusion, +15%; Dissipation, -50%; Terminal Condition, Loses Concentration, -20%) further levels add Reliable +5% and a Linear AoE

Chaos This spell works exactly as Confusion above, but also affects Machines. Machines Will scores are usually equal to their Complexity \times 2.

Machines affected by Confused often are unable to perform their standard operations outside anything but the most mundane conditions. This can cause glitches or failure, not responding to inputs, nor responding.

Magic	Base Cost
Magic 1	30
Magic 2	31
Magic 3	32
Magic 4	33
Magic 5	33
Magic 6	34
Magic 7	34
Magic 8	34

Statistics: Affliction (Based on Will, +20%; Cosmic, Affects Machines, +50%; Ranged Illusion Affliction, +175%; Margin-Based, Confused, +15%; Terminal Condition, Loses Concentration, -20%) further levels add Reliable +5%

Chaotic World This spell works exactly as Chaos above, while also affecting a large area as opposed to a single target.

When casting this spell, it affects all targets within a number of Yards of a point of the caster's choice equal to the Force of the spell. The power of the spell dissipates as it goes, making it easier to resist; add a +1 bonus to their resistance roll for every yard of distance a target is from the center.

Magic	Base Cost
Magic 1	35
Magic 2	41
Magic 3	43
Magic 4	47
Magic 5	48
Magic 6	49
Magic 7	50
Magic 8	51

Statistics: Affliction ((AoE, 1 yard, +25% Based on Will, +20%; Cosmic, Affects Machines, +50%; Ranged Illusion Affliction, +175%; Margin-Based, Confusion, +15%; Dissipation, -50%; Terminal Condition, Loses Concentration, -20%) further levels add Reliable +5% and a Linear AoE

Invisibility The caster alters the perceptions of living beings near them, making themselves undetectable to them.

To use it, the Awakened touches his target and Concentrates for 1 second and rolls Spellcasting + Magic⁵¹. Their margin of success is used for a Quick Contest versus the Will+4 of anyone who might visually perceive them. Whenever they win this Quick Contest, the subject and objects they are carrying are treated as invisible to that individual, while losing leaves the individual unaffected.

When invisible, all electromagnetic spectrum based sight for living things will fail to see them, however other methods, such as sound, touch, smell, sonar, etc. all still work as normal. Notably, any machines are immune to this spell and will still perceive the subject as normal. Being invsibile grants the subject a + 9 bonus to stealth in any situation where being seen would matter. Spells or abilities that would grant sight of the subject cannot see them, although they may still look at the area they are in. Of course, Astral Perception and other sight on the Astral Plane are entirely unaffected by this spell, as they can simply see the aura of the subject anyways.

 $^{^{51}}$ This roll is used for initial success and the contested Glamour roll to simplify play.

There is a limit to how much the subject may carry while under these effects, with object over their Light Encumbrance becoming visible while carried.

At higher Forces, it becomes increasingly hard to resist this spell. At every even Force, the Will roll to resist the spell is lowered by 1, to a minium of Will-5; and at every odd level, the Awakened gains a +1 bonus to their Spellcasting roll.

Magic	Base Cost
Magic 1	56
Magic 2	59
Magic 3	62
Magic 4	64
Magic 5	66
Magic 6	67
Magic 7	68
Magic 8	69

Statistics: Affliction (Invisibility, +300%; Touch Illusion Spell ,+145%) [54.5] further forces increase Invisibility's level.

Statistics: Invisibility (Can Carry Objects, Light, +20%; Glamour, Will+4, Quick Contest⁵², -25%; Magical, -10%; Substantial Only, -10%) [30] further levels add -1 to Glamour [1] and +1 Reliable [2] alternating.

Realistic Invisibility This spell works exactly like Invisibility above, with some notable exceptions:

The Quick Contest is a Spellcasting + Magic versus Per+4, with higher forces working in the same manner.

The spell affect machines as well as living beings.

Magic	Base Cost
Magic 1	61
Magic 2	64
Magic 3	67
Magic 4	69
Magic 5	71
Magic 6	72
Magic 7	73
Magic 8	74

Statistics: Affliction (Invisibility, +350%; Tocuh Illusion Spell ,+145%) [59.5] further forces increase Invisibility's level.

Statistics: Realistic Invisibility (Affects Machines, +50%; Can Carry Objects, Light, +20%; Glamour, Will+4, Quick Contest⁵³, -25%; Magical, -10%; Substantial Only, -10%) [30] further levels add -1 to Glamour [1] and +1 Reliable [2] alternating.

Phantasm The magician creates a convincing illusion of any object, creature, or scene they desire at an area of within line of sight.

To do so, they must Concentrate continuously and succeed on a Spell-casting + Magic roll. This creates a highly detailed and animated three-dimensional illusion that fits within a one yard radius of the chosen point.

These illusions lack any actual mass or way to directly affect the material plane, however their true value is in deception and distraction. When an individual views your phantasm, you must make a Quick Contest of Spellcasting + Magic versus their Will; if you win, the illusion seems real to that person, with the GM determining how they might react.

Modifiers: Your victim gets +4 if someone who knows about the illusion warns him, or if you critically fail in a Quick Contest against someone else. He gets +10 if you create the illusion unsubtly and in plain sight, or if he examines the illusion with a sense you can't deceive – most often touch, but this can also be things like Sonar, Radar, and Infrahearing or Ultrahearing.

At the GM's option, inappropriate illusions (e.g., a pack of rabid wolves in a submarine) give a further +1 to +10, while believable ones (e.g., you pull out an illusionary gun) give from -1 to -5. If the final modifier is a net bonus, halve it if the victim is aware of magic, but not its specifics, as long as the effects of your illusion could pass as a reasonable magical effect (e.g. mind controlling a rabid animal as opposed to an illusion of it showing up).

Some uses of Phantasm require a separate skill roll; in particular: creating an illusion scary enough to cause a fright check requires an Artist (Illusions) + Magic roll versus the higher of IQ or Will. To create a phantasm of someone the target knows, roll against the *lower*

of Acting and Artist (Illusion) versus the higher of your target's IQ and Will.

Additionally, roll a new Quick Contest whenever someone you have already fooled changes how they interact with the phantasm, such as interacting with a new sense (often touch, through trying to attack or interact with it). If you win, you simulate a believable response to what he just witnessed.

While it's easy to create mass illusions such as a horde or crowd, individual people that interact realistically can be difficult, requiring more effort to prevent robotic or jarring responses. For each individual past the first, add a +4 bonus to resist the illusion.

Phantasm creates illusions throughout the Infrared to Ultraviolet spectrums, but it is easier for those who already have the ability to see in one or both ofthose spectrums to do so; when purchasing this spell, use the costs based on whether you have Both (Hyperspectral Vision), are Missing 1 (Infravision or Ultravision), or are Missing 2 (Normal Vision).

Additionally, the caster can create illusions in the hearing spectrum that they can hear, which may include Infrasonic or Ultrahearing for certain people; the spell has no ability to create illusions in those hearing spectrums by default, and does not cost anything different for those who lack it.

Higher Forces of this spell allow you to create larger and more convincing Illusions. For each Force past the first, add a +1 to your Spellcasting roll and all rolls in Quick Contests. Additionally, the area the Illusions must fit inside is increased, becoming a radius equal to the Force of the spell.

Magic	Both	Missing 1	Missing 2
Magic 1	35	37	41
Magic 2	48	50	54
Magic 3	55	58	61
Magic 4	60	62	66
Magic 5	63	66	69
Magic 6	65	68	71
Magic 7	66	69	72
Magic 8	67	70	73

Statistics: Illusion (Based on Will, +20%; Ranged, LoS, +80%; Variable, +5%; Accessibility (Not on Machines), -30%; Magical, -10%; Reduced AoE⁵⁴, -25%; Requires Spellcasting Roll⁵⁵, -10%;

⁵²Limitation taken from PK & Kromm's ruling on Quick Contests for traits like Resistable (and ergo, Glamour)

⁵³Limitation taken from PK & Kromm's ruling on Quick Contests for traits like Resistable (and ergo, Glamour)

⁵⁴Simply lowers the base AoE radius down to 1 yard.

 $^{^{55}}$ Difference between IQ and Requires (10) Roll

Requires (Spellcasting) Roll, -20%) further levels add Reliable, +5% [1.25] and a Linear AoE. For those without IR or UV, add Extended, +10%; for those withouth both add Extended, +25%

Trid Phantasm This spell works exactly like Phantasm above, except that it also affects machines instead of just living beings. Additionally, all Will resistance rolls are replaced with Per rolls.

Magic	Both	Missing 1	Missing 2
Magic 1	37	40	43
Magic 2	50	53	56
Magic 3	58	60	64
Magic 4	62	65	69
Magic 5	66	68	72
Magic 6	68	70	74
Magic 7	69	71	75
Magic 8	70	72	76

Statistics: Illusion (Ranged, LoS, +80%; Variable, +5%; Magical, -10%; Reduced AoE^{56} , -25%; Requires Spell-casting Roll⁵⁷, -10%; Requires (Spell-casting) Roll, -20%) further levels add Reliable, +5% [1.25] and a Linear AoE. For those without IR or UV, add Extended, +10%; for those withouth both add Extended, +25%

Silence

Stealth

4.3.6 Manipulation Spells

Animate The Awakened causes an object to spring to life, animated and under his direct control.

To do so, Concentrate for 1 Second and roll versus Spellcasting + Magic; success allows the Awakened to animate objects of a number of HP dependant on the Force of the spell. After this initial concentration, your spell will continue until you lose your concentration, but does not requires constant Concentrate maneuvers.

Each Force provide 2 ST to use for animation, which requires an amount of ST equal to an objects HP for unliving objects, or half its HP for homogenous objects.

An animated object can grab, lift, strike, etc. with a ST equal to the amount needed to initially animate it; while its DX is equal to yours. It can

While B558 will be an invaluable resource for determining what can be animated, a table for weight by HP is also included for HP animateable by up to Force 16.

move also long as it is not locked in place, with a Move equal to the ST of the spell minus the ST needed to Animate it. Additionally, objects with built-in methods of flight, such as RC helicopters, are able to fly using those methods. It is, of course, harder to animate more technologically advanced objects, adding an additional penalty up to -6 for such objects, as assessed by the GM. This spell can animate multiple objects, but the ST is split amongst them all; see Mass Animate below for a better way to animate many things at once!

1 0.02 lb 0.002 lb 2 0.125 lb 0.156 lb 3 0.42 lb 0.525 lb 4 1 lb 0.125 lb 5 1.95 lb 0.24 lb 6 3.375 lb 0.42 7 5.35 lb 0.66 lb 8 8 lb 1 lb 9 11.39 lb 1.42 lb 10 15.625 1.95 lb 11 20.8 lb 2.6 lb 12 27 lb 3.375 lb 13 34.33 lb 4.29 lb 14 42.875 lb 5.36 lb 15 52.73 lb 6.59 lb 16 64 lb 8 lb 17 76.77 lb 9.6 lb 18 91.125 lb 11.39 19 107.17 lb 13.4 lb 20 125 lb 15.625 lb 21 144.7 lb 18.09 lb 22 166.38 lb 20.8 lb 23 190.11 lb 23.76 lb <	111	Omiving	Homogenous
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			012 10

Unliving

Homogenous

 $^{^{56}\}mathrm{Simply}$ lowers the base AoE radius down to 1 yard.

⁵⁷Difference between IQ and Requires (10) Roll

Magic	Base Cost
Magic 1	13
Magic 2	24
Magic 3	33
Magic 4	39
Magic 5	44
Magic 6	49
Magic 7	54
Magic 8	60

Statistics: TK 2 (Independent, +70%; Animation, -20%; Cannot Affect Self, -20%; Cannot Punch, -10%; Hard to Use 2 (Accessibility, Technology Only, -20%), -8%; Magical, -10%; Requires (Spellcasting) Roll, -20%; Terminal Condition, Losing Concentration, -20%)) higher Forces are simply more levels.

Mass Animate This spell works similarly to Animate above, but has the ability to animate objects en-masse instead of splitting its capabilities over multiple.

The spell affects any number of objects within an area with a radius equal to the Force of the spell, with a penalty to the Spellcasting roll equal to the amount of objects, sans one.

When being used in combat, the objects must take the same actions, which can greatly hinder them when combining differing objects! Meanwhile, out of combat, this spell can assist in any long-term task that is concluded in a single die roll, such as having a group of animate parts assemble themselves into a machine. This can be used to proved bonuses according to the Time Spent section (B346).

Additionally, this spell, while much better at animating masses of smaller objects, struggles with larger ones! Instead of having 2 ST per Force, it only has 1 ST per Force; it's still capable of animating dozens of small objects, but will struggle for larger objects.

As a note, it can animate Diffuse objects with a ST equal to 1/4 their HP, which can serve as a good estimate for cases such as a swarm of caltrops!

Magic	Base Cost
Magic 1	10
Magic 2	25
Magic 3	42
Magic 4	59
Magic 5	78
Magic 6	94
Magic 7	110
Magic 8	124

Statistics: TK 1 (AoE, 1 yard, +25%; Independent, +70%; Animation, -20%; Cannot Affect Self, -20%; Cannot Punch, -10%; Hard to Use 2 (Accessibility, Technology Only, -20%), -8%; Magical, -10%; Requires (Spellcasting) Roll, -20%; Terminal Condition, Losing Concentration, -20%)) higher Forces are simply more levels with higher linear AoE.

Control Actions The awakened can puppeteer individual's bodies, making them perform actions against their will.

To do so, they must roll a Spellcasting + Magic roll; success lets the Awakened use the spell as long as they maintain continuous Concentration. The spell has 2 ST for every Force, which can be used to forcibly manipulate living beings.

To control someone, the Awakened must Concentrate for 1 second and win a Quick Contest of the spell's ST versus the target's bodily ST. If they win, the target performs a maneuver of their choice, using their bodily ST and the caster's DX; additionally, the target's Move cannot exceed the Margin of Victory in the Quick Contest.

Note: There's uncertainty whether the Awakened has to roll a Quick Contest every round to control their targets or simply has to succeed once. Given how expensive the ability is, a GM would not be outside their purvue empowering this to work similarly to Mind Control - where a single Quick Contest gives control and a second roll at any "moments of truth" can allow them to break out.

Magic	Base Cost
Magic 1	18
Magic 2	35
Magic 3	49
Magic 4	62
Magic 5	70
Magic 6	76
Magic 7	81
Magic 8	87

Statistics: TK 2 (Animate Life-Forms, +100%; Accessibility, Life-Forms Only⁵⁸, -30%; Animation, -20%; Cannot Affect Self, -20%; Cannot Punch, -10%; Magical, -10%; Requires (Spellcasting) Roll, -20%) [9] higher Forces are more levels.

Mob Control This spell works similarly to Control Thoughts above, except that it affects individuals in an area with a radius equal to the Force of the spell.

Roll for each life-form in the area individually, with a penalty equal to the amount of life-forms sans one. This spell is very difficult to affect large beings, such as humans. It only have 1 ST per Force instead of 2 ST.

Magic	Base Cost
Magic 1	13
Magic 2	30
Magic 3	50
Magic 4	71
Magic 5	91
Magic 6	111
Magic 7	130
Magic 8	147

Statistics: TK 2 (AoE, 1 yard, +25%; Animate Life-Forms, +100%; Accessibility, Life-Forms Only⁵⁹, -30%; Animation, -20%; Cannot Affect Self, -20%; Cannot Punch, -10%; Magical, -10%; Requires (Spellcasting) Roll, -20%) [9] higher Forces are more levels and a linear AoE.

Control Thoughts This insidious spell allows the Awakened to control the literal thoughts of their target, making them think that whatever they are doing is their own ideas.

To do so, Concentrate for 1 second and roll a Quick Contest of Spell-casting + Magic versus Will; success places the target under control for as long as the Awakened takes continuous Concentrate maneuvers, effectively

 $^{^{58}}$ There should generally be many more useful inamate objects to control compared to life-forms.

 $^{^{59}}$ There should generally be many more useful inamate objects to control compared to life-forms.

giving them the Reprogrammable disadvantage. This last for a period after the Awakened drops their control, as the targert's ego has to reassert its normal mode of thinking. Notably, this spell is powerful enough that its range is not strictly line of sight, instead taking Long-Range penalties.

Modifiers: Long-Range modifiers to the target; -1 per slave already under your control; +2 if you concentrate for a full minute before casting, or +4 if you concentrate for a full hour

If the Awakened is incapacitated, stops concentrating, or forces the target to act against their morals, make a second Quick Contest at the "moment of truth", with success freeing them from control.

If the Awakened loses any Quick Contest, they cannot use this spell on that target for 24 hours, and the target feels a sense of mental coercion coming from you - in addition to any general stimuli for spellcasting. This is usually enough to put people on guard, but anyone who lacks experience with similar spells or magic in general (A very rare thing!) will likely not recognize it. If the Awakened rolls a critical failure, they lose control of anyone else they are currently controlling - or have to roll against some mishap or crippling if they have no one under their control.

After the spell wears off, the target does not have any supernatural inclination to believe or disbelieve that what he just did was genuine. If it was mundane (e.g. take a bathroom break), they would be very unlikely to notice, while ones that went against their principles (e.g. kill your grandmother), would be extremely easy to spot.

Higher Forces are increasingly difficult to resist, gaining a +1 bonus to the Spellcasting roll for every Force above 1.

Magic	Base Cost
Magic 1	68
Magic 2	73
Magic 3	77
Magic 4	81
Magic 5	84
Magic 6	86
Magic 7	88
Magic 8	89

Statistics: Mind Control (Long-Range, +50%; Magical, -10%; Requires (Spellcasting) Roll, -10%) further levels add Reliable

Roll the Quick Contest for every target in the area, with success and failure determining the result as per normal Control Thoughts. Distinct orders can be issued to individuals or in bulk to multiple individuals, but one can't mix different orders among different individuals.

Magic	Base Cost
Magic 1	93
Magic 2	122
Magic 3	139
Magic 4	151
Magic 5	159
Magic 6	165
Magic 7	168
Magic 8	171

Statistics: Mind Control (AoE, 1 yard, +25%; Long-Range, +50%; Magical, -10%; Requires (Spellcasting) Roll, -10%) further levels add Reliable and Linear AoE

Influence The Awakened implants a simple suggestion into his target's mind, making them act on it as if it were their own idea.

To do so, Concentrate for 1 second and roll a Quick Contest of Spellcasting + Magic versus Will. Success implant the command into their subconscious, making them carry it out as if it were their own idea. The Awakened can issue mental commands for a number of seconds equal to their Margin of Victory, but after that the target will follow them to their own ability and inclinations. If the command goes against their morals, roll a second Quick Contest at the moment of truth.

Modifiers: Long-Range modifiers to the target; -1 per slave already under your control; +2 if you concentrate for a full minute before casting, or +4 if you concentrate for a full hour

If the Awakened loses any Quick Contest, they cannot use this spell on that target for 24 hours, and the target feels a sense of mental coercion coming from you - in addition to any general stimuli for spellcasting. This is usually enough to put people on guard, but anyone who lacks experience with similar spells or magic in general (A very

rare thing!) will likely not recognize it. If the Awakened rolls a critical failure, they lose control of anyone else they are currently controlling - or have to roll against some mishap or crippling if they have no one under their control.

What makes this spell so insidious is what happens after. While the target does remember everything that they did, they will try tooth and nail to rationalize it however they can - or failing that simply try and forget about it! Let some street trash into the SKIF? Well, they didn't really look that bad and you're pretty sure they showed you valid ID? Confronted with camera footage that they did not? Well they must have shown it to you outside the camera's view. In general, it should take difficult coercion or expertise to get an individual to recognize that their thoughts were not their own.

Higher Forces are increasingly difficult to resist, gaining a +1 bonus to the Spellcasting roll for every Force above 1.

Magic	Base Cost
Magic 1	75
Magic 2	80
Magic 3	85
Magic 4	89
Magic 5	92
Magic 6	94
Magic 7	95
Magic 8	96

Statistics: Mind Control (Independent, +70%; Long-Range, +50%; Rationalization, +20%; Magical, -10%; Reduced Duration, 1/60, -35%; Requires (Spellcasting) Roll, -10%; Suggestion, -40%) further levels add Reliable

Levitate

Mana Barrier

Physical Barrier This spell create a glowing, semi-transluencent force field over an area.

To use it, the awakened must Concentrate for 1 second and roll on a Spell-casting + Magic roll; success conjure the physical barrier.

The wall has 3 HP and 2 DR⁶⁰ per Margin of Success (minimum 3 HP and 2 DR), is homogenous, and imposes a Vision penalty to see through it equal to

Mob Mind This particularly powerful spell works exactly like Control Thoughts above, except that it affects groups of individuals in an area with a radius equal to the Force of the spell.

 $^{^{60}}$ Changed towards more HP than DR using the ideas found here.

half its DR^{61} , (rounded up, maxmimum -10).

The wall has one section per Force, each measuring $3 \times 1 \times 4$ yards (length, width, height). These each of these sections can be arranged as the caster sees fit. Optionally, the GM may allow them to make smaller or larger segments in certain dimensions in return for lengthening or shortening others, such as halving width for double the length; if the width is altered, reduce the DR and HP proportionally (e.g. 1/2 a yard is 1.5 HP and 1 DR per MoS).

The barrier itself is a homogenous object, making it very resistant to most firearms, and it can be affected by damage following Damage to Objects (B483): at 0 HP, the wall must succeed an HT 12 check every second or suffer failure - which usually means a section of it collapses. At every negative integer of HP, the wall must succeed against an HT roll or be destroyed and dissipate; a failure of 1 or 2 means that the spell remains, but is reduced to rubble and debris of the original force field. It dissipates automatically at -5×HP.

When attacking targets through the wall individuals take Vision penalties as described above, as if looking through a foggy substance. Certain damage types can pierce the wall to deal more damage to those behind it, as seen in Overpenetration (B408); the wall itself provides Cover DR equal to its DR + HP/4, or 2.75 per MoS (rounded down).

Magic	Base Cost
Magic 1	60
Magic 2	63
Magic 3	64
Magic 4	64
Magic 5	65
Magic 6	65
Magic 7	66
Magic 8	66

Statistics: Innate Attack, Cr (Margin Based⁶², ×3 to final; Area of Effect, 1 Yard, +25%; Cosmic, No Die Roll (Accessibility, Innate Attack roll only, -20%), +80%; Extended Duration, $\times 5000$, +150%; Increased Range, LoS,

+40%; Long-Range 2, +100%; Persistent, +40%; Wall, Rigid, +60%; Inaccurate 2, -10%; Limited, Nonmagical Threats plus Jet/Missile spells, -15%; Magical, -10%; Requires (Spellcasting) Roll, -20%; Terminal Condition, Losing Concentration, -20%)

4.4 Adept Powers

Adept Spell

1 + Spell Cost Points

Buy as per any normal spell alongside the Spellcasting skill. buy multiple Adept Spells, you do not have to pay the additional 1 point for each spell - you must only pay it once. Adepts are limited to a maximum amount of Adept Spells equal to their Magic.

Adrenaline Boost

3.75 Points, 4 Points for higher levels

As a free action, the adept can trigger this power, increasing their reaction time greatly. Their Basic Speed increases by 0.25 per level they have in the power, which improves all derived traits except Basic Move.

The adept can use the power for as long as they like, however after the power has finished they lose FP equal to their level in the ability.

Statistics: Basic Speed +0.25 (Reduced Time 1, +20%; Aftermath (Costs FP 1/sec), -10%; Magical, -10%, No $Basic\ Move,\ -25\%)\ [3.75/level],\ further$ levels are Basic Speed by +0.25 (Reduced Time 1, +20%; Aftermath(Costs FP +1/se)c, -5%; Magical, -10%) [4]

Animal Empathy

4.5 Points, 4.5 Points for higher levels

Statistics: Animal Empathy (Magical, -10%) [4.5] additional levels provide Animal Friend (Magical, -10%) [4.5/level]

Astral Perception

13 Points

Grants the effect of the Astral Perception advantage, including an Unusual Background.

Attribute Boost

Various Points

The adept can boost their physical attributes temporarily, granting immense and fleeting power. For this power, the adept takes a Ready maneuver and rolls against 10 + Magic, increasing their Attribute's level by their Margin of Success temporarily.

The adept can use the ability for as long as they wish, however after the ability is finished, they lose 2 FP for every second it was active.

The cost of the advantage varies by attribute:

- Attribute Boost ST (No HP) [20]
- Attribute Boost DX (No Basic Speed) [65]
- Attribute Boost HT (No Basic Speed, FP) [23]
- Attribute Boost Basic Speed (No Basic Move) [16]
- Attribute Boost Basic Move [20]

Affliction (Attribute), Statistics: Margin-Based, +X%; Accessibility, SelfOnly, $-20\%^{63}$; Aftermath (Costs FP) 2/sec), -15%; Requires Magic Roll, - $20\%^{64}$)

Authoritative Tone

9 Points, 4.85 Points for higher levels

The power makes the adept speak in ways that makes people trust and believe in him. It gives +2 to Diplomacy, Fast-Talk, Mimicry, Performance, Politics, Public Speaking, Sex Appeal, and Singing, while also granting +2 on any reaction roll made by someone who can hear your voice.

Further levels enhance improves other aspects, giving +1/level past the first to Fortune-Telling, Leadership,

⁶¹There's no consistent ruling on whether the rigid Wall enhancement block vision (e.g. a wall of stone versus Aluminum Oxide could both be rigid, but one is see through.), but Powers 42 implies it does. Since it could be a bane or boon I'm simply allowing it as a stacking penalty.

⁶²Based on Psionic Power's enhancement and PK's design notes of it. In essence, a weighted sum of margins is about equal to ×3, so this is applied to the wall's innate attack level cost as a final multiplier. $^{63}\mathrm{GURPS}$ Powers, The Weird.

 $^{^{64}\}mathrm{Is}$ Requires Attribute (10) Roll, -20%

⁶⁵" Actively interacting" already includes hearing you, however this requires that any interact definitively includes hearing you (No sign language, charades, etc.)

Panhandling, and Public Speaking skills alongside Reaction and Influence rolls with people you actively interact with and can hear you.

Statistics: Voice (Magical, -10%) [9] further levels are Charisma +1 (Magical, -10%; Nuisance Effect, Actively Interacting always requires hearing, -5%⁶⁵) [4.85]

Berserk

18 points

The adept can willingly enter a state of blind rage, greatly enhancing their physical traits at the cost of their mental faculties. As a Ready maneuver, the adept can activate the power, granting them all the effects of the Berserk (B124) disadvantage with Battle Rage:

- Must All-Out-Attack a foe in range, or Move / Move and Attack into range.
- Can go guns blazing if over 20 yards, but can only reload weapons that take 1 second.
- Immune to stun, shock, and injurious penalty to Move. +4 to HT rolls to remain conscious or alive.
- Can roll SC after downing each foe, and once when there are no foes left - after which you target friends!

You may attempt to resist or activate the disadvantage as normal - once when entering combat, when damaged over 1/4 your HP in a second, and when witnessing equivalent harm to allies. You do not need to be under the effects to gain the other benefits of the power.

While the power is active, the adept's ST, DX, and HT are improved by +1. This also improves their Basic Speed and FP, but not HP. Whenever the power ends, remove these benefits and determine the effects (You may pass out from losing the FP, for instance).

Additionally, your IQ, Per, and Will are all lowered by -1, alongside any derived traits, while the power is active, impeding your mental capabilities.

After the power ends, the adept immediately loses 3 FP.

Statistics: Berserk Attributes (ST +1 (No HP, -2) [5]; DX +1 [25]; HT

+1 [15]) (Aftermath(Costs FP 1/sec), -10%; Magical, -10%; Temporary Disadvantage, Berserk, SC 12, Battle Rage, -15%; Temporary Disadvantage, -1 IQ, -15%; Temporary Disadvantage, -1 Per, -5%; Temporary Disadvantage, -1 Will, -7%) [17.1]

Berserker's Rage

+23 points

Prerequisites: Berserk Adept Power

This power works exactly like the Berserk power, with the following changes:

ST is increased by +3, while DX and HT are increased by +2.

Additionally, the adept loses 1 FP per *minute* that the power was active, rounded up.

Statistics: Increase attributes to ST+3 (No HP, -2) [15], DX+2 [50], and HT+2 [30]. Change Aftermath(Costs FP 1/sec), -5%; to Aftermath(Costs FP 1/min), -5%. [40.85 total]

Cloak

5.2 per Level

The adept's powers passively protect them from Detection Powers, such as Detection Spells like Detect Life, Detection Powers like Search, and so on. This affects the adept alongside anything in their direct vicinity (notably including their carried equipment).

Anything trying to use such an effect (even for helpful purposes) takes a penalty equal to the adept's levels in this power. This penalty does not apply to any of the adept's Detection Powers, nor is the effect especially detectable itself (Beyond the normal rules for Adept Powers).

Statistics: Obscure, Detect Abilities (Defensive, +50%; Extended 2, +40%⁶⁶; Stealthy, +100%; Limited (Magical), -20%; Magical, -10%) [5.2]

Combat Sense

14 Points + Variable Points at higher levels

The adept gains an instinctive sense for threats in their vicinity, improving their ability to defend against them.

The power provides them with a +1 to all active defenses, +1 to the Fast-Draw skill, and a +2 to Fright checks.

Additionally, they never "freeze" in surprise situations and gain a +6 on all IQ rolls to wake up and recover from surprise or mental stun.

In surprise situations, the adept provides a +1 to initiative rolls, or +2 if they are the leader.

Higher levels improve this even more! The adept can improve one of four defenses, each with their own costs: Unarmed Parries [4.5], All Parries [9], Dodges [13.5], and/or Blocks [4.5].

The adept can only take levels up to half of their magic, rounded down. As well, the GM is recommended to require *all options* be taken before any can be improved to the next level. Do note that All Parries does include Unarmed Parries.

Statistics: Combat Reflexes (Magical, -10%) [14] further levels add one of Enhanced Defense Parry, Dodge, and/or Block (Magical, -10%) [4.5/9], [13.5], [4.5]

Critical Strike

6 Points

The adept's powers drive their weapon more powerfully and deadlier than otherwise.

Select a skill when taking this power. The adept increases their Striking ST by 4 when using weapons with that skill.

Statistics: Striking ST 4 (One Skill Only, -40%; Magical, -10%) [6]

Danger Sense

14 Points

The adept can detect impending danger even in the most unlikely situations.

In any situation involving ambush, impending disaster, or similar hazards the GM rolls against the adept's Perception + Magic. Success gives enough warning to take action, while critical success gives details as the the nature of the threat as well.

Statistics: Danger Sense (Magical, - 10%) [14]

 $^{^{66}}$ Detection Abilities covers a good amount of spells and critter powers, so 2 should "cover" a wide enough range to justify them all.

7 Points

This power allows the adept to take in experience and technique extremely quickly when presented with suitable reference material and enough time.

By spending an hour watching or reading training, explanation, or demonstration media of a skill (in any format, including in person and recordings), the adept can temporarily add 1 point to that skill. This stacks with any current points, as long as the material is sufficiently advanced for higher levels (e.g. adding 1 point to 15 points of Physics requires Phd level media).

This point lasts for up to 6 hours, or until the adept uses this ability to learn another skill.

The power can be purchased multiple times. Each time, it allows the adept to store a separate skill, allowing him to "learn" multiple skills, or to stack multiple points into one skill.

Statistics: Modular Ability 6 per slot, 3 per point (Slow and External) (Magical, -10%; Maximum Duration 6 hours, -5%; Trait-Limited, Skills Only, -10%) [4.5 + 2.25]

Eidetic Sense Memory

7 Points

The adept is able to perfectly recall any stimuli or detailed sensory input that they experienced. This allows them to perform feats like flip through a book and read it later or shift through conversations after the nightclub is empty. Some of these feats may still require separate skill rolls for analysis still.

This affects recall, not comprehension, so gives no benefit to skills themselves (Other than Speed-Reading B222). However, for any IQ roll for learning you may add a +10 bonus. Some examples of this include memorizing paydata or information to slip through security and earning familiarities with equipment or accents. If the GM is using Quick-Learning Under Pressure (B292) or Maintaining Skill (B294), this bonus applies to them too!

Statistics: Photographic Memory (Magical, -10%) [9]

Elemental Body

Variable Points

Prerequisites: Elemental Strike

Magic	Acid	Cold	Fire	Lightning
Magic 1	6	5	5	5
Magic 2	12	10	10	10
Magic 3	17	14	15	14
Magic 4	22	18	20	18
Magic 5	28	23	24	23
Magic 6	33	27	29	27
Magic 7	38	32	33	32
Magic 8	42	34	37	34

Acid:

Statistics: Innate Attack, Burn Xd-2 (Aura, +80%; Backlash(Drain FP)⁶⁷; Magical, -10%; Melee Attack, -30%)

Cold:

Statistics: Innate Attack, Burn Xd-1 (Aura, +80%; Backlash(Drain FP); Magical, -10%; Melee Attack, -30%; No Incendiary, -10%)

Fire:

Statistics: Innate Attack, Burn Xd-1 (Aura, +80%; Backlash(Drain FP); Magical, -10%; Melee Attack, -30%)

Lightning:

Statistics: Innate Attack, Burn Xd-1 (Aura, +80%; Surge, +20%; Back-lash(Drain FP); Magical, -10%; Melee Attack, -30%; No Incendiary, -10%)

Elemental Strike

Variable Points

This power adds elemental enhancements to an adept's unarmed attacks, allowing him to electrocute, burn, or more with a single blow. Notably, these effects are not visible on the physical plane - although follow-on effects such as setting something on fire or shocking something are!

The cost for this is dependent on the adept's Thrusting Damage, ergo his ST^{68} , and on the element chosen.

These effects are not applied to any strength-based weapons used by the adepts, such as swords or brass knuckles, although they do not necessarily need skin contact to work (gloves are acceptable).

Additionally, they do not apply to any non-human-standard unarmed attacks, such as horns, claws, teeth, etc.

To apply to them, those attacks must also include the respective elemental types found below. For Fire, Lightning, and Cold simply add their enhancements. For Acid, build another Follow-Up attack in the same fashion and use the Alternative Abilities (P11) rules for it.

Striking ST	Acid	Cold	Fire	Lightning
1-2	0	0	0	0
3-4	1	1	1	1
5-6	1	1	1	1
7-8	1	1	1	1
9-10	2	1	1	1
11-12	3	2	1	1
13-14	4	3	1	1
15-16	6	3	1	1
17-18	7	4	1	2
19-20	7	4	1	2
21-22	8	5	1	2
23-24	10	6	1	2
25-26	11	6	2	2
27-28	11	7	2	2
29-30	12	7	2	2

Acid:

The adept's first channel acidic forces, decaying the armour of anything that his fists strike. Whenever the adept strikes something with his unarmed attacks, the target's DR is reduced by 1 for every 5 basic damage rolled.

Statistics: Innate Attack, Cor X⁶⁹ (Follow-up, Unarmed Attacks, +0%; No Wounding, -50%; Magical, -10%)

$Cold^{70}$:

The adept can channel frostbite cold in a sharp instant, weakening armour for an instant. This provides your unarmed attacks with an armour divisor of 2.

Statistics: Innate Attack, Cr X (Armour Divisor 2, +45% (Magical, -10%))- NOT Innate Attack, Cr X

Fire:

The adept's unarmed attacks can ignite fires and cause incendiary effects. The adept's base striking damage when attacking with fists is used for Making Things Burn (B433).

Statistics: Innate Attack, Cr X (Incendiary, +9% (Magical, -10%))- NOT Innate Attack, Cr X

Lightning:

The adept's unarmed attacks are charged with electricity, enough to fry electronics. Any critical hit will disable electronics (or those with the Electric disadvantage) and any electronic hit by

⁶⁷See the Drain FP limitation.

 $^{^{68}}$ Please note that most of this power is made using Modifying ST-Based Damage (P146), and as such any unorthodox Striking damage will NOT work with it.

 $^{^{69}}$ Rolling dice for this follow-up is waived - it's built to be the same as the Striking ST, so we just use that roll!

⁷⁰There's no "snap armour" equivalent in GURPS, so AD is the best alternative.

an attack dealing over 1/3 HP requires an HT to avoid shorting out for seconds equal to Margin of Failure, or until repaired on a critical failure.

Statistics: Innate Attack, $Cr\ X$ (Surge, +18% (Magical, -10%))- NOT Innate Attack, $Cr\ X$

Empathic Healing

17 Points

The adept is able to magically take on the wounds of others in order to heal them.

To do so, concentrate for 4 seconds and then make an IQ + Magic test. Success allows them to transfer HP loss from another creature to themselves, which ignores any immunities or reductions. Even 1 HP of healing stops bleeding (The adept does not begin bleeding either). Failure transfers nothing and costs an immediate 1d HP, with critical failure costing the target 1d HP as well.

Crippled (but still whole) limbs can be healed as well, by making the roll at a -6 and spending an additional 2 HP. If the adept completeley heals the HP lost to the crippling injury, the limb will no longer be crippled. The adept only gets on attempt per crippled injury.

If the power is used on an individual multiple times, it has a cumulative -3 for each *successful* use. The penalty lasts for 24 hours after the *last successful attempt*. This makes multiple small healings difficult!

You can heal any creature that is carbon-based, however individuals with lots of 'ware are more difficult. The GM should assign a penalty up to -6 for individuals with impacted essence. A good heuristic is a -1 for every 10 points in 'ware-caused disadvantages.

Statistics: Healing (Xeno-healing, Carbon-Based lifeforms, +60%; Empathic, -50%; Hard to Use 2 (Accessibility, Only on low Essence Individuals, -40%), -6%; Injuries Only, -20%; Magical, -10%; Takes Extra Time 2 (4 Seconds), -20%) [17]

Enhanced Perception

4.5 Points per Level

The adept's powers sharpen their senses, allowing them to surveil their

surroundings with extreme clarity. This power adds +1 Perception per level. Adepts are limited to levels equal to half their magic, rounded down.

Statistics: Perception (Magical, -10%) [4.5]

Flexibility

5/14 Points

Adepts with this power can bend and flex their bodies past metahuman norms. This becomes very useful for tasks that requires bending and maneuvering in odd ways, providing a +3 bonus to Climbing, Escape rolls to get free of restraints, the Erotic Art skill, and on attempts to break free in close combat (B391). Additionally, they may ignore up to -3 for working in close quarters (Such as an Explosive check to disarm a bomb in a vent or small casing; or a Mechanics roll to work on an engine inside a car).

At the second level, these bonuses increase further, allowing the adept to maneuver their body in any way that is not outright abnormal! The adept adds +5 to the same rolls and ignore up to -5 in close quarter penalties.

Statistics: Flexible (Magical, -10%)
[5] or Double-Jointed (Magical, -10%)
[14]

Focused Archery

3 Points per Level

The adept is able to focus their qi when drawing a bow or crossbow, enabling them to pull loads higher than their actual strength. This power increases the adept's Striking ST when loading Bows or Crossbows, letting them use stronger bows. The adept can have a maximum of 3 levels.

Statistics: Striking ST 2 (Cross-bow/Bow, -40%; Magical, -10%) [3]

Freefall

9 Points

The power helps the adept to absorb the kinetic impact from falls, cushion his landings. Subtract 5 yards from a fall automatically (as if succeeding on an Acrobatics check). Additionally, a successful DX roll halves damage from a fall Statistics: Catfall (Magical, -10%)

Hanging

4 Points

The adept gains the ability to adhere to surfaces, such as walls, for short periods of time. They cannot move while attached, but otherwise need not make any climbing checks. They can maintain this power for up to 5 minutes, afterwards they must reattach elsewhere.

If falling, the adept can attempt to adhere to a nearby surface. On a successful DX roll, they can touch the surface and may follow up with a ST roll at a -1 for every 5 yards already fallen. Success allows the adept to arrest their fall, however a failure still lets them subtract 5 yards from their distance fallen due to slowing down during the failed attempt.

Clothing and armour does not impact the power, however their power does not work when at Heavy encumbrance or above.

Statistics: Clinging (Accessibility, No movement, -40%⁷¹; Accessibility, No Heavy Encumbrance, -20%⁷²; Magical, -10%; Nuisance Effect, Max 5 Minutes, -10%⁷³) [4]

Improved Physical Attribute

Variable Points

' Just buy the Attribute with Magical, -10% my dude.

Improved Reflexes

14/27/41 Points

The adept's reflexes are vastly improved, allowing them to react with lightning speed. For each level, increase the Adept's Basic Speed (and all derived attributes from it, except Basic Move) by +1. The adept may qualify for certain advantages given a high Basic Speed.

Statistics: Improved Basic Speed +1.0 (No Basic Move, -5; Magical, -10%) [13.5] further levels are +2.0 and +3.0.

⁷²Priced as a reverse to the Can Carry Objects Enhancement from Power-Ups 4.

 $^{^{71}}$ Based on the assumption that this would reduce the useful situations for clinging by around 1/20.

 $^{^{73}}$ Valued at 10%, because -5% simply seemed to small to limit any long term clinging. Optionally treat as an Accessibility

Various Points

These powers grants sensory capabilities not normal possible for metahumans. These can be picked from the list below:

3D Spatial Sense [9 Points] The Adept gains intuitive knowledge of directions in three dimensions. They always know where north is, can retrace any path within a month, and gain a +3 bonus to Body Sense, Navigation (Air, Land, or Sea), a +2 bonus to Aerobatics, Free Fall, and Navigation (Hyperspace or Space), and a +1 bonus to Piloting.

Statistics: 3D Spatial Sense (Magical, -10%) [9]

Sensitive Touch [9 Points] The adept's sense of touch gains as much resolution as human vision. This allows them to recognize very fine details about objects they touch as readily as a normal human could by vision, allowing distinguishing of fine relief, small variations in heat, tremors as people approach, and so on.

This gives +4 on Touch rolls and on skill rolls that are dependent on touch (such as a Forensic to distinguish between two fabrics). They disregard penalties for working by touch so long as a task doesn't require visual information, and even then that might be possible (e.g. distinguishing colours based on how well they retain heat in the sun); unfamiliarity penalties still apply in such a case.

This doesn't let the adept target someone with an attack based on vibrations, but you could notice a person's general presence. For that, take Vibration Sense below.

Statistics: Sensetive Touch (Magical, -10%) [9]

Acute Sense [2/4/6/8/9 Points] One of the Adept's senses has its clarity increases greatly, providing a +1 bonus per level to its respective Sense rolls. The maximum levels are half the adept's Magic, rounded *up*. This can be applied to more than the normal five senses, including options such as Magical Sense SURGE Power, the Search Critter Power, and so on.

Statistics: Acute Sense 1-6 (Magical, -10%) [2-9]

Night Vision [1/2/3/4/5/6/7/8/9

Points] The adept's low-light vision increases, allowing them to see and act more clearly in the dark. The lower darkness penalties by 1 per level in this power, as long as there is *some light*, meaning -9 darkness or better.

Statistics: Night Vision 1-9 (Magical, -10%) [1-9]

Infravision [9 Points] The adept can see through the entire infrared spectrum, which has a variety of capabilities; it allows them to see the radiated thermal infrared emitted from most objects, they are able to see through certain objects that infrared passed through (many plastics and some fabrics), allows them to spot hot components such as sensors in walls, and to see active millimeter-wave and terahertz detectors (such as often are used in portal scanners), and see IR lasers (which are commonly used for both communication and lethal purposes). See Powers: Enhanced Senses p8 for more, including limiting vision to Near or Thermal Infrared.

The adept can act in absolute darkness as long as their surroundings emit heat (largely all objects). Spotting targets that emit heat grants a +2 to all Vision rolls. As well, following heat trails provides a + 3 bonus to Tracking if the trail is no longer than an hour old (varied based on environment). It can also act as quality equipment for uses that would benefit from infravision, including a +2 to Naturalist and Prospecting, +2 to Artist (Pottery or Sculpting) or Metallurgy for heat-based tasks, +2 to vision-based Forensics, Observation, or Search, and a +4 to Vision or Observation vs Camouflage or Disguise.

Color is not discernible through the infrared spectrum, although certain colors emit and absorb heat better and may be discernible with a roll at at least -4. A Vision at -4 can also be used to read via reflected heat. Distinguishing between objects of similar sizes and shape is difficult, requiring a roll at -4.

Bright flashes of infrared heat can blind you exactly as very bright lights, often ocurring from bursts of fire, explosions, high powered lasers, and often.. very bright lights (especially cheap ones).

Statistics: Infravision (Magical, -10%) [9]

Ultravision [9 Points] The adept can see through the entire ultraviolet spectrum, which has some useful capabilities; it allows them to see better in low light conditions (ultraviolet is often present from sunlight and artificial lights), see active ultraviolet scanners (such as blacklights), and see UV lasers (uncommon options for communication and lethal purposes). UV notably does not pass through windows or normal visors, although it is possible to specially make ones that do.

The adept can see better in low-light conditions where UV is present (e.g. sunlight, even under cloud cover and artificial lights), letting them ignore -2 in darkness penalties, although you still cannot see with no light. It penetrates water well, halving Vision penalties underwater. Wherever UV is present, the wider spectrum provides a +2 to Vision rolls, as well as vision-based Forensics, Observation, and Search. The power can also act as quality equipment for uses that would benefit from seeing UV, including a +2 bonus to Naturalist or Prospecting and a +4 to Vision or Observation vs Camouflage or Disguise.

Statistics: Ultravision (Magical, - 10%) [9]

Hyperspectral Vision [23 Points] This combines the benefits of Infravision and Ultravision. The adept gains a +3 bonus to Vision, and vision-based Forensics, Observation, Search, and Tracking. It also acts as quality gear, as described in the respective traits. In complete darkness, the power acts as Infravision.

Statistics: Hyperspectral Vision (Magical, -10%) [23]

Telescopic Vision [5/10/15/19]**Points** This power allows the adept to magnify their vision in similar ways to using binoculars or a scope. Each level lets them always ignore -1 in range penalties to Vision rolls, or -2 per level if they take an Aim maneuver. Alternatively, the adept may use the power similarly to a variable-power scope, giving +1 Accuracy for each second Aiming, to a maximum equal to their level. The benefits of this are cumulative with technological aids (lenses do stack magnification), as long as they are purely optical, not digital; as well the GM may assign darkness penalties equal to the lower bonus of the power and the equipment (Which may be overcome with ily. This may provide bonuses to normal powers or other traits.

hearing, counting the source as being

There are two alternative powers as well; one makes it so that the adept must Aim for a number of seconds equal to their levels to gain any Accuracy bonus, and costs [5/9/14/19]. Alternatively, they many give up their ability to gain Accuracy bonuses at all, costing [2/3/4/6].

Statistics: Telescopic Vision (Variable, +5%; Magical, -10%)

Discriminatory Hearing [14]**Points**] The resolution for the adept's power increases immensely, improving their ability to notice, distinguish, and differentiate between sounds of any kind. This allows them to always distinguish between similar sounding, but unique objects, about as easily as a human can do by voice, via a single Hearing roll; they can differentiate between two car engines, or firearms, or so on. The adept is even adept at remembering such sounds too, requiring a minute and a successful IQ roll to commit to memory, requiring 24 hours of wait on a failiure.

This increase in resolution provides a +4 bonus to all Hearing rolls (effectively improving effective hearing to 8 times as far) and a +4 bonus to Shadowing noisy targets. It can also stand in for quality gear in certain circumstances.

Statistics: Discriminatory Hearing (Magical, -10%) [14]

Subsonic Hearing [5 Points] The adept gains the ability to hear very low frequency sound waves (Below 40 Hz). These sounds are present in many large or heavy circumstances, including large weather events (tornadoes, hurricanes, etc), large ground events (earthquakes, volcanoes, etc), large bodies of water moving (waves, waterfalls, etc.), large movements of creatures (from either large animals or a large number of them), many animals calls (whales, elephants, hippos, tigers, cats, etc.), sonic booms and explosions, and some machines (especially larger and mechanical ones).

Wherever subsonic sounds are available, the adept can make Sense rolls to notice and identify them as they would with normal hearing. The sounds themselves can travel around twice as far as normal sounds and penetrate through buildings, the ground, and water read-

ily. This may provide bonuses to normal hearing, counting the source as being louder or closer than it would normally with standard hearing - or simply allow the check at a longer range. The power always provides a +1 bonus to Tracking if the quarry is moving over the ground. It can also stand in for quality gear in certain circumstances.

Statistics: Subsonic Hearing (Magical, -10%) [5]

Subsonic Hearing [5 Points] The adept gains the ability to hear very high frequency sound waves (Above 20 kHz). This allows them to hear things from dog whistles to sonar.

Sonar itself comes in many forms; bats use it for echolocation (although many other animals make sounds in the range too, such as dogs, birds, and crickets), some motion detectors use it (as opposed to IR), sonar rangefinders are an alternative to lasers, it is used for general sensors as well (ultrasounds, some anti-collision sensors, and so on). Like all passive detectors, the adept may detect Active Sonar out to twice its effective range at no penalty.

Statistics: Ultrahearing (Magical, - 10%) [5]

Parabolic Hearing [4/8/11/15/ 19/22 Points This power helps to adept to collect and filter out sound waves, allowing him to hear sounds from further away and through more background noise. Each level doubles the distance at which a sound can be heard with no penalty (B358, P:ES21), effectively negating -1 in range modifiers It also screens out backper level. ground noises (HT158), either ignoring one source per level or ignoring -2 in penalties per level (The GM should choose one and/or the other, as these are implied, but unofficial effects).

Statistics: Parabolic Hearing (Magical, -10%) [3.6 per level]

Discriminatory Smell [14 or 21] Points The adept acquires immense resolution with his sense of smell, improving their ability to notice, discern, and differentiate between smells. This allows them to distinguish between the smells of people, objects, and even places. The adept may even memorize smells, requiring a minute and a successful IQ roll, requiring 24 hours of wait for a failure.

This increase in resolution provides a +4 bonus to all Smell rolls and on any tasks that relies on smell, which always includes the Tracking skill.

Some adepts have the ability to determine emotional state via hormones and physiological responses. This functions like Empathy (B51, all of Social Engineering) while you are able to smell them well (usually within 2 yards). This power costs [21] Points.

Statistics: Discriminatory Smell (Magical, -10%) [14]. Optionally adds Emotion Sense, +50% [21]

Discriminatory Taste [9] Points This power functions very similarly to Discriminatory Smell due to their linked systems. However, the adept is required to ingest a substance to use it, usually being bodily fluids. They can also make an IQ roll to recognize the substance, identify whether it is safe, etc. It is also possible to perform analysis using other skills, such as Cooking, Chemistry, Pharmacy, Poisons, etc.

It provides a +4 bonus to Taste rolls, as well as any task that relies on Taste, such as most Cooking rolls.

Vibration Sense [9] Points The adept is able to detect the locations, speed, and size of objects based on their vibrations. This power only works in Air or Water, although a version is available for both at [14] Points.

The power is not precise enough to act as a replacement for sight; the adept can locate moving objects in the dark, but cannot tell most anything about them (e.g. whether they are armed, what they look like, etc). In a perfectly still area, it is still possible to have a hazy understanding of large objects and openings purely on the flow of the air or water, which is enough to avoid barriers before running into them.

To make a Sense roll, consult the Size and Speed Table (B550) and apply separate bonuses for size and speed alongside a penalty for range. Wind or current will interfere with your sense similarly to fog or smoke; look up the air speed on the table and apply it as a penalty.

A successful Sense roll reveals the rough size, speed, location, and direction - which allows you to target it with an attack - but nothing about shape, colour, etc. The modifiers to your sense roll apply to any attacks (exactly as with Vision), but can never provide a bonus.

Statistics: Vibration Sense (Magical, -10%) [9]

Indomitable Will

2/4/6/8/9/11/13/14 Points

The adept's will is hardened by this power, reducing his susceptibility to fright. Each level in this power provides a +1 bonus to Fright Checks or resistance rolls to the Intimidation skill, while also acting as a penalty to the opponents Intimidation skill.

At level 8, the adept becomes *immune* to fear in all forms. They are exempt from Fright checks and most reaction modifiers alongside Intimidation failing (unless the opponent has the Empathy advantage).

Statistics: Fearlessness (Magical, -10%) [1.8 per level] last level is Unfazeable (Magical, -10%) [14]

Inertia Strike

Points

This power allows the adept to channel additional momentum into their target after a hit, making it easier to knock them around. Each level of this power adds 1d cr dbkb to their unarmed or melee attacks, purely for the purposes of determining Knockback (B378).

Statistics: Innate Attack, Cr (Double Knockback, +20%; Follow-Up, Universal (Accessibility, Unarmed and Melee Only, -20%), +40%; Magical, -10%; No Wounding, -50%) [5]

Iron Gut

4/5/6/7 Points

The adept becomes able to eat just about anything, reducing both his need for life-support, food, and water, while also improving his ability to resist ingested toxins.

This lowers the quality of such things to 2/3, 1/3, 1/20, and 1/100 for each level. This should generally lower cost of living by 4%, 8%, 10%, and 12% respectively for lowered food costs (it's cheap to eat out of the trash!). Additionally, each level provides a +1 bonus to resist food-borne toxins and diseases.

Finally, the power provides a +3 bonus to resist Ingested Toxins (Which includes food-borne toxins, but covers some more things).

Statistics: Reduced Consumption (Cast-Iron Stomach, -50%; Magical, -10%) [0.8 per level] and Resistant, Ingested Toxins (+3, x1/3; Magical, -10%) [3]

Iron Will

4/8/11/15/18/22 Points

This power helps protect and alert the adept to mental intrusions, such as from mind altering spells, adept powers, and critter powers, even while unconscious.

Each level adds a +1 bonus to resist mental attacks, including but not limited to the Control Thoughts spell, Influence Critter Power, and Commanding Voice Adept Power. It also resists attempts to locate the adept's mind; the opponent must win a Quick Contest against the adept's Will + Magic + Mind Shield to find them. As well, the adept is alerted by any failed attack on their mind, but does not necessarily know anything more than that they were attacked.

The adept can lower this as a free action at the start of their turns, allowing friendly magicians to read their minds or for similar activities.

Statistics: Mind Shield (Magical, -10%) [3.6 per level]

Kiai

27/36/44/51/58/64/69/72 Points

The adept can release a blood curdling cry that can terrify anyone who hears it - even allies.

When the adept uses a free action⁷⁴ to turn on this power, anyone that is able to hear their cry must immediately make a Fright Check (B360), with normal Fright Check modifiers as applicable. Failure means the target must roll on the Fright Check Table as normal.

The adept can keep this power on for as long as they can howl, which may cause repeat fright checks against those who begin the hear them, failed to resist the last time, or so on.

If the target succeeds on their result, they are immune to the adept's power for 1 hour; targets also gain a +1 bonus to resist for every time the Critter has targeted them in the past 24 hours.

After activating the power, the adept must resist a number of drain equal to the levels they have in the power.

At higher levels, their battle cry becomes extremely terrifying. Impose a -1 penalty to their Fright Check for each level beyond the first.

Level	Penalty	Cost
1	+0	27
2	-1	36
3	-2	44
4	-3	51
5	-4	58
6	-5	64
7	-6	69
8	-7	72

Statistics: Terror, Hearing 1 (Drain FP; Magical, -10%) [27]

Killing Hands

7/14 Points

The adept's hands become finely tuned killing machines, granting them a number of surreal benefits to a normal martial artist.

First, they add +1 crushing damage per die to the adept's unarmed punch damage. Additionally, the adepts limbs are treated as if they were weapons. This allows them to parry weapons with no unarmed parry penalty (B377) - regardless of skill. This also imposes the same penalty to opponents attempting to parry the adept unarmed - as if he were wielding a melee weapon such as a sword.

The adept is able to use techniques or styles that might require a weapon as opposed to to unarmed attacks, although the GM should confirm that each of these at least makes physical sense (Although lean on the side of: If a Wuxia movie would allow it, it can probably be done here too!).

At the second level, the adept can also include his legs in this power, applying these benefits to them as well. This allows them the same benefits, but also notably allows the adept to parry with their legs - although the GM is free to impose rolls to keep balance, avoid falling, or so on, in a similar way to the DX roll for missed kicks.

Statistics: Two CR Strikers (Limb, -20%; Magical, -10%) [3.5 each] further levels double it for legs.

⁷⁴It's a bit difficult to determine whether it's a Free Action or Ready Maneuver to activate Terror, but because it's so expensive we're erring on the side of caution.

5/9/14/18/23/27 Points

By temporarily decreasing his body's effective weight, the adept can achieve amazing feats of jumping.

Taking this power multiplies the adept's jumping distance and height (B352) by $\times 1.5$. The adept's Move while jumping their the greater of his normal Move and 1/5 their long jump distance. This also allows for the adept to slam into a foe by jumping, using his maximum jump as his move. Lastly, falling a distance equal to or less than the adept's maximum high jump deals no damage, and can be increased by Catfall or the Acrobatics skill as normal.

Higher levels increase this power exponentially. At the next level increase the multiplier to $\times 2$, and continue multiplying as for the previous levels for any higher levels (e.g. Level 5 is $\times 2 \times 2 \times 1.5$ ($\times 6$ total)).

Statistics: Super Jump 1/2⁷⁵ (Magical, -10%) [4.5 per level]

Linguistics

4/5 Points

The adept gains the ability to temporarily pick up languages. After being exposed to a language for 1 hour, the adept can temporarily gain Broken in the language, allowing them decent communication abilities. Should they acquire another language, they lose their already memorized language from this power.

At higher levels, the adept gains Accented instead of Broken, allowing much better communication abilities.

The adept can also use this to improve their already existing language skills, raising by 1 or 2 categories (e.g. Broken -¿ Accented or Broken -¿ Native) respectively.

This power can be purchased multiple times, allowing the adept to remember as many languages as were purchased alongside swapping out whichever languages they please when memorizing new ones.

Statistics: Modular Ability, 4 Points per slot, 3 Points per point (Slow, External) (Magical, -10%; Requires IQ Roll, -10%; Trait-Limited, Languages Only, -30%) [4] higher levels add 1 Point as [5] **Magic Sense**

Points

Statistics: Detect, Magic (Magical, -10%)

Master Archer

23 Points

This power allows the adept to perform truly heroic feats when using the Bow skill, in ways that would seem straight out of a Trid. Due to it's cinematic nature, the GM should decide whether this power is allowed - especially if they are intending to run a Black Trenchcoat style of game.

When performing an Attack or All-Out-Attack, the adept adds the bow's Acc without taking an Aim maneuver. If they do aim, they gain the normal benefits for aiming multiple seconds.

When instead performing a Moveand-Attack, the adept instead ignores the Bow's bulk penalty, alongside any penalty for Flying Attacks (MA107) or Acrobatic Attacks (MA107). They may also ignore Bulk in Close Combat, however they do not gain any Acc bonus in such a case.

Adepts with this power are particularly adept at rapid firing arrows, and halve the penalties for Quick Shooting Bows (MA119), regardless of the maneuver. When performing such a feat with an Attack or All-Out-Attack maneuver, add Acc to skill as normal, but not to the skill roll to ready the bow hastily.

In an overall similar fashion, half the penalties for Dual-Weapon Attack (MA83) when shooting two arrows at once.

Finally, halve all Fast-Draw penalties, rounded down.

Statistics: Unusual Background⁷⁶ [5] and Heroic Archer (Magical, -10%) [18]

Metabolic Control

5/9/14/18/23/27 Points

The adept is able to control their metabolic functions to a certain degree, allowing them to aid natural processes and even enter a deathlike trance for long periods.

Due to the adept's increased control over pulse, blood flow, digestion, and

respiration, they gain a +1 bonus to HT rolls for tasks that would benefit from these. This is often context dependant, such as lowering pulse rate to stop the spread of sepsis, and in complex situations may require a skill roll (Physiology, Physician, etc.) to determine the best thing to do. However, it should always apply to Bleeding rolls and rolls to recover (not resist) from Toxins and Disease.

The adept can also enter into a form of hibernation. In such a trance, it is hard to discern whether the adept is still alive, requiring a successful Quick Contest of Diagnosis vs ${\rm HT}$ + Magic + Metabolic Control. In such a state, each level reduces the adept's oxygen needs by 10% and doubles the amount of time they can go without food and water. The adept is unaware of their surroundings in such a state, but will still awaken if injured.

A mental "alarm clock" can be set to awaken them after a certain amount of time has passed.

The GM should consider whether the allow 10 levels of this ability or not, due to the *extreme* conditions it allows hibernation in (for one, the adept would no longer need oxygen!), although these are not unprecedented levels of control even in the real world!

Statistics: Metabolism Control (Magical, -10%) [4.5 per level]

4.5 Spirits

Spirits are mysterious beings originating from the Metaplanes, coming in an as wide a variety of shapes and minds as humans and animals, if not more so. They are categorized into a number of wide categories, however the specifics of their form, mentality, and sometimes powers vary widely by the summoner's tradition, such as angels for Christian Theurgists. As well, in the metaplanes themselves, it can vary even more, including mythical beasts, dinosaurs, dead humans (supposedly), or worse beings such as Shedim and Invae.

For game purposes, spirits are summoned using the Summoning and Binding advantages. Their abilities down below are used to determine their cost for pricing as Allies, all of which must have the Appears Constantly, Special Abilities, Summonable, and Favor modifiers

 $^{^{75}}$ We're taking half levels here (Similarly to Enhanced Move), to allow for more resolution in levels.

⁷⁶Heroic Archer is a *very powerful* ability, even in a setting where guns exist. While arrows might not be as effective as a bullet, the ability to place them extremely accurately in rapid fashion, combined with technological bows, all calls for an Unusual Background Tax.

- with expections for certain cases such as unwilling summons, free spirits, wild spirits, and so on.

Because there is no set starting points for a campaign, the cost are as follows (with some additional interpolation), with an additional Force Guide for 200 and 100 points:

% Points	Cost	200 Pts	100 Pts
5%	1	Force 1	Force 1
10%	1	_	-
15%	2	Force 2	_
20%	2	_	_
25%	2	Force 3	Force 2
40%	3	Force 4	_
50%	4	Force 5	Force 3
65&	5	Force 6	_
75%	6	Force 7	Force 4
90%	8	Force 8	-
100%	10	Force 9	Force 5
115%	13	Force 10	-
125%	15	Force 11	Force 6
140%	18	Force 12	-
150%	20	Force 13	Force 7
165%	23	Force 14	-
175%	25	Force 15	Force 8
190%	28	Force 16	-
200%	30	-	Force 9
225%	35	-	Force 10
250%	40	-	Force 11
275%	45	-	Force 12
300%	50	-	Force 13
325%	55	-	Force 14

4.5.1 Spirit Meta-Trait

All Spirits share some fundamental qualities that define them as spirits, although even this can be hard to fundamentally nail down due to the tumultuous nature of magic. The GM should feel free to both edit this to their liking, but also to edit it even within the realm of lore, as all attempts to nail down what makes a spirit a spirit have so far, failed.

69 Points

Advantages: Astral Perception [12]; Doesn't Breath [20]; Doesn't Eat or Drink [10]; Doesn't Sleep [10]; Flight (Planetary, -5%; Magical, -10%; Slow, Basic Move, -25%) [24]; Injury Tolerance (Unbreakable Bones) [10]; Immunity, Metabolic Hazards [30]; Spark [4]; Telecommunication, Telesend (Full Communion, +20%; Accessibility, Summoner Only, -80%; Magical, -10%)

[9]; Unaging [15]; Unusual Background (Spirit)⁷⁷ [5]

Disadvantages: Dependency, Mana (Very Common, -5; Constantly, ×5) [-25]; Fragile (Unnatural) [-50]; Unusual Biochemistry [-5]

4.5.2 Spirit Force

9.5 Points per Force

As a spirit's force increases, they have a number of traits that increase alongside it. This trait is automatically applied for higher force spirits and does not count towards any CP bonuses per Force.

Advantages: Damage Resistance 1 (Force Field, +20%; Accessibility, Only when Manifested/Possessing, -20%; Limited Defenses, Physical Attacks, -20%; Can't Wear Armour, -40%) [2]; Magic [7.5]

4.5.3 Spirit Morphology Traits

For spirits that take their own form,

Elemental

7 Points

Elemental covers most spirits that are fundamental forces, such as Fire, Air, Earth, etc. For most traditions, these take the form of representation of those forces, which means that they lack almost any form of convential morphology.

These are almost universally given the Injury Tolerance (Homogenous) trait, but the GM is technically within their right to use Injury Tolerance (Diffuse). This is, however, discouraged; while there is not much lore on exactly how a spirit manifestation works, it is likely similar in many ways to how magic forms mana into a physical form for spellcasting. This could imply that they are more "mana" than element, meaning that they are more amorphous blob of mana than trying to hurt "fire". This is additionally beneficial, because diffuse is much more powerful than any lore would support.

Notably, while the spirit has No Head, to No Brain trait is left to the Materialization Section.

Advantages: High Pain Threshold [10]; Injury Tolerance (No Blood, No

Eyes, No Neck, No Head 78) [17]; Peripheral Vision [15]

Disadvantages: No Fine Manipulators [-30]; No Sense of Smell/Taste [-5]

Traits: Non-Standard Morphology⁷⁹ [0]

Bodily

35 or 0 Points

These spirits have actual bodily morphology, often manifesting in forms like humans or animals. While they still lack anything that might be considered a biology, they do have a number of morphological traits that are valid targets nevertheless.

Some spirits with this style of morphology have inferior forms (e.g. Quadraped), which are often compensated with superior senses.

Advantages: Injury Tolerance (No Blood) [5];

Disadvantages:

Choose where applicable:

Biped [0] or

Quadraped [-35]; Discriminatory Hearing [15]; Discriminatory Smell [15]

4.5.4 Spirit Type Traits

Different traditions have differing types of spirits, which affect how they interact with the material plane.

Materialization

62 Points

Spirits who materialize create a physical body from mana, actually creating a physical body on the material plane.

Their bodies are not anything that would approach normal biology, which makes them particularly hard to damage without magical effects; they are treated as Homogenous to any physical attack (Although, do note that their No Brain and No Vitals remains versus magical attacks regardless).

The spirit can jump between the two planes. The requires 10 seconds of concentration, 1 FP, and an IQ roll. Success jumps to the corresponding time on the astral plane. The rules for the plane can be found under the Astral Projection advantage above.

⁷⁷This is a small Unusual Background meant to represent the spirits ability to take Critter powers, Injury Tolerance, etc.

 $^{^{78}}$ Does not include no Brain, see Materialization section.

 $^{^{79}}$ Any rules that rely on physiology modifiers are heavily penalized as normal.

This is a more difficult task than projection, due to the fact that the spirit is actually moving between the planes themselves, which is why it has a different modifiers.

Modifiers: +1 per Level of Magic, -1 per second of less concentration.

As well, the spirit's manifestion does not innately allow for tag-alongs or following. While manifesting, the spirit is Dual-Natured.

Advantages: Injury Tolerance (No Brain, No Vitals) [10]; Injury Tolerance (Homogenous) (Limited Defense, Physical Attacks, -20%)⁸⁰ [32]; Jumper, Astral (Improved, +10%; Cannot Escort, -10%; Cannot Follow, -20%; Naked, -30%; Limited Access, Astral Plane & Home Plane, -15%; Magical, -10%; Nuisance Effect, Dual-Natured, -5%) [20]

Possession

62 Points

Possession spirits are unable to interact with the material plane on their own. They must possess people or object in order to do so.

The spirit can only posses something from that astral plane (no switching from body to body). To do so, they must All-Out Concentrate for 1 minute, touch the subject, and roll IQ vs the subject's Will, if living, or HT if unliving (The GM may make exceptions to use Will for objects guided by intelligences, such as AI or even Pilot programs). If the spirit fails, the subject is immune to their possession attempts for 24 hours.

The spirit takes a -3 penalty if trying to possess someone with a good amount of cyberware or a highly manufactured item, or a -6 penalty if trying to possess someone with a lot of cyberware or a highly technological or electrical item.

While possessing, the spirit uses the subject ST, DX, and HT (or their own DX for inanimate objects), as well as their physical advantages and disadvantages. They keep their mental attributes, advantages, and their skills, although physical skills must use their new attributes.

For the purposes of possessing an unliving object, the spirit needs a level of TK equal to the HP of an unliving object's HP, or half the HP of a homogeneous object. The object itself can grab, lift, strike, etc. with a ST equal

to the TK required to lift it, move and jump if not fixed (with a move equal to the spirit's TK level minus the minimum level), etc. Objects that have special modes of transport may use them (such as flying a RC helicopter).

The spirit does not have any particular access to a living beings or electronic system's memories, nor do they have utter control over any electric system that they possess (Although they do have control of its physical body).

While possessing, the spirit may still be affected by anything that can normally affect a manifested spirit. Attacks that penetrate or ignore the subject's DR can injure them, but the subject's HP act as extra DR for this purpose.

As well, an awakened individual with the Banishing skill can force the spirit to leave by winning a Quick Contest of Banishing vs. the Spirit's Will.

Do note that the as the spirit can still be targeted normally, they do count as being Dual-Natured.

Advantages: Possession (Decreased Immunity, +50%; Link, TK, +10%; All-Out Concentrate, -25%; Environmental, Astral Only, -20%; Hard to Use 2 (Accessibility, Technology Only, -20%), -8% Immediate Preparation Required, 1 Minute, -30%; Spiritual, -20%; Magical, -10%; No Memory Access, -10%) [37]; TK 25 (Link, Possession, +10%; Accessibility, Only things being possessed, $-40\%^{81}$; Animation, -20%; Cannot Affect Self, -20%; Cannot Punch, -10%; Magical, -10%) [25]

While Basic Set p558 will likely be an invaluable resource for determining HP based of weight, some times the GM may wish to know the weight of an object from its HP. A table below is provided for up to 25 HP.

HP	Unliving	Homogenous
1	0.02 lb	0.002 lb
2	0.125 lb	0.156 lb
3	0.42 lb	0.525 lb
4	1 lb	0.125 lb
5	1.95 lb	0.24 lb
6	3.375 lb	0.42
7	5.35 lb	0.66 lb
8	8 lb	1 lb
9	11.39 lb	1.42 lb
10	15.625	1.95 lb
11	20.8 lb	2.6 lb
12	27 lb	3.375 lb
13	34.33 lb	4.29 lb
14	42.875 lb	5.36 lb
15	52.73 lb	6.59 lb
16	64 lb	8 lb
17	76.77 lb	9.6 lb
18	91.125 lb	11.39
19	107.17 lb	13.4 lb
20	125 lb	15.625 lb
21	144.7 lb	18.09 lb
22	166.38 lb	20.8 lb
23	190.38 lb	23.76 lb
	216 lb	25.76 lb
24	244.14 lb	30.57 lb
25	244.14 10	
26		34.32 lb 38.44 lb
27 28		42.89 lb
1		42.89 lb 47.63 lb
29	_	52.73 lb
30 31		58.19 lb
1		64 lb
32		70.19 lb
33		70.19 lb 76.77 lb
34 35		87.74 lb
36		91.125 lb
1		
37		98.93 lb 107.17 lb
38		
39		115.86 lb
40		125 lb
41		134.61 lb 144.7 lb
42		
43	_	155.29 lb
44	_	166.38 lb
45	_	177.98 lb
46	_	190.11 lb
47	_	202.78 lb
48		216 lb
49		229.78 lb
50		244.14 lb

Inhabitation

Inhabitation spirits are, at a glance, very similar to Possession spirits, however these are much more insidious. While a Possession spirit is like someone squatting in your house, an Inhabitation spirit

⁸⁰ This Injury Tolerance (Homogenous) lacks No Brain and No Vitals, because those aspects are NOT ignored by magical attacks.

⁸¹Accessibility based on the estimate of less than 10,000 useful items available at any given moment, but more than 17 (6%)

is a home invasion, murdering to owner and posing as them.

Due to this nature, they are very often limited to outer spirits, such as Invae and Shedim.

TODO: This. Include dependancy on out planes w/ some stopping while.. possessing probably.

Bound Spirit

-5 Points

Disadvantages: Sense of Duty (Summoner) [-5]

4.6 List of Spirits

Here are a list of templates for known spirits. A conjurer does not necessarily have access to all of them, and when creating a character should get with their GM to determine which spirits are available to their tradition.

Every Spirit has a Force rating when summoned. The base template represents Force θ , and underneath are a list of improvements that can be added when summoning Force 1 and above, alongside limitations to those options for each type. Each increase of Force provides an amount of CP that is determined by the spirit Type, which can be chosen from the list, or any other trait that the GM approves; a portion of this section are dedicated to powers that a spirit gains by default at Force 1, instead of gaining the bonuses CP. These powers may have a higher cost when adding them to higher Force spirits and must be bought before spending any other CP. These are marked with a + symbol. A minimum cost for all of the Force 1 powers is noted next to the header, for easy addition when creating a Force 1 Spirit.

Some spirit types might have certain traits that are automatically improved at higher levels of Force, in which case they will be noted there. While the GM technically decides and is the final arbitrator on what traits a spirit is summoned with, it is recommended to allow the summoner to choose what they want, as long as it seems reasonable.

Additionally, all increases of Force automatically increase the level of the Spirit Force trait from above, which does not count against the spirit's CP for each Force.

Some spirits are given multiple templates to choose from (Such as a Spirit of

Water's liquid or frozen forms). These must be determined when summoning and should generally not change without GM discretion (i.e. a frozen Spirit of Water won't generally melt into a liquid form).

4.6.1 Spirit of Fire

-134 Points Force 0

A Spirit of Fire takes, unsurprisingly, the form of something heavily related to fire. Most often, especially for tradition close to hermetics, this takes the form of some sort of fire elemental, force, etc. For shamanic ones, this could be a bit less elemental (Although many still are), taking the form of fire associated things or creatures, such as a Phoenix. In such a case, it is acceptable to switch Elemental [7] with Bodily [5/0], and take either +1 HP/+1 ST respectively.

Spirits of fire are apt combat spirits, with above average Perception and Dexterity, while on the flip side having some of the more accessible countermeasures. They are naturally resistant to sources of heat or fire, but there is a limit as extraordinarily dangerous sources can still affect their materialized form.

They have the capability to induce accidents and confusion in opponents, or for less subtle effects can fling fireballs, burn people at the touch, or even completely engulf them in the flames of their body.

Unlike many spirits, they do require oxygen to materialize well, losing FP as per suffocation otherwise. As well, their form is more draining in the presence of water (or any general fire-retardant chemical), causing 1d HP damage per minute of exposure.

Attributes: ST 5 [-35]; DX 7 [-75]; IQ 6 [-60]; HT 7 [-45]; HP 5 [0]; Basic Speed 4.25 [15]; Basic Move 3 [0]; Per 7 [-15]; Will 6 [-28]; FP 6 [0]

Advantages: Damage Resistance 10 (Limited, Heat/Fire, -40%) [30]; Elemental [7]; Manifestation/Possession [62]; Spirit Meta-Trait [69];

Disadvantages: Doesn't Breath with Oxygen Combustion⁸² [-10]; Innumerate [-5]; Invertebrate [-20]; Weakness, Water (1d/minute) [-40]

Skills: Aerobatics (H) DX [4]; Assensing (H) Per [4]; Brawling (E) DX+2 [4]; Innate Attack (E) DX+2 [4]

Spirit of Fire Improvements

Force 1 [131]: Spirit Force [10.5+]

Accident [38]
Confusion [42+]
Elemental Attack (Fire) [5 per Magic]
Energy Aura [5.5 per Magic]
Engulf [29+];

Automatic effects at Higher Forces:

Damage Resistance 1 (Limited, Heat/Fire, -40%) [3]

Optional effects at Higher Forces, +12 CP per Force:

Fear [42+] Guard [12+] Noxious Breath Search [29+]

+1 ST limited to Force+4 +1 IQ, HT, Will limited to Force+5 +1 DX, Per limited to Force+6 +1 HP, FP limited to +30% from ST/HT +0.25 Basic Speed limited to +1.0 from

base +1 Basic Move limited to +2 from base

4.6.2 Spirit of Air

-214 Points Force 0

A Spirit of Air takes, once again unsurprisingly, the form of something heavily related to air. For hermetics, this is often a traditional air elemental, also heavily associated with lightning. For other traditions, this might also take the form of great birds or other things that represent or are associated with the air. In such a case, it is acceptable to switch Elemental [7] with Bodily [5/0], and take either +1 HP/+1 ST respectively. Other possible forms include: flocks of crows or butterflies, a woman made of clouds, etc.

Spirits of Air are heavily power focused, with relatively weak defense and abilities, made up for by their bulky power lists. They tend to have abysmal ST and HT, but have great DX and improved Basic Speed (Although their low HT counteracts this largely). These spirits are also extremely mobile, with a max speed of $\times 1.5!$

Their powers are highly varied and capable. They are able to cause acci-

 $^{^{82}}$ This updates the Doesn't Breath in the Spirit Meta-Trait to add Oyxgen Combustion, -50% to it.

dents or confusion in opponents, while also able to obscure things around them from notice and also mystically search for anything that they are familiar with. Less subtly, they are able to greatly speed up or slow down almost anything flying they can see - including themselves, their summoner, or the rigger's rotodrone!

Unlike other spirits, their form of flight is impacted by air currents. Wind can push the spirit in its direction by 1 yard per second for every 5 mph of wind. This can sometimes be beneficial, providing a backdraft for the spirit! However, it is more likely to affect their ability to stay exactly where they want to be at a given moment. They are also particularly vulnerable to high and low pressures. Beyond the normal effects, whenever they are in a *Thin or Dense* pressure (B429), their bodies are unable to properly maintain themselves, causing 1d unresisted HP damage per minute of exposure. The GM is within their rights to assign small bonus damage to high pressure attacks, such as crushing explosives.

Attributes: ST 1 [-63]; DX 8 [-50]; IQ 6 [-60]; HT 2 [-120]; HP 1 [0]; Basic Speed 3.25 [15]; Basic Move 3 [0]; Per 6 [-20]; Will 6 [-28]; FP 2 [0]

Advantages: Elemental [7]; Enhanced Move, Air, ×1.5 (All-Out, -20%; Magical, -10%) [7]; Manifestation/Possession [62]; Spirit Meta-Trait [69];

Disadvantages: Flight with Lighter than Air⁸³ [-4]; Innumerate [-5]; Invertebrate [-20]; Weakness, Low/High Pressures (1d/minute) [-20]

Skills: Aerobatics (H) DX [4]; Assensing (H) Per [4]; Brawling (E) DX+2 [4]; Innate Attack (E) DX+2 [4]

Spirit of Air Improvements

Force 1 [215]: Spirit Force [10.5 per Magic]

Accident [38] Concealment [12+] Confusion [42+] Engulf [29+]; Movement (Air) [54] Search [29+]

Optional effects at Higher Forces, +15 CP per Force:

Elemental Attack (Lightning) [5 per

Force]
Energy Aura [5.5 per Magic Fear [42+]
Guard [12+]
Noxious Breath
Psychokinesis

+1 ST limited to Force+1 +1 HT limited to Force+2 +1 IQ, Will, Per limited to Force+5 +1 DX limited to Force+7 +1 HP, FP limited to +30% from ST/HT +0.25 Basic Speed limited to +1.5 from

+1 Basic Move limited to +3 from base

4.6.3 Spirit of Earth

-133 Points Force 0

Spirits of Earth, yet again, take the form or things heavily related to earth and nature. For hermetic styled traditions they have a wider range than normal, taking the form of dirt, sand, or sometimes even wood or metal (As detailed in other templates TODO). For more shamanic traditions, this can also take the form of burrowing creatures, subterranean creatures, etc. In such a case, it is acceptable to switch Elemental [7] with Bodily [5/0], and take either +1 HP/+1 ST respectively.

Spirits of Earth are extremely hard and strong, making them viable for many laborious tasks alongside the task of bodyguarding. They have great ST and HT, at the price of very low DX and low IQ and Basic Speed (Although their high HT counteracts this marginally). They also have additional DR, past the normal for everyday spirits. It is semi-ablative (B47), but will often provide that extra kick of protection to make them much tankier.

Their powers are limited, but powerful. They lack much in the way of subtlty, only able to prevent accident and catastrophes for those nearby them. Overtly however, they are able to bind opponents by controlling the ground, greatly speed up or slow down almost anything ground based, and mystically search for anything familiar to them.

Spirits of Earth are also extremely versatile in the conditions that they can go into. They are immune to the effects of pressure and vacuum entirely. They

are, however, not sealed (You can still water and Blight them)!

Attributes: -305 ST 10 [0]; DX 4 [-150]; IQ 5 [-75]; HT 9 [-15]; HP 10 [0]; Basic Speed 2.75 [-10]; Basic Move 2 [0]; Per 6 [-20]; Will 6 [-28]; FP 9 [0]

Advantages: 193 Damage Resistance 5 (Semi-Ablative, -20%) [20]; Elemental [7]; Manifestation/Possession [62]; Pressure Support 3 [15]; Spirit Meta-Trait [69]; Vacuum Support [5]

Disadvantages: -25 Innumerate [-5]; Invertebrate [-20]

Skills: 12 Assensing (H) Per [4]; Brawling (E) DX+2 [4]; Innate Attack (E) DX+2 [4]

Spirit of Earth Improvements

Force 1 [135]:

Spirit Force [10.5 per Magic]

Binding 6 [20; 3.3 per Will] Guard [21+] Movement (Ground) [54] Search [29+]

 $Automatic \ \ effects \ \ at \ \ Higher$ Forces:

Binding +1 [3.3] Damage Resistance +1 (Semi-Ablative, -20%) [4]

Optional effects at Higher Forces, +7 CP per Force:

Concealment [12+] Confusion [42+] Engulf [29+];

Elemental Attack (Earth) [5.5 per Force] Fear [42+]

4.6.4 Spirit of Beasts

-131 Points Force 0

Spirits of Beast are a strange and extremely diverse class of beings. They are known to take the form of any nonsapient animal - mythical or not - although they do sometimes stay away from more meta-physical depictions that are used for other elements, such as a Stormbird for a Spirit of Air. They aren't limited to singular animals, sometimes manifesting as an entire flock (Although this does not change their traits unless the GM really wants to alter the templates!).

The variety of forms can sometimes mean a required change in their Bodily Advantage, such as an Emu being Bodily (Bipedal). In such a case, the spirit retains the Discriminatory Smell

 $^{^{83}\}mathrm{This}$ updates the Flight in the Spirit Meta-Trait to add Lighter than Air, -10% to it.

& Hearing [30], usually paying for it with -2 HT [-30] alternatively -1 DX & -0.25 Basic Speed [-30] or as a final alternative -4 ST [-28]. GMs and players are free to mix these up as they wish, as long as the end up within ± 5 points.

The Spirits themselves are solid allrounders, with good ST and HT alongside average everything else. Their perception is aided by their enhanced senses, allowing for extremely precise smelling, tasting, and hearing alongside their good night vision.

They lack a large amount of powers, but are unique in their Animal Control power, which allows them to command large amounts of non-sapient animals. Otherwise, they can instill fear into a subject or greatly increase or decrease the speed of a target.

Their movement power is somewhat less intuitive than other spirits, because it is related to the form that their animal takes; an eagle may have it's home territory as an area that eagles normally live (e.g. wilderness of Alaska) or it may simply have the air as its home territory. Alternatively, a cat may have the alleys of any urban area (akin to a feral cat), or alternatively just the ground as its territory. The GM should strive to make them relatively equal in frequency given the campaign and its setting (e.g. a campaign permanently in Alaska should not allow the former eagle example, while it should also not require "the ocean" for an aquatic animal in a campaign that will never see water).

Spirits of Beast are additionally strange in their animistic mindset. They are bestial, meaning that they generally lack many "civilized" concepts such as property. They are not unintelligent, they simply react like an animal would. Think similar to how a chimpanzee act and reacts. They are also unable to read text or abstract images, making them unable to even use many aspect of metahuman society!

Attributes: ST 9 [-7]; DX 6 [-100]; IQ 6 [-60]; HT 8 [-30]; HP 10 [0]; Basic Speed 3.75 [5]; Basic Move [0]; Per 6 [-20]; Will 6 [-28]; FP 8 [0]

Advantages: 136 Bodily (Quadraped) [0]; Manifestation/Possession [62]; Night Vision 5 [5]; Spirit Meta-Trait [69]

Disadvantages: -35 Bestial [-10]; Dyslexia [-10]; Innumerate [-5]; Non Iconographic [-10] Skills: 8 Assensing (H) Per [4]; Confusion [42+] Brawling (E) DX+2 [4] Engulf [29+]

Spirit of Beast Improvements

Force 1 [132]:

Spirit Force [10.5 per Magic]

Animal Control [25+] Fear [42+] Movement (Various) [54]

Optional effects at Higher Forces, +15 CP per Force:

Concealment [12+] Confusion [42+] Guard [21+] Natural Weapon Noxious Breath Search [29+] Venom

4.6.5

Spirit of Water

-176 Points Force 0

Spirits of Water most often take forms associated with the actual molecule itself, as a water elemental or some other representation. Sometimes (more often for shamanic traditions) they also take the forms of things like mermaids, sea serpents, or anything water related as well! As usual, such forms can justify a switch from Elemental [7] to Bodily [5/0], and take either +1 HP/+1 ST respectively.

Attributes: ST 6 [-28]; DX 6 [-100]; IQ 6 [-60]; HT 6 [-60]; HP 6 [0]; Basic Speed [0]; Basic Move [0]; Per 6 [-20]; Will 6 [-28]; FP 6 [0]

Advantages: Amphibious [10]; Chameleon 1 [5]; Elemental [7]; Manifestation/Possession [62]; Pressure Support 3 [15]; Slippery 5 [10]; Spirit Meta-Trait [69]

 $\begin{array}{ccc} \textbf{Disadvantages:} & \text{Innumerate} & [-5]; & \text{Invertebrate} & [-20]; & \text{Vulnerability}, \\ \text{Heat/Fire \& other Dehydrating Attacks} \\ \text{(Common, $\times 3)} & [-45] \end{array}$

Skills: Assensing (H) Per [4]; Brawling (E) DX+2 [4]; Innate Attack (E) DX+2 [4];

Spirit of Water Improvements

Force 1 [177]:

Spirit Force [10.5 per Magic]

Concealment [12+]

Confusion [42+] Engulf [29+] Movement (Sea) [54] Search [29+]

Optional effects at Higher Forces, +15 CP per Force:

Aciddent [39]
Binding 6 [20+; 3.3 per Will]
Elemental Attack (Water) [5.5 per Magic]
Energy Aura (Ice) [4.5 per Magic]
Guard [21+]

4.6.6 Spirit of Man

Weather Control

-212 Points Force 0

Spirits of Man are extremely interesting concepts to metahumanity, least of all for their apparent ability to mimic the identities of dead people - or that they might just be dead people. The most common form by far are those that are metahuman in shape - but they are by not means limited to this! They can take the form of anything heavily related to metahumanity, such as infrastructure like street signs and trash cans, humanlike animals such as monkeys and coyotes, or human-associated animals such as dogs! In such cases, they may switch their Bodily (Bipdeal) [5] trait, or may even take the *Elemental* [7] trait!

Attributes: ST 4 [-42]; DX 5 [-125]; IQ 6 [-60]; HT 6 [-60]; HP 4 [0]; Basic Speed [0]; Basic Move [0]; Per 7 [-15]; Will 6 [-28]; FP 6 [0]

Advantages: Bodily (Biped) [5]; Infravision [10]; Manifestation/Possession [62]; Night Vision 5 [5]; Spirit Meta-Trait [69]

Disadvantages: Choose -45 points in disadvantages (Preferably mental) to represent the spirit's mentality. Some niche suggestions:

Compulsive Behaviour (Ghostly Repetition) 84 [-1 to -15]

Invertebrate [-20] & Innumerate [-5] (For non-humanoid spirits)

Delusion (They are the spirit of a dead person) [-10]

Skills: Assensing (H) Per [4]; Brawling (E) DX+2 [4]; Spellcasting (H) 10 [4];

 $^{^{84}}$ From Horror p23

Spirit of Man Improvements

Force 1 [212]:

Spirit Force [10.5 per Magic]

Aciddent [39]

Concealment [12+]

Confusion [42+]

Guard [21+]

Influence [58]

Search [29+]

Optional effects at Higher Forces, +15 CP per Force:

Fear [42+]

Spell (Any spell that the summoner

knows)⁸⁵ [var]

Movement (Various) [54]

Psychokinesis

4.6.7 Spirit of Guidance

TODO Points Force 0

Spirits of Guidance are there to provide direction to summoners, often taking the form of things closely associated with that, such as explorers or navigators, ancient ancestor, or as mundane as a seeing eye dog. They can take less obvious forms as well, such as a street sign, although these can be rare depending on the tradition and summoner.

4.6.8 Spirit of Plant

TODO Points Force 0

Spirits of Plant can be interesting in contrast to wooden Earth Spirits. Plant Spirits tend to focus more on the flora themselves than the idea of wood or the ground supporting it, meaning that they often take the forms of auspicious trees or plants as opposed to literal bodies of wood. Many traditions deliniate between cultivated and wild plants as well.

4.6.9 Guardian Spirit

TODO Points Force 0

Taking a much more metaphysical approach than many spirits, Guardian Spirits often form as string warriors, avenging angels, guardian ancestors or spirits, and so on. Their forms are often dual-purposed to frighten opponents and reassure their allies, and as such often are impressive and mythological in their style, such as Norse Valkyries or Islamic Ifreets.

4.6.10 Task Spirit

TODO Points Force 0

Yet another metaphysical style of spirit, Task Spirits take forms related to workers - often physical, although that is changing somewhat as traditions blend with the modern world. These can be carpenters, smiths, or even hackers, but can also be non-human, such as Golems. Their style can range greatly, from regal consultant to slave, and overlap heavily with other spirits, especially Spirits of Man.

 $^{^{85}\}mathrm{Spirits}$ rarely cast at a Force above their magic, although they can.

5 Matrix

5.1 Books

The Matrix rules make use of GURPS Pyramid #3/21 Cyberpunk article Console Cowboys and Cyberspace. It is a selection of rules for running a semicomplex minigame of hacking, which serves purpose for the Matrix well.

Cyberpunk works through three parts: it creates an additional hardware modifier for computers to create cyberdecks, it creates rules for interface modes while hacking, and most importantly it creates a large swath of programs that are used to accomplish specific tasks in cyberspace.

Cyberpunk also has a ruleset for determining opposition using the GURPS Action BAD system. However, these rules systematically misrepresent Shadowrun's security design philosophy, in that when facing powerful organizations, you will more often be facing many layers of weak opponents and security, and when facing a less-powerful individual, you will often face one strong opponent. BAD simply assigns a difficulty based on how powerful the entire opponent is, which tends to overvalue organizations and undervalue individual deckers. As such, it is not used for the setting.

Another useful book is GURPS High Tech - Electricity and Electronics. It provides in depth explanations for many hardware and software related topics. Notably, we will be making use of the Dedicated modifier, which prevents programs from being changed, but applies x0.5¥ and x0.2lbs.

5.2 Shadowrun Specifics

Shadowrun has a small selection of decking tools or systems that are unrepresented in Cyberpunk:

5.2.1 Cold & Hot Sim

When entering into VR, any character with 1 or more points in Computer Hacking (or at the GMs discretion) can disable their Sim-filter Module, turning on Hot-Sim.

Hot-Sim adds +2 to all Computer Hacking, Computer Operation, Computer Programming, or Expert (Computer Security) rolls to use Cyberpunk's programs, however it provides a -2 to resistance rolls against the Damage program or any other effect that the Sim-Filter Module is usually protecting against (Such as traumatic Simsense recordings) alongside rolls to resist Link-Locking, due to relaxed security. Explicitly, this bonus never applies to Threading rolls.

5.2.2 Link-Lock Program

Link-Lock Program (Continuous)

Default : Computer Hacking-3 Base Complexity : 5

Sends continuous keep-alive signals to the target's VR module, forcing them to stay connected to the Matrix even if they try to disconnect.

This program can only be effectively used on individuals that are in VR, only causing meaningless errors for individuals using terminals. While this program is running, successfully using the Control or Damage program against an individual causes link-locking.

Link-locking prevents a user from disabling or leaving VR through normal methods by overwriting any signals. This can be potentially lethal, as the user is unable to retreat from any dangerous situation without outside help.

If a user wishes to jack out there are a couple routes, none that are easy. They can attempt to use the Control program to temporarily gain control over their cyberdeck's keep-alive systems, in which case they must win a Quick Contest versus the Link-Lock program with their Control program with a -3 modifier.

Alternatively, they can attempt to simulate the Link-Lock's incoming signals in order to spoof their commands to the cyberdeck. They must also win a Quick Contest versus the Link-Lock program with their Spoof program with a -2 modifier.

Next, they can attempt to jam the incoming keep-alive signals from the opposing decker. This does not stop the keep-alive signals, but it would - in theory - prevent them from reaching the user's systems and preventing jacking out. However, most competently designed Link Lock programs embed themselves in breached systems to prevent this exact flaw (Which is why they require a successful Control or Damage program use), which makes jamming the opposing decker have little effect (and

may in fact, prove negative should the opposing decker disable their program and have no way to signal that to the worm in your system!).

In the case that you already have access to the opposing decker's systems, you can attempt to simply disable this program through any conventional means to control programs: Alter to change the program, Control to signal for the program to end or change, etc.

Lastly, you can take the painful road by hard jacking out. This is where a friendly companion of your physically either unplugs your connection to your cyberdeck, turns it off, or just breaks it. This immediately requires the user to roll HT as if resisting the effects of the Damage program, with a -4 penalty. In cases where there is not a Link-Lock program running and the user is hard jacked out, this roll is made at no penalty.

5.3 Cyberdecks

The GM is heavily advised to help a player design their own Cyberdecks, which are as much a tool as they are a form of expression by the Decker. They can provide a wide array of specializations and opportunities for hackers, whether that be portability, program limitations, high complexity, improved defenses, terminal styles, or more!

Erika MCD-1

A medium-sized, bottom tier cyberdeck about the size of a laptop, with built-in Basic VR, a Portable Terminal (-1 to skill), and built in Cable Jack and Tiny Radio Communicator.

Equipment: Cable Jack, Portable Terminal, Small Radio Communicator (10 mi range).

Microdeck Summit

Cost: 435¥, Weight: 0.55 lbs. LC 4

An alternative to the MCD-1, this small cyberdeck is about the size of a

phone, with built-in Basic VR, a Datapad (-2 to skill), and built in Cable Jack and Tiny Radio Communicator. It trades off a bit of cost in return for portability.

Equipment: Cable Jack, Portable Terminal, Tiny Radio Communicator (1 mi range).

Statistics: Small Computer, Complexity 4 (Cyberdeck, ×1.25¥), 125¥, 0.5 lbs; Datapad, 10¥, 0.05 lbs; Basic VR, Complexity 4, 300¥

Fairlight Excalibur

Cost: 1,878,550¥, Weight: 10.5 lbs., LC 2

The holy grail of decks, the Fairlight Excalibur has practically every bell and whistle that one could want. It keeps its hefty size - a large laptop or small workstation - largely as a sign of its status, while providing the computing power of an entire business and then some.

The Excalibur is Complexity 7, Hardened, and can run 50% more programs that normal. It also has Total VR built-in for the system, a portable terminal (Completely detachable for most decker's purposes), and a Small Radio Communicator that also comes with a built in Secure Encryption Chip, which makes communications basically uncrackable to anything but Quantum Computers at the expensive of a 1 second delay.

Equipment: Cable Jack, Portable Terminal, Secure Encryption Chip, 500¥; Small Radio Communicator (1 mi range).

5.4 Decryption Computers

Due to the advent of superior computing power and quantum computing, encryption is not a given for security. Here are some devices designed to be used alongside decks for decrypting files or communications.

These usually do not come with any terminals, instead designed to be linked up with driving computers that send them information for decryption, without slowing down the original computer in the meantime.

Standard Decryption Computer

Cost: 5,500¥, Weight: 2 lbs. LC 3

This computer is a workhorse for decryption purposes. It has Complexity 10 for the purposes of decryption, meaning it takes 36 seconds per attempt for Basic Encryption and 1 hour per attempt for Secure Encryption. As well, it comes with a library of hacks, flaws, and exploits for known Encryptions while provides a +1 (Quality) bonus to your Cryptography rolls.

However, while the computer can perform basic tasks, it cannot switch out programs, leaving it dedicated to the task of decryption.

Equipment: Cable Jack, Small Radio Communicator (10 mi range).

Statistics: Personal Computer, Complexity 5 (Dedicated, $\times 0.5 \mbox{$\mathbb{Y}$} \times 0.2 \mbox{lb};$ Quantum, $\times 10 \mbox{$\mathbb{Y}$}$, $\times 2 \mbox{lb}$), 5,000 $\mbox{$\mathbb{Y}$}$, 2 lbs; Decryption Program, 500 $\mbox{$\mathbb{Y}$}$

Small Decryption Computer

Cost: 1,000¥, Weight: 1 lbs. LC 3

A smaller computer for hackers on a budget or on the go. It has Complexity 9 for the purposes of decryption, meaning it takes 6 minutes per attempt for Basic Encryption and 3 hours per attempt for Secure Encryption. As well, it comes with a library of hacks, flaws, and exploits for known Encryptions while provides a +1 (Quality) bonus to your Cryptography rolls.

However, while the computer can perform basic tasks, it cannot switch out programs, leaving it dedicated to the task of decryption.

Equipment: Cable Jack, Small Radio Communicator (10 mi range).

Statistics: Small Computer, Complexity 4 (Dedicated, $\times 0.5 \mbox{$\stackrel{\cdot}{Y}$} \times 0.2 \mbox{lb};$ Quantum, $\times 10 \mbox{$\stackrel{\cdot}{Y}$}, \times 2 \mbox{lb}, 500 \mbox{$\stackrel{\cdot}{Y}$}, 0.2 \mbox{lbs};$ Decryption Program, $500 \mbox{$\stackrel{\cdot}{Y}$}$

Beefy Decryption Computer

Cost: 50,500¥, Weight: 16 lbs. LC 3

An extremely beefy computer for hackers who want near real-time decryption of almost any system. It has Complexity 11 for the purposes of decryption, meaning it takes 3 seconds per attempt for Basic Encryption and 6 minutes per attempt for Secure Encryption. As well, it comes with a library of hacks, flaws, and exploits for known Encryptions while provides a +1 (Quality) bonus to your Cryptography rolls.

However, while the computer can perform basic tasks, it cannot switch out programs, leaving it dedicated to the task of decryption.

Statistics: Microframe Computer, Complexity 6 (Dedicated, $\times 0.5 \mbox{$\mathbb{Y}$} \times 0.2 \mbox{lb};$ Quantum, $\times 10 \mbox{$\mathbb{Y}$}$, $\times 2 \mbox{lb}$), $50,000 \mbox{$\mathbb{Y}$}$, $16 \mbox{lbs}$; Decryption Program, $500 \mbox{$\mathbb{Y}$}$

G.O.D. and Overwatch TODO : This

5.5 Guidance

When designing matrix opposition, it can be pretty daunting to individuals who don't understand networking or computer science. While going off gut intuition and Hollywood style hacking films can lead to some pretty acceptable results, putting in the extra level of realism can simultaneously make the security feel more fleshed out and realistic, while also making it more difficult without resorting to simply increasing Skill Levels.

5.5.1 Networks

Networks are connections of computers that are connected to each other via ethernet (physical wires) or remotely (wifi). In Shadowrun, the vast majority of Networks are composed of almost entirely - if not entirely - remote connections.

This is done for a variety of reasons: Physical technology has lagged behind remote technology, GOD serves as a police force for remote networks, and the ever classic convenience and costit's just more cost and time efficient in the grand scheme to coordinate with the greater remote Matrix than to be an eclectic company.

That being said, there are some situations where physicals networks are still used. The most obvious is the situation where devices are still plugged via cable to a computer, such as an MRI being physically plugged into the computer that runs it. The less obvious ones are situations where taking the difficult road is worth it, such as protecting sensitive information (Trade Secrets, Research), paranoid individuals' home servers, or old systems that would cost more to upgrade than maintain.

When designing a network for a run, it helps to know three broad types of networks found in the Matrix: The Matrix itself, an intranet, and an extranet.

The Matrix is the remote connections of all the computers available to metahumanity - plus something.. else, if the stories were to be believed. It's made up of a very large amount of networks, ranging from home servers to AAA office hosts, that are all connected to their Matrix provider.

A Matrix provider is a company such as NeoNet (Rest in peace) that serves Matrix traffic from network to network, provides maintenance and/or customer support for networks and hosts, and connects grids on the Matrix. A Matrix provider connects networks through special services; they rent out connections that are difficult to maintain (Such as cross-continental cables), maintain licenses for special services that keep track of internet traffic and route it to locations, and maintain hardware to perform those services. In essence, they maintain licenses and hardware that allows them to connect networks and grids to other networks and grids.

The nice thing about Matrix providers, is that as long as you have access to a computer or service that uses them (Such as a home subscription, public wifi, or a cracked grid), you can access any computer that the Matrix provider's software has interacted with before (provided it is still online, available, and unchanged) simply by routing your traffic to other computers that can eventually route your traffic to your destination. This allows you to overcome many limitations of range when it comes to the Matrix, but does restrict you to accessing those destinations through their expected routes - as opposed to say, hacking into the building by taking apart a camera or stealing a commlink. For further reading by interested readers.

An Intranet is a private network that is set up to only allow access to individuals from a company internally. Usually this is done by setting up ICE that block all incoming traffic to company devices, instead only allowing traffic to be routed through dedicated servers set up to handle outside data; this means that (without hacking in), a user would not be able to communicate with a commlink on the Intranet directly, but might be able to access it by sending data through a more secure central server. Sometimes, this is done via physical cables only (mostly in sensitive locations only), where company commlinks have their wireless capabilities removed and can only connect to the internet by sending and receiving data through that central server - if at all!

An Extranet, like an Intranet, is a private network for a company. However, Extranets meant to serve users from outside a normal company rather than inside. Most often, this takes the place of things like public websites, user login and services, etc, basically anything that someone not part of the company can connect to. These can have varying degrees of connection to the company's Intranet as well; the company may set up a VPN that allows outside computers using it to access the Intranet, certain non-sensitive parts of the Intranet may be accessible upon authorization, etc. The lines can get quite blurry.

On any network, a given account is provided permission to do a variety of tasks, while prevented from performing others. You can generally break permission sets into three groups: User, Security/Dev, and Admin.

User account permissions are the vast majority, being made up of anyone who does not need specialized access to the network itself. They are usually limited in altering anything in the network and on their computer at all, and if they can alter anything it is usually limited to things directly related to their job (e.g. research files stored remotely for a scientist). Some users have very expansive lists of things related to their job, such as software developers, which can lead to them having much more permissions than others.

Security accounts are used to provide general IT and cybersecurity services to the network, meaning that their permissions are often much more relaxed. They are usually able to access wide swathes of the network, remotely control company computers (sometimes without notification!), access security features such as ICE and programs, and more. They are however, limited in that they are still restricted to the role of providing IT and cybersecurity services - not playing GOD; this means that they can't often disable security entirely, allow illicit data, or delete digital records, but this can vary based on the needs of the company - and often times can be largely circumvented.

Admin accounts are entirely in control of the network. If it is possible to do

something on the network, admins can do it. Often times, this does not include people like CEOs and is instead limited to leadership of IT, Cybersecurity, etc.

When designing a network, it's generally important to know a small list of things:

- Who provides the network its connection to the Matrix (if at all)?
- How many program slots are taken up by security programs? How much by company use / freefloating?
- Does the company have an Intranet?
 - What traffic might it allow directly to devices on the intranet, if any at all?
 - What broad categories of accounts are on the network?
 Users (What jobs for each?),
 Security, and Admin.
 - What are the stats of the servers hosting the intranet?
 Especially, the programs used to provide ICE and Security?
 - Does the company allow remote access via VPN?
- Does the company have an Extranet?
 - What services is hosted on the Extranet? A public website, login portal, VPN?
 - Is any part of the Intranet accessible to the Extranet?
- Is any part of the network airgapped (Cut off from the internet)?
- Is any part of the network physical instead of remote?
- How is data/paydata stored? Is it kept on group servers in shared folders so everyone can access it? Is it carried between computers on physical media for security? Is it kept on individual computers?
- What is the networks response to intruders?
 - Does it use lethal measures like Black IC?
 - How does it respond to accidents/false flags? Does it care if a worker gets Black IC'ed?

 What defenses (Programs, hardware, etc) are prepared?
 How do they launch if set off unsupervised?

5.5.2 Hosts

Hosts are the colloquial term for networks on the Matrix. In Shadowrun lore, there is some discrepancy on whether they have any physical presence at all, or are entirely run on some mix of computing power stolen from the wider Matrix and/or mystic Matrix technomagic from dead Technomancers.

For the purposes of this book, we will take the stance that there are still hardware components to hosts, but their software aspect is still grown and cultivated by Matrix providers to be run on said hardware, providing the Complexity boost from TL 8 to TL 9 (Both to provide greater reason for physical infiltration and to make it logically consistent).

If the GM takes issue with this, simply change any hardware running a host (Which is generally the server portions of Intranets and Extranets) into a purely software format - and also try not to think very hard how it works.

Hosts in base Shadowrun are generally given ratings from 1-12, ranging from home LANs to AAA Zero Zone equivalents, which determine how difficult they are to hack. In GURPS, the skill of a network's ICE program is a modifier to the Spyder's (or whomever set up/maintains the host) skill, based on Complexity; as such, the rating of a host is dependant on the Spyder's base skill and the Complexity of the host.

Below is a table that provides a range of example Spyder Skills, Complexities, and total Effective Skill for Hosts, given by a Rating system similar to Shadowrun's original style.

0.0			
Rating ⁸⁶	Spyder Skill ⁸⁷	Complexity	Effective Skill
1	4-7	4	4-8
2	7-8	4	7-9
3	7-8	5	8-10
4	10-11	5	11-12
5	10-11	6	12-14
6	10-12	6	12-15
7	10-14	6	12-17
8	11-14	7	14-18
9	13-15	7	16-19
10	14-16	8	18-21
11	15-17	8	18-22
12	16-19	8-9	20-25

Another important consideration when designing hosts is software. It can be tempting to see Complexity 7 Hosts as an opportunity to slap Complexity 7 ICE on them, but hosts have further purpose than to be literal brick walls!

Hosts have limited program slots/processing power, which has to be used providing their services. If an admin takes their Complexity 7 Host and runs a Complexity 7 ICE and Listen on it at all times, there would be no program slots left for any non-trivial commercial use!

How much of a host's program slots are left to commercial use is a fine art that is best determine by the GM based upon the host's needs. A decent range is around 1/5 - 1/3 of the program slots reserved for commercial use. However, some considerations are:

- How many employees and customers access the host regularly?
- Is the work done on the host software dependent (Skills with TL/9)?
- Does the work require lots of large services (Network routing, communications, traffic systems, etc)?

There is one caveat to this advice: some companies will have dedicated servers that are set up to handle their firewall and security.

In such a case, all of the program slots can be used for security purposes! However, these are often much less powerful than the host as a whole, so the effect is not that different.

5.5.3 Distributed Processing

Sometimes, it can be beneficial to run a large number of computers simultaneously that act as one larger computer. This is often used in the case of supercomputers and botnets, leveraging the easier accessibility of smaller computers to create a more powerful group.

Distributed systems determine the total power of the

distributed systems as if they were one. Because each step of complexity is a tenfold increase in power, 10 lower complexity devices should be treated as 1 Complexity higher, and so on.

For singular tasks that only affect parts of the network, treat them as either a smaller distributed network or a singular computer as necessary. If any part of the network is disabled, the overall statistics need to be re-calculated; it is adviseable to keep some buffer space then, in case an opponent disables some devices.

For software purposes, each computer needs to run software for communicating and coordinating with the network; usually this is a base Complexity 2 Listen program, but in the cases where there are orders of magnitudes of devices, the GM may increase the required Complexity.

A quick calculation is: if a piece of software needs to be run by every computer individually, increase its effective Complexity alongside the network's Complexity. Singular programs split across the network can be run using the combined complexity.

When working with a network of varying Complexities, it is recommended to convert all of them to one level of Complexity (e.g. Convert 1 Complexity 5 computer to 100 Complexity 3 computers for calculations).

Example: Mark, master decker, is running a distributed network of 10,274 Small Computers, made up of commlinks, smart-home devices, and other small interfaces. The overall Complexity of the Network is 8, which the GM has ruled needs a Complexity 2 Listen program on each device, which could

⁸⁶See Section 11.5.1

⁸⁷All SL are determined for Hard Skills. Lower by one for Very Hard Skills.

normally run 2,000,000 Complexity 2 programs, however because it is technically running 10,274 programs, the Listen program is treated as Complexity 6 on the Network.

Acting in a distributed manner has a number of benefits and drawbacks. Most importantly, it allows a decker to make use of multiple computer's processing power, which can help overcome low Complexity limitations.

As well, it provides multiple vectors for attack, while limiting reprisals, since the decker can attack through any device (or all of them!), while the enemy can only attack devices that they know of and must trace the network's connection back to the master computer if they wish to deal any real damage.

If any device goes down too, it does not immediately take down the decker, instead limiting the effectiveness of the network somewhat.

However, there are some downsides too. Achieving higher complexities requires an extremely large amount of devices (Complexity 7 Requires 1,000 Small Computers weighing 500 lbs), which can be logistically hard to store and often weigh more than a single computer.

As well, each computer needs to be running software for communicating with the rest of the network, which can reduce the amount of programs available, and can be prohibitively expensive if they have to purchase all of the software - although it should be possible for most deckers to write the software themselves.

When working in very large groups, a network can be very difficult to hide from observers - especially if the computers in the network were not legally acquired. Many thousands of unnoteworthy computers all turning on a single target is something that will attract more attention than if one computer had originally, especially to organizations like GOD, which have a big picture view of the Matrix as a whole.

Mark's network weighs 5,137 lbs and costs 1,027,400\forall in hardware and 308,220\forall in software (If the GM does not let him duplicate code!); compared to a Macroframe weighing 4,000 lbs and costing 1,000,000\forall in hardware, it will certainly cost more and take up more space, but it is also much harder to defeat, requiring an opponent to either take down all computers, or successfully trace

the Listen programs back to Mark's master computer.

5.5.4 Software Packages

Creating Software, especially when those pieces interact with each other like with Firewalls, can be a daunting task for some. As such, I've assembled some example setups of Software that can be used for inspiration, quick use, or anything of the sort.

All of these packages come in a Level, starting at 0. Levels determine what Complexity the software is run at, which in turn determines skill defaults as covered in Cyberpunk. As such, for more powerful hardware, simply increase the Level for a more powerful piece of soft-

The total Complexity of the Package is listed in a format like: x2 C3; x3 C(3+L), which indicates the packages has 2 Complexity 3 programs that don't increase with Level, and 3 Complexity 3 Programs that increase with Level. In this case, a Level 3 Package would have 2 Complexity 3 Programs and 3 Complexity 6 Programs, and may be appropriate for a Host or Device of Complexity 7 or more.

Firewall Firewalls are programs that are, at their core, meant to control what traffic comes in or out of a computer.

Certain superior models will also perform actions upon suspicious behaviour, such as alerting admins, tracing the connection, or in extreme cases attacking the connection.

They aren't necessarily limited to that however! Firewalls may shutdown the computer if triggered, spawn IC to respond, delete files when alerted, trigger whole suites (such as a Data Bomb!), or more. There's plenty of possibility, so get creative.

Inferior Firewall For this simple Firewall, the ICE prevents access to the device, while the Listen allows authorized users to bypass the ICE.

• x2 C(3+L)

• ICE :: Complexity 3 + L

• Listen :: Complexity (2+1) + L

Standard Firewall A standard Firewall: the ICE protects the device, the Listen allows authorized users access, the Analyze monitors the security of the ICE and Listen, and the Trigger acts when anomalies are detected by the Analyze - usually it calls the admins.

• x1 C3; x3 C(3+L)

• ICE :: Complexity 3 + L

• Listen :: Complexity (2+1) + L

• Analyze :: Complexity 3 + L

• Trigger :: Complexity 3

Superior Firewall Closer to an IPS, this Firewall works the same as above, except instead of the Trigger just calling the admins, it also attempts to find the malicious connection and Analyze it (For things like IP, Device ID, etc).

• x1 C3; x5 C(3+L)

• ICE :: Complexity 3 + L

• Listen :: Complexity (2+1) + L

• Analyze :: Complexity 3 + L

• Trigger :: Complexity 3

• Search :: Complexity 3 + L

• Analyze :: Complexity 3 + L

Matrix Search / Perception Used to find and analyze information on a network. It may require breaching or spoofing ICE to gain all of the information.

• x2 C(3+L)

• Search :: Complexity 3 + L

• Analyze :: Complexity 3 + L

Hack on the Fly This is the method for stealthily infiltrating a Host or network. While it's simple in design, it is almost never in execution. The decker should thoroughly analyze the security before attempting, as many firewalls are made up of multiple constituent parts that must be unravelled in turn.

At its simplest, this means spoofing an Analyze watching ICE to give an OK, then spoofing the Listen to gain access. Further complicated systems may require Spoofing multiple programs (or even devices!) at once in order to prevent any from noticing.

• x1 C(4+L)

• Spoof :: Complexity 4 + L

Sleaze This is used to prevent the decker from going noticed while in the system. It can prevent them from being detected, analyzed, searched, eavesdropped, etc.

However, if a Spyder already has cause for concern, inconclusive results could give them more reason to continue investigating.

- x1 C(4+L)
- Stealth :: Complexity 4 + L

Brute Force Usually the quickest way to enter the system, this method penetrates and disables an ICE in one go.

Many security setups have Analyze programs set up to detect this sort of entry, multiple layers of ICE to slow them down, or simply human eyes that check on the program, all of which can make this form of entry go loud. Preventing that can require combining this with other tactics, such as Spoof or Control.

- x1 C(3+L)
- Breach :: Complexity 3 + L

5.5.5 Spyders

Spyders serve as the network IT and cybersecurity for corporations. Usually, the term Spyder implies an individual of competence, but in reality almost anyone can be put in charge of such a position, regardless of credentials - which is often the case in smaller businesses.

Standard Spyder

Attributes: ST 10 [0]; DX 10 [0]; IQ 11(12) [15]; HT 10 [0]

Secondary Attributes: HP 10 [0]; Per 11 [5]; Will 11 [7]; FP 10; Basic Speed 5.0; Basic Move 5

'Ware: Wireless Datajack (Base Grade) [6, 12,000¥]; Cerebral Booster 1 (Cultured Bioware, Base Grade) [5, 30,000¥]

Primary Skills: Computer Operation (E) IQ+2 [4]-14; Computer Programming (H) IQ+1 [8]-13; Computer Hacking (VH) IQ; Electronics Operation/TL9 (Security) (A) IQ+1 [4]-13; Electronics Operation/TL9 (Surveillance) (A) IQ [2]-12; Electronics Repair/TL9 (Computers) (A) IQ [2]-12; Expert Skill (Computer Security) (H) IQ+1 [8]-13; Research (A) IQ+1 [4]-13

Secondary Skills: Area Knowledge (Cyberspace) (A) IQ-1 [1]-11; Current

Affairs/TL9 (Cyberspace) (E) IQ+1 [2]-13; Mathematics/TL9 (Applied) (H) IQ-2 [1]-10; Mathematics/TL9 (Computer Science) (H) IQ [4]-12

Perks: Console Monkey [1]

5.6 IC

Intrusion Countermeasures (Not to be confused with the program ICE), are collections of programs that are designed to automatically respond to certain threat vectors inside of a host. These can provide a staggering range of capabilities, from Patrol IC constantly scanning credentials, to the notorious Black IC trying to flatline unauthorized users.

When building a host, it's a good idea to decide what IC are running on the server at all times, alongside what their automated response schedule looks like. Most Hosts that are of decent size will be running Patrol IC at all times, focused on tasks such as scanning all users, watching important files, or scanning for malicious activity. Some may run additional IC as well to prevent loading times.

It's important to take into consideration the fact that IC are *dumb*. They are, at best, competitive with Pilot programs, and as such should not be trusted to actively deal with intrusion unsupervised. Most importantly, this implies that a host *should never* leave lethal (Or even less-than-lethal) IC running 24/7, unless they are running a draconian ship!

It only takes one researcher accidentally using the wrong password, one intern curiously searching the directory, one person accidentally opening a file, and so on in order to end up with a hurt or killed person on your network! The only worse thing than getting your valuable research stolen, is killing those who would make it (or re-make it) in the first place!

This is counterbalanced by the fact that IC can take quite some time to load, or alternatively must take up significant resources, which causes penalties to rolls. IC still follow the Invoking Programs rules (Pyramid #3/21 p11), meaning that each subprogram must be loaded once per turn, or alternatively multiple subprograms may be loaded at once at the cost of -1 to all rolls for each subprogram past the first. Deckers should take advantage of the spin up times to either disable the IC and/or its

subprograms or complete their objective and jack out.

- 5.6.1 Black IC
- 5.6.2 Patrol IC
- 5.7 Sample Hosts

5.7.1 The Seattle Metroplex Administration Host

Host Computer: Mainframe, Complexity 7;

Programs: 1 Complexity 7, Dedicated to employee and public use. Provides tools, searching, payment, sign in, system controls, etc. If the player needs to access these (For instance, accessing the payment security that the host runs themselves), they are usually Complexity 5 programs.

- 1 Complexity 6 ICE (+3), providing security for the host
- 1 Complexity 6 Listen (+4), letting through employees and citizens with SINs
- 1 Complexity 6 Analyze (+3), watches the ICE and Listen programs to detect any signs of hacking.
- 1 Complexity 3 Trigger, alerts system admins if there is any sign of hacking via Analyze.

Leftover Space:

- 6 Complexity 6 Programs
- 9 Complexity 3 Programs

Spyder: 2 Standard Spyders on rotating 12h shifts.

Computer Templates

For templates on computers, see the AI section on computer bodies.

6.1 Rigging and You

Riggers make use of Control Rigs in order to jump into drones. This provides them with a wide variety of "bodies" to use for runs, while also putting a layer of separation between them and the real world.

To jump in he must win a quick contest of IQ versus the systems Will. Most system's have a Will of Complexity×2. If this roll fails, he is unable to attempt to jump into this system for 24 hours, indicating either incompatibilities, errors, or being locked out by security. If the system knows it is under attack or otherwise on guard, it adds +5 to its defense. Systems owned by the Rigger may choose (or be directed) to not resist.

When jumped in, his body is unconscious - while his mind has complete control of the vehicle he has jumped into. The Rigger uses the physical statistics of the vehicle, while maintaining his mental attributes and skills alongside the relative skill level of his physical skills.

While jumped in, he does not have any special access to the system's memory, although his prior access to the system does allow him that.

Because of the close link between the rigger and the system, damage to the system can cause lethal biofeedback to the rigger. Whenever the system takes damage, the rigger takes an equal amount of burning damage. He can resist this by making an HT check, lowering it by his Margin of Success to a minimum of 0, adding a +3 bonus if his RCC or Control Rig are hardened (Depending on whichever he routes his traffic through). As well, if the drone "dies" from damage, the rigger must resist the higher of 3d burning damage or the damage the drone took, resisting with HT as usual.

While jumped in, the rigger benefits from a Talent level equal to his Control Rig rating×2. This provides a bonus to all rolls to "rig" well, which include control, piloting, sensor, and mounted weaponry rolls, among others.

6.2 Drones

Drones are the tool of choice for Riggers. They can be found in the Drone section of Equipment.

6.2.1 To Ally or Not?

Because drones are not singular advantages, the tactics used for purchasing 'Ware by converting the CP cost to Nuyen would be extremely expensive and impractical, easily ending up in north of 100,000\forall. As such, one of the obvious solutions that might come to mind is buying a drone as an Ally with Minion, +50%. However, drones are common and standardized equipment that anyone can purchase (or at least, anyone with a license) - meaning that they should cost straight Nuyen, not be built as an advantage or bought with CP. As an example, would you reguire all characters to buy their vehicles as allies? It is somewhat different for AI, since their bodies can only be drones or computers, but for a Rigger they fall much closer to normal characters, and should purchase drones with nuyen.

The question then is, how much should they cost? One might assume that, similarly to many other parts in this book, creating the drone as an advantage (notably as an ally) and then converting that to nuyen may produce good results. However, given that most drones with their pilot programs fall into the 25% CP Total for allies, almost every drone would be 5 Points, ergo 15,000¥. This is much higher than normal in Shadowrun, and also homogenizes most of the drone's values.

Even expanding the ally costs, as noted under GURPS Social Engineering p42, does not help this very much, especially considering that bodies and pilot programs should be bought separately in the first place! As such, the recommendation is to simply prices via fiat, using Shadowrun's prices as a gold standard compared to GURPS' starting wealth. These are what the prices provided are designed from.

6.3 RCCs

Rigger Control Consoles are computers that are specialized for managing and coordinating large numbers of drones at the same time. While they are not mandatory for riggers like a control rig is, they are still an extremely common sight, as they allow for better control of the drones that a rigger is not currently jumped in to.

RCCs are very similar in design to Cyberdecks, in that they are computers that have a built in program for x1.25 cost - that program being a Tac-Net (UT149, PY55:31). This necessarily limits Cyberdecks to complexity 5 and above. TacNets provide the usual bonus of +1/+2 to tactics and allows for the rigger to issues commands to his drones as any commander would to his troops. Notably, the riggers is not restricted to only drones in his Tacnet, and can include his teammates who may also benefit from it.

Pyramid #3/55 also notes some additional benefits and options for Tac-Nets. Notably, there is the inclusion of a TacNet Server program (p17) for a Complexity 7 computer, which provides a +3 to tactics and may be a useful option for some riggers. As well, it provides advanced rules for TacNets (p31) that GMs should consider whether to use or not:

- Allowing TacNets to be used for complimentary bonuses to Area Knowledge, Camouflage, Expert Skill (Military Science), Intelligence Analysis, and Strategy with a skill level of 12 (Complexity 5), 14 (Complexity 6), or 16 (Complexity 7).
- Adding an equipment bonus to Situational Awareness equal to its Complexity.

The first option should generally be a good inclusion, while the latter (If you intend to use Situation Awareness rules from Tactical Shooting) can short circuit any reason to include Situational Awareness in the first place due to high bonuses, and should be scrutinized heavily.

6.3.1 Using an RCC

While you are connected to your gaggle of drones, you can issue commands to them via interface, DNI, voice command, text command, etc.

Depending on the complexity of the command alongside your choice of medium, the time required can vary, usually ranging from a Free Action (e.g. Voice Command to "Watch that building and shoot anyone who doesn't respond to IFF") to multiple seconds of Concentration (e.g. Typing out a command to patrol a given location with random timing intervals and in an randomly determined alternating route).

Commands do no necessarily have to be sent in bulk, but it does make issuing them a lot simpler. You can issue commands to any individual drone simply enough, alongside any group, as well you can often issue multiple commands at the same time, but if this takes more than a sentence this will often require a Concentrate maneuver or skill roll.

When in doubt, see B363 for guidance on the Talk free action - with some extra leniency for DNI mediums. However, if there is still doubt, you can always ask for a skill roll (such as Tactics), in which case Situational Awareness (TS11) provides good inspiration for modifiers. As well, see Typing (B228) to determine the amount of time necessary to type a command, although a quick guesstimate of 0.5 words per second for an untrained individual and 1 word per second for a trained individual works well. Powers: Enhanced Senses p23 covers How Fast You Can Read, alongside how ETS affects this (p30).

Keep in mind that most pilot programs above Rating 1 are fairly intelligent for these purposes, able to quickly understand languages, understand or interpret vague commands (or ask for help otherwise), react to an unknown situation with their best judgement, etc. A drone that is given a vague order shouldn't act like a literal minded retard, it should query its operator if it's outside the norm for a drone ("Confirm?: Shoot the unarmed, restrained individual.") or too vague ("Elaborate: What does, "Go show them pieces of drek who's the real boss in town" mean?).

This does not mean that they are capable of anything distinctly sapient, they will still fail to understand if you don't explain to them in generic terms and concepts related to their role that they are pre-programmed to process and understand. Nor does it give them great capabilities to generalize; in unknown situations that they are familiar with, they will try to determine their owner's / manufacturer's best response and follow that, while in situations that they are unfamiliar with they may re-

treat, ask for elaboration, take whatever action they think is best (which is likely strange or erroneous), or sometimes straight up spazz out.

In situation where the GM is uncertain how a drone will interperet a command, they can call for the Pilot Program to make an IQ or Tactics roll, usually for more generic commands or commands more related to their original programming, respectively. Since these commands are often very simple, this is usually done with a bonus, ranging from +0 to +1 for complicated commands or quite strange situations, +2 to +3 for slightly complicated commands or strange situation, +4 or +5 for straightorward commands or situations that are just outside a drone's normal programming, or +6 or +7 for very simple commands or situations that a drone could even generalize their information to. As well, if the drone is connected to the RCC it can benefit from the Tac-Net bonus and the Rigger can use their Tactics as a complementary skill.

Example: Joe to Rigger is clearing a building with his Rotodrone, Doberman, and Steel Lynx.

On his first turn, he uses a voice command over his RCC: "Rotodrone, shoot anyone we don't know leaving the building.", as a Free Action, while he boots up his other two drones.

He types into his RCC "Doberman, Steel Lynx, boot up and guard me.". The GM guesses this as about 10 words, so he says it takes 10 seconds, while in the meantime the Rotodrone moves to overwatch.

Once they are booted up, Joe and his two drones head inside, as Joe uses DNI to command: "Lynx go right, us two will go left.". While it does command multiple drones to do different things, it's handedly within one sentence, so the GM agrees it's a free action.

In the left room, Joe and his Doberman turn the corner to spot a Nosferatu, out for blood. He quickly commands over DNI: "Doberman, open fire! Lynx get back here!". While it is two sentence, because they are both short and over DNI, the GM asks for a Tactics roll at -4, which Joe barely makes due to his TacNet, making it a Free Action.

The Nosferatu casts a physical illusion, making the abandoned building looks as if it were a field of flowers. Joe verbally says: "Shit, Doberman open fire at 1 oclock!". The Doberman's pilot is

confused about the order, unsure of how it has teleported, where its owner is, and what it is shooting at.

The GM calls for the Pilot Program to make a Tactics roll against the Doberman's Tactics 5. He gives it a +2 for a "strange situation", alongside the Tac-Net's +2. Joe succeeds on his complementary Tactics, providing another +1. The Doberman rolls against Tactics 10, barely failing, and confusedly asks for confirmation and context from Joe. Joe uses a Concentration maneuver to confirm, hoping his Steel Lynx gets here quick."

6.3.2 RCC Examples

RCCs are easily creatable and cutstomizeable using the Ultratech computer rules and a number of example RCCs are included here as well. Do remember that riggers will have to purchase their own ICE & Firewalls among any other desireable programs for their RCCs, which can be found in the Software Packages section of the Matrix.

TODO: Develop this

Statistics: Small Computer, Complexity 5 (RCC, $\times 1.25 \mbox{$\mathbb{Y}$}$; Fast, $\times 20 \mbox{$\mathbb{Y}$}$) 2,500\mathbb{Y} 0.5 lbs; Datapad 10\mathbb{Y}, 0.05 lbs; TacNet, Complexity 5, 1,000\mathbb{Y}

Statistics: Personal Computer, Complexity 5 (RCC, $\times 1.25 \%$) 1,250%5 lbs; Portable Terminal 50%, 0.5 lbs; TacNet, Complexity 5, 1,000%

Statistics: Personal Computer, Complexity 5 (RCC, $\times 1.25 Y$; Hardened, $\times 2 Y$, $\times 2$ lbs) 2,500Y 10 lbs; Portable Terminal 50Y, 0.5 lbs; TacNet, Complexity 5, 1,000Y

Statistics: Personal Computer, Complexity 6 (RCC, $\times 1.25 \, \text{¥}$; Fast, $\times 20 \, \text{¥}$) 25,000¥ 5 lbs; Portable Terminal 50¥, 0.5 lbs; TacNet, Complexity 6, 3,000¥

Statistics: Microframe, Complexity 6 (RCC, $\times 1.25 \%$) 12,500% 40 lbs; Workstation Terminal 500%, 5 lbs; TacNet, Complexity 6, 3,000%

Statistics: Microframe, Complexity 7 (RCC, $\times 1.25 \mbox{$\mathbb{Y}$}$; Fast $\times 20 \mbox{$\mathbb{Y}$}$) 250,000 $\mbox{$\mathbb{Y}$}$ 40 lbs; Workstation Terminal 500 $\mbox{$\mathbb{Y}$}$, 5 lbs; TacNet, Complexity 7, 10,000 $\mbox{$\mathbb{Y}$}$

6.3.3 Autosofts

Autosofts are pieces of Software that can be run on Drones or RCCs to allow them to make use of various skills. Their cost and skill usage are covered under their spot in the Drone section of Equipment. however this section covers their usage for Riggers and RCCs.

Drones are relatively lacking in computer Complexity, with most of them capping out at Complexity 4. This only lets them use up to 4 points in skills, which can be a deal breaker for extremely important ones (Such as the Guns skill).

However, the Rigger is able to network his RCC with his drones using his TacNet, which also can allow him to share his programs among them. This is also possible without a TacNet, however the rigger must run an individual program for each drone, instead of making use of the TacNet's better software to distribute commands between them all! This allows the rigger to both save on money and run higher Complexity programs for his drones, although it is still a good idea to keep mission critical programs on the drone itself, in case a Decker jams your connection!

7 Resonance

7.1 Resonance Power

Resonance is a power that allows users to manipulate computer software using to the best of metahumanity's determination - just their mind. Emerged users, while focused in differing specialties, all have the ability to interface with the Matrix and computers via radio waves believed to be generated by their mind, generally referred to as their Living Persona.

How they do so is still up to series debate, even after the inhumane experiments done by corporations like Horizon, ranging from a special, Matrix derived Metaplane, to the ghost of hundreds of dead Technomancers, to the gestalt consciousness of humanity, to the inhumane influence of the true AIs.

Whatever the reason, Technomancers are (apparently) here to stay now, unlike their predecessors the Otaku, and their capabilities are not to be taken lightly.

For most intents and purposes, a Living Persona seems to work like a normal computer or datajack that lacks media storage. It can be jammed, hacked, shut off, execute programs on other computers, perform VR, be stopped by lead paint, etc.

However, some resonance based powers called Complex Forms seem to only partially play by the rules of the Matrix. These powers cannot be jammed, hacked, etc., unlike their cousin abilities for the Emerged. As long as the user can make any connection to a computer, these abilities can be used regardless of the mundane circumstances. This is somewhat limited however by the fact that Complex Forms tend to be reliant on other abilities that are susceptible to these effect, and by the dangerous Fading that Emerged receive when using such powers.

As such, there are two power modifiers that are used for Resonance (both of which Resonance improves the abilities of):

- Resonance, -15%; (Mundane Countermeasures, -10%; Supernatural Countermeasures, -5%)
- Complex Form, -5%; (Supernatural Countermeasures, -5%)

• Critter Resonance, -5% (Supernatural Countermeasures, -5%)

7.2 Emerged Types

Emerged

27 Points

An Emerged character, colloquially known as Technomancers - or many years ago Otaku, although it is still up to debate whether they are one and the same - has the ability to manifest a Living Persona and connect to computers using only their brain.

This meta-trait allows you to communicate using Radio on any and all standard communication frequencies used for the Matrix. This is somewhat more expansive than a normal computer, including cases such as AM/FM Radio, GPS and Satellite, etc. To do so, make a Concentrate maneuver and succeed a Computer Operation + Resonance to establish a communication link. For certain secure boxes, this may require some scanning or detection to determine in what ways they will even begin to communicate! It's also possible to maintain multiple contacts, with a cumulative -1 to the roll for each contact past the first.

However, it does not include communication with radio in ways and frequencies not used for Matrix communication, such as Radar and other detection formats, certain types of navigation and obtuse communications, etc. When in doubt, most radio communication systems should be included by the GM.

Your ability has a range of 2 miles, although it can connect to further locations by hopping along networks (As normal computers do), so it only has to be in range of a computer or network that can pass along the data (Which, given the ubiquity of wireless computers in the Sixth World, is not very hard outside of a Z Zone).

You can transfer information in any format, encoding, and so on - although this does not grant you the ability to read formats that are protected, such as encryption and ciphers. As well, you may transfer any information from your senses in such a way.

The communication is also secure, preventing any spying or eavesdropping

unless the opponent wins a quick contest of IQ (only if using Telecommunication, such as with this power) or Electronics Operation (Surveillance) versus your IQ or Expert Skill (Cybersecurity), adding any Resonance to either rolls.

Additionally, while on the Matrix, the user counts as a digital consciousness - which is to say their brain acts like a computer. This allows the Emerged to interact with the Matrix as if they were a computer themselves. For game purposes, they have a Complexity equal to 2 + Resonance.

Their Matrix minds are immune to Mind Control or any telepathic powers alongside spells that affect living minds, however they can be hacked, damaged, taken offline, and more by digital threats and viruses (Although not reprogrammed, they lack that disadvantage!).

Unlike AI, the Technomancer can only run on their own mind, unable to duplicate, backup, or transfer their digital minds between machines - although they can still move around and interact with hosts and networks as normal. They are unable to actually reside inside (read: possess) computers like riggers (without a specific Submersion) or AI, so they both do not immediately gain control of resident systems, nor are trapped inside them should their matrix connectivity be shut off, they function like a deck would - lose connection to the host it was currently "inside" and interacting with, which can still be damaging!

While his normal ways of interacting with the Matrix are complex and intuitive enough to count as Basic VR, the Technomancer is also able to enter a trancelike state to enter the Matrix at any time, exactly as if using Total VR. When in this trance, the Emerged always counts as using Hot-Sim, no matter what.

Statistics: Digital Mind (Accessibility, Only on Matrix, -40%) [5]; Telecommunication, Radio (Requires (Computer Operation), +5%; Secure, +20%, Sensie, +80%; Accessibility (Only frequencies used for Matrix), -20%; Reduced Range, x1/5, -20%; Resonance, -15%) [15]; Unsusual Background [5]; Accessory, Total VR (Cosmic, Does not take program slots, +50%; Cosmic, Ignores

⁸⁸See the Resonance Program advantage below as an example of how this works.

7.3 Using a Living Persona

Emerged's consciousness represent themselves on the Matrix as living persona. These can take almost any form possible, and often tend to be more intricate, detailed, realistic, or so on compared to other icons on the matrix (Although not enough to reliably distinguish them).

Their persona allows them to exist on the matrix in the same way as a Commlink or similar device, with their Living Persona acting as their icons on the wider Matrix. They are also able to perform any standard actions expected of a computer with wireless capabilities, be it searching, communicating, browsing the Matrix, writing and editing files, executing programs, and so on.

Their Persona lacks any media storage, which makes them unable to physically store files, paydata, programs, and so on. However, they can easily stream data from one source to a device of theirs, such as a commlink. This does however, mean that they are unable to innately perform hacking actions using the GURPS #3/21 - Cyberpunk hacking programs, as they would only be able to execute them through other computers be default.

The standard way to run hacking (or any programs, should the technomancer wish to run DOOM in his brain!), is to purchase the Resonance Program advantage from below, which allows him to run the program as if installed on his Digital Mind.

Secondly, most Complex Forms and the Technomancer's Emerged trait double up as programs for the use of one or more hacking programs (The GM is encouraged to consider their use for non-hacking programs too, such as Puppeteer being used for IT Remote Desktop software). However, many of these powers only provide this benefit in situations that are close to their normal abilities (e.g. Listen can be gained through Emerged and Wiretap, however Emerged covers network traffic, while Wiretap covers all network, digital, electrical, and so on). These restrictions are taken, but altered from Pyramid #3/91 - Thaumatology IV, which is further described in the Behind the Screen section on Resonance.

Power: Editor lvl 2

With the form that gives the Emerged write and execute permissions on files, they can perform the functionality for Alter.

Analyze

Power: Editor lvl 1 and

Breach

Power: Emerged

Any Emerged can slam enough traffic and attacks to brute force crash some ICE. Additionally, they add an IQ-2 to the list of defaults for the Breach program when run through their Living Persona.

Control

Power: Emerged and Puppeteer

By default, an Emerged is able to issue general commands to computers and systems within normal expectations, which allows them to use the Control program for any mundane usage. Puppeteer allows the Emerged to also perform unorthodox commands, outside the normal bounds of operation for the systems they interact with (e.g. overriding a drone's controls, switching an RFID safety system off when looking at foes, and so on).

Damage

Power: Resonance Spike

The Damage program is simply a more straightforward and brutish approach to the same objective compared to the Resonance Spike ability. The only difference, being the program can target the minds of creatures. As such, all uses for the Damage program work with the Resonance Spike power.

ICE

Power: Emerged

An Emerged is fully capable of filtering incoming and outgoing traffic using their natural abilities, allowing them to run the ICE program as normal. Additionally, they add Will to the list of defaults for the ICE program when run through their Living Persona.

Power: Emerged and Pulse Storm

For wide-spectrum jamming (read: jamming every frequency in an area around you), the Emerged's normal capabilities suffice, allowing them to use the Jam program for that use case. For jamming that targets a specific icons, covers only certain frequencies, or is otherwise any more complex, the Emerged requires the more powerful Pulse Storm form.

Link-Lock

Power: Resonance Spike

In the same fashion that the Emerged is able to send dangerous data through to devices with the Resonance Spike power, this can also be toned down for a long term and insidious signal that forces users to remain connected to the Matrix. Emerged with the Resonance Spike form. can also use it for the Link-Lock program.

Listen

Power: Emerged and Wiretap

Emerged includes the ability to communication over radio, which covers any wireless Listen use cases. Alternatively the Wiretap Complex Form covers *any* wireless, electrical, or digital Listen use cases, which does include using it to monitor software, such as ICE, on the same computer.

Search

Power: Editor lvl 1 and

Editor's first level allows the Emerged to search and probe through data systems and files, which can also be used at a lower power as the Search program for the purposes of searching any single software icon, such as a file, database, or so on. For searching networks, the Emerged needs the TODO Power.

Spoof

Power: Puppeteer

Similarly to controlling the inputs and outputs of a device, Pupeteer can also be used as a normal Spoof program to do so for a software. This doesn't grant any capabilities to use the Pupeteer Complex Form outside its normal restrictions still (e.g. no Pupeteering ICE), although you can still often Pupeteer a device to perform a software action anyways.

Stealth

Power: Static Bomb

The Emerged is capable of using the Static Bomb program for long lasting and low-powered obfuscation, allowing them to use it to run the Stealth program.

Trigger

Power: Emerged

The Emerged's brain is naturally able to function like a normal computer, which includes all cases of calling and executing actions and programs based on pre-planned instructions, e.g. the entire Trigger program.

7.4 Resonance Advantages

Compiling Prerequisite: Emerged

Points / Level

The Emerged is able to compile Sprites out of the Resonance Realm, using them for assistance in the Matrix.

By Concentrating for 1 second for every Level, the user can attempt to compile a sprite. This requires a Quick Contest between the Emerged's Compiling and the sprite's Level+6⁸⁹, with the Emerged gaining a number of Tasks equal to their Margin of Success.

The sprite's countdown timer however, starts ticking. Immediately, the GM should roll against a FoA 6, with success indicating that G.O.D. has noticed some slight abberations on the Matrix and will begin investigating the sprite. This is nothing so dangerous as convergence, nor necessarily illegal, but it can invite unwanted attention to the sprite (Who will be destroyed in G.O.D. finds it), or the technomancer themselves (Who may receive anything from unwanted matrix scans to attempted kidnappings).

Regardless of success, G.O.D. is bound to notice sooner rather than later, and usually by the end of the work day, or by the start of the next one (e.g. sunrise or sunset), they will have found the sprite and will delete it. The only way to prevent this is through Registering (down below).

Attempting a compiling requires the Emerged to resist FP loss equal to the sprite's Level - or HP loss if the Level is great than their Resonance. They can compile a Level up to double their Resonance.

The Emerged can use their Tasks (capital T) for any discrete task, such as: scout this location, hack this device, use this specific power, gain access to this network, etc. While it's not as certain as with the similar case of Spirit's, some people believe that Sprites keep note of how Emerged treat them, which might affect attempts to compile or register Sprites - if it's true.

A character may only ever have one slot for Compiling, and ergo one Sprite normally compiled at a time.

Because campaigns do not all start at the same amount, it's not possible to provide a definitive table for compiling costs based on Resonance. The table here provides costs for 200 point and 100 points campaigns, using the table for spirit ally costs. If you want a sufficiently different campaign level, you will have to recalculate the cost. For instructions on how to do so see the Spirit Math Section, which is the same system as Sprites.

Note that it is more expensive for lower point characters because higher Level Sprites will be a higher percentage of your points and ergo more impactful.

Resonance	200 Points	100 Points
Resonance 1	3	3
Resonance 2	4	6
Resonance 3	5	13
Resonance 4	8	21
Resonance 5	12	29
Resonance 6	16	37
Resonance 7	20	45
Resonance 8	24	53

Statistics: Modular Ability, 4 per slot, 4 per point⁹⁰ (Reduced Time 1⁹¹, +20%; Social Only, +0%; Complex Form, -5%; Attracts Threats, FoA 6, Grid Overwatch Division, -5%; Nuisance Effect, Overwatch, -5%; Requires Threading Roll, -35%92; Trait-Limited, Only Allies with Summonable, Special Abilities, and Favor, -50%), each Level has it appropriate levels of points alongside FP and HP drain.

Registering Prerequisite: Emerged and Compiling

Points / Level

The Emerged uses the Resonance to Register Sprites with the Matrix, making it appear as a legitimate entity - no longer a sore thumb waiting for G.O.D. to converge on it, which also lets them keep more around!

Registering a sprite takes 1 hour per Force, during which the sprite won't keep making trails for G.O.D. to follow (assuming the GM didn't pass their FoA roll of course). Afterwards, the Emerged must succeed on a Quick Contest between his Registering and the sprite's Level+9, gaining additional Tasks equal to the Margin of Success.

Attempting a Registering requires resisting FP loss equal to the sprite's Level - or HP loss if the Level is higher than the Emerged's Resonance.

After registering, the sprite stays until all of the favors are used up. Additionally, registered sprites are much more likely to assist in long term or difficult goals, such as aiding in study of Complex Forms, remote tasks, and so on.

A character may have as many Registering slots as the GM wishes to permit. Any sprite that becomes registered takes up a Registering slot and no longer takes up the Compiling slot.

As mentioned in Compiling, these costs are dependent on the Campaign Starting Points level. Costs for 200 points and 100 points are provided here.

 $^{^{89}\}mathrm{Determined}$ by average starting Will for a Sprite being 7.

⁹⁰External Influence only.

 $^{^{91}}$ Because campaign points would affect a 1 sec / point change, we'll apply this and take a middle ground of 1 second per Force. If you wish, you can calculate a time to summon per Ally point cost.

⁹² This modifier is made up of: Requires Attribute (10) Roll, -20%; Requires Skill Roll (Threading), -0%; Quick Contest, -15%

Resonance	200 Points	100 Points	
Resonance 1	3	3	\mathbf{s}
Resonance 2	4	5	S
Resonance 3	5	11	c
Resonance 4	7	17	r
Resonance 5	10	23	I
Resonance 6	13	29	1
Resonance 7	16	35	
Resonance 8	19	41	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $

Statistics: Modular Ability, 4 per slot, 3 per point⁹³ (Reduced Time 1, +20%; Social Only, +0%; Hard to Use, -5%⁹⁴; Complex Form, -5%; Requires Registering Roll, -35%⁹⁵;; Trait-Limited, Only Allies with and Summonable, Special Abilities, and Favor -50%), each Level has it appropriate levels of points alongside FP and HP drain.

Resonance Prerequisite: Emerged

5 Points / Level

Resonance is the core for your unnatural abilities as an Emerged. Add your Resonance to all rolls to use **Complex Forms** well; this means all Complex Form skills, activation rolls, etc. As well, the GM should look for ways to apply a bonus indirectly to passive abilities, as described in GURPS Supers p22.

Your Resonance also serves as a cap for various resonance advantages: For Threading, Compiling, and Registering, you can only buy Levels up to your Resonance level.

When purchasing resonance advantages, you must only pay full cost for your most expensive Complex Form; for all other ones you pay only 1/5 cost. However, you can only sustain one Complex Form at a given time (although you may have multiple instances of that Complex Form if applicable); if you want to sustain multiple different effects, you must pay full price for each of your next most expensive Complex Form for the amount of additional effects you wish to sustain.

When threading Complex Forms, you must make two Concentrate maneuvers (or only one, if the last Complex Form used is the same one).

Statistics: Power Talent [5]

$\begin{array}{lll} \textbf{Resonance} & \textbf{Program} & \textit{Prerequisite:} \\ \textit{Emerged} & & & & & & & & & & \\ \end{array}$

2 Points

The Technomancer is able to run a specific program through his Living Persona as if it were a normal computer. It can be run at any complexity from its minimum up to the complexity of their Persona (3 + Resonance), chosen when loaded.

The Technomancer is still subject to computer restrictions like normal, including Complexity limiting the amount of programs they can run, interface modes affecting skill levels, programs needing to be invoked, and so on.

Many Technomancer advantages provide the corresponding Resonance Program advantage for free (as shown above), including all the benefits as seen here; the Technomancer should only purchase this for programs that they do not have corresponding advantages for.

Statistics: Accessory, Program (Cosmic, Can change Complexity, +50%; Complex Form, -5%)

7.5 Complex Forms

7.5.1 Using Complex Forms

Complex Forms are one of the secret spices to an Emerged's capabilities, allowing them to interact with the Matrix and its denizens in ways that are wholly unique from the mundane. Complex Forms require the Threading skill to make use of them.

Unlike much of Decking, Complex Forms and other Resonance powers tend to target non-standard attributes. While Decking tends to be contested computer skill rolls, these can often be contested with Will or HT of targets, which can sometimes be pure software!

Usually, in such cases the power indicates what those rolls should be for most targets, but here are some general rules for it as well: HT Resistance rolls are for resisting brutish attempts and damage to hardware and software, while Will is for subversion and manipulation. HT is the same as in the basic set, ranging from 8 for cheap designs, 10 for average designs, 12 for rugged designs, and 14 for very rugged designs. Meanwhile, Will is usually either the Will of the owner for the device or software or alternatively the Complexity \times 2 of the Software or the Device.

Explicitly, **none** of these powers take Complexity as a penalty to their roll (as

seen in Psionic Powers and Technomysticism)! The math behind it *does not* work out well, and ends up being *much* more punishing in comparison to normal contested Power versus Will rolls!

Threading

10/Hard

Defaults: None

Threading allows a Technomancer or Otaku to manipulate the Resonance of the Matrix in order to create wholly unique effects inside of them called Complex Forms.

When threading a Complex Form, you must first select a Level for it, which can range from 1 - 2×Resonance. The higher the Level, the more powerful the Complex Form, but the more Fading you must resist. Fading is the strain put on your body due to the laborous process of Threading. It costs 1 FP per Level, up to your Resonance, after which it instead costs 1 HP per Level.

You can resist Fading by rolling against (IQ+Will)/2, reducing the amount of FP or HP fading by your Margin of Success.

Many Complex Forms provide resistance rolls for systems. When these systems are manned, they usually use the Attributes and Skills of their owners. When unmanned, the GM may decide whether they benefit from the owner's attributes or not, given that they would be configured by them after all. If they are, it usually will be at a penalty for being unable to react. For unmanned systems, they usually have a Will of Complexity×2.

Editor

The Emerged is able to interface with a file and read its contents without having to necessarily break through ICE or encryption.

To do so, roll a Quick Contest of Threading + Resonance versus Will of the File (That of the device it's housed on, usually Complexity \times 2). Success allows the Emerged to read text, listen to audio, watch media, or engage with any for of media that the file contains - however it is explicitly read only, unable to execute or write!

This form bypasses even encryption and ciphers, able to translate them to

⁹³Duration and External Influence

 $^{^{94}}$ Applied as bonus to resist.

⁹⁵This modifier is made up of: Requires Attribute (10) Roll, -20%; Requires Skill Roll (Registering), -0%; Quick Contest, -15%

meaning for the Emerged to understand, effectively rendering them useless; some particularly well encrypted or high Complexity files can improve the resistance roll of the file by up to +3.

At the second level, the Emerged is able to even write and execute the file itself. This requires 10 minutes of Concentration ended with a Quick Contest of Threading + Resonance versus Will of the File, with a -1 penalty per file already under your control. Success allows the Emerged to write and execute the file freely (Although this is separate from being able to read from it).

The Emerged can edit the file as long as their Concentration is maintained, and afterwards for one minute per margin of success.

Failure however, locks the Emerged out of the file for 24 hours and can alert sysadmins or programs watching it that something unusual has happened, and that your account was involved (But not what was attempted or any further information about it), which is usually enough for investigation, but not raising the alarms. On a Critical Failure, the Emerged also loses control of every other file controlled by this power, or must check against crippling if there are no others.

At higher Levels (The Level of the Complex Form being Threaded, not the power itself), both powers become easier to use, gaining a +1 bonus per Level past the first.

Resonance	Editor 1	Editor 2
Resonance 1	4	13
Resonance 2	6	18
Resonance 3	9	22
Resonance 4	11	26
Resonance 5	12	29
Resonance 6	13	31
Resonance 7	13	33
Resonance 8	14	34

Statistics: Mind Probe (Sensory, +20%; Universal (Accessibility, Encryption and Ciphers only, $-20\%^{96}$), +40%; Accessibility, Only on a File itself, -40%; Accessibility, Only on Matrix, -40%; Complex Form, -5%; Cybernetic Only, -50%; Requires Threading Roll, - $10\%^{97}$) higher Level adds Reliable, +5%

Statistics: Mind Control (Slow and Sure Only, 10 seconds, +115%; Accessibility, Only on a File itself, -40%; Ac- nance, making it follow his commands. cessibility, Only on Matrix, -40%; Complex Form, -5%; Conditioning Only, -50%; Cybernetic Only, -50%; Requires Threading Roll, -10%98 higher Level adds Reliable, +5%

Pulse Storm

The Emerged cause a veil of Resonance to surround his target on the Matrix, jamming incoming and outgoing radio signals to them.

To do so, roll a Quick Contest of Threading versus Will (Usually Complexity \times 2 for devices). Success gives a penalty to all radio communications going to or from the target to take a -1 penalty per Level. This explicitly affects attempts to interface with that device alongside its attempts to interface outwards - so long as that is done through wireless radio communication.

This power affects all bands of Radio communication, including things such as GPS, Gridguide, and so on. As well, the power's existence isn't detectable through mundane means, simply showing up as dropped packets, random increase in latency, or strangely bad signal. Additionally, when threaded it cannot be detected by any mundane means either.

Resonance	Base Cost
Resonance 1	24
Resonance 2	31
Resonance 3	37
Resonance 4	43
Resonance 5	48
Resonance 6	51
Resonance 7	53
Resonance 8	55

Statistics: Affliction (Jam Radio, +37%; Malediction 1, +100% No Signature, +20%; Accessibility, Only on the Matrix, -40%; Complex Form, -5%; Requires (Threading) Roll, -15%99) [19.7] and then Jam Radio is Obscure, Radio (Extended, all Radio comms, +40%; Stealthy, +100%; Complex Form, -5%; No Area of Effect, -50%) [3.7] further Levels increase Jam Radio's levels.

Puppeteer

The Technomancer interfaces themselves with a system using the reso-

Resonance	Base Cost
Resonance 1	23
Resonance 2	28
Resonance 3	32
Resonance 4	36
Resonance 5	39
Resonance 6	41
Resonance 7	43
Resonance 8	44

Level	Duration	Bonus
Level 1	1 second	+0
Level 2	1 second	+1
Level 3	2 seconds	+1
Level 4	2 seconds	+2
Level 5	3 seconds	+2
Level 6	3 seconds	+3
Level 7	6 seconds	+3
Level 8	6 seconds	+4
Level 9	10 seconds	+4
Level 10	10 seconds	+5
Level 11	20 seconds	+5
Level 12	20 seconds	+6
Level 13	30 seconds	+6
Level 14	30 seconds	+7
Level 15	60 seconds	+7
Level 16	60 seconds	+8

Statistics: Mind Control (Independent, +70%; Cybernetic Only, -50%; Complex Form, -5%; Reduced Duration, ×1/60, -35%; Requires (Threading) Roll, -20%); Sense-Based, Reversed, Matrix, -20%) [20] further levels add Reliable. +5% on even levels and reduce the Reduced Duration on odd levels.

Resonance Spike

The Emerged is able to induce overheating and physical damage in devices by suffusing them with a spike of Resonance energy.

Roll a Quick Contest of Threading + Resonance versus the computer's HT (+3 for Hardened systems). If the Emerged wins, the computer takes 1d burning surge damage per Level. This form notably cannot be used to target living beings on the devices using VR, although it can have knock on effects!

Highly powerful hits can have additional effects. Dealing over 1/3 of HP causes the system to start short, requiring an immediate HT roll (+3 for Hard-

 $^{^{96}\}mathrm{As}$ such, doesn't include for eign languages, for eign minds, etc

⁹⁷Difference between Requires IQ Roll and Requires (10) Roll

 $^{^{98}\}mathrm{Difference}$ between Requires IQ Roll and Requires (10) Roll

 $^{^{99}\}mathrm{Difference}$ between Requires Will and Requires (10) Roll

ened systems). Failure disables the device for seconds equal to Margin of failure; critical failure disables it until repaired. For living beings, this simply affects the devices they are on, which can prevent jacking out, performing actions, or even dumpshock. As well, critical success on the Threading roll also disables the device until repaired.

Additionally, there is nothing subtle about this power. Although the target may not understand what Resonance is, it is patently obvious that you have attempted a loud and violent attack, in a similar fashion to seeing a firearm being shot.

Resonance	Base Cost
Resonance 1	13
Resonance 2	24
Resonance 3	35
Resonance 4	45
Resonance 5	53
Resonance 6	59
Resonance 7	62
Resonance 8	65

Statistics: Innate Attack, Burn (Based on HT, +20%; Malediction 1, +100%; Surge, +20%; Accessibility, Only on Matrix, -40%; Complex Form, -5%; Cybernetic Only, -50%; No Incendiary, -10%; Requires Threading Roll, -10%¹⁰⁰) [6

Static Bomb

The Emerged is able to interfere with an icon's ability to track their Living Persona over a network or computer.

Success on a Threading + Resonance roll provides a -1 penalty per level to attempts to detection or maintain detection of the Living Persona, lasting for 1 minute until the Emerged must roll again. The power itself is undetectable to mundane means, simply hiding or altering their presence, or blinding or altering traffic towards them if necessary. This even affects indirect detection methods on the matrix, such as measuring traffic load going through a network, detecting read/write counts on a disk, or increased usage of wireless interface cards - it however does not affect any physical direct or indirect methods, such as listening to computer active, sounds or other media that a computer might play, or so on.

While this power does not affect the Emerged's use of the network, it does affect allied attempts to locate them, which can cause things such as dropped or unreachable calls, unintentional disconnecting from team comms or Tac-Nets, or simple attempts to find them on the Matrix. When in doubt, the GM should be within their rights to cause small hiccups and time delays for extended usage of the power.

At Level 10, the Emerged is invisible to detection, although the penalty *can* increase higher, for dealing with edge cases or opponents who negate penalties

Resonance	Base Cost
Resonance 1	9
Resonance 2	17
Resonance 3	24
Resonance 4	31
Resonance 5	37
Resonance 6	43
Resonance 7	48
Resonance 8	51

Statistics: Obscure, Digital Detection 1 (Defensive, +50%; Extended, Indirect Detection¹⁰¹, +20%; Stealthy, +100%; Accessibility, Only on Matrix, -40%; Complex Form, -5%; Requires Threading Roll, -20%) [4.1]

Stitches

Heavily limited Healing for software only

Statistics: Healing (Machines Only, +0%; Accessibility, Software only, -30%¹⁰²; Accessibility, Only on Matrix, -40%; Complex Form, -5%; Requires Threading Roll, -10%¹⁰³)

Wiretap

The Emerged gains the ability to monitor all of the data flowing in, out, and throughout of a system, without needing to break past its ICE.

To do so, Concentrate for one second and roll a Quick Contest of Threading + Resonance versus the system's Will (Usually, Complexity \times 2). Success lets the Emerged monitor the device's ingoing, outgoing, or internal traffic over wireless or wired connections,

see any commands input (including everything input through a terminal or VR interface), notice when a program starts or ends, see any outputs from displays or other devices, and anything suitably similar.

The Emerged can only view data that in unprotected and in standard formats, such as text, video, audio, databases, etc. Anything that is encrypted or ciphered is unable to be interpreted, but can be streamed to a separate device for later decryption.

At higher Levels, the power becomes easier to use, providing a +1 bonus per Level past the first.

Resonance	Base Cost
Resonance 1	21
Resonance 2	24
Resonance 3	27
Resonance 4	29
Resonance 5	31
Resonance 6	32
Resonance 7	33
Resonance 8	34

Statistics: Mind Reading (Sensory, +20%; Multiple Contacts, +50%; Accessibility, Only on Matrix, -40%; Complex Form ,-5%; Cybernetic Only, -50%; Requires Threading Roll, -10%¹⁰⁴) [19.5] further levels add Reliable +5%

7.6 Sprites

Sprites are strange denizens of the Matrix, believed to be formed out of or summoned from the Resonance Realms. They are able to compiled and given form by the Emerged in order to assist them with tasks on the Matrix. Sprites take a variety of shapes, largely influenced by the Emerged's sense of design when compiling them, although they do tend to associate themselves towards certain categories of skills and therefore matching aesthetics.

In game, Sprites are summoned using the Compiling and Registering advantages. Their templates down below are used to calculate their cost as Allies, all of which must have the Appears Constantly, Special Abilities, Summonable, and Favor modifiers.

Because there is not a set point limit for any campaign, the costs are as fol-

 $^{^{100}\}mathrm{Difference}$ between Requires DX Roll and Requires (10) Roll.

 $^{^{101}}$ There's ways to indirectly profile network traffic and users that I think ostensibly serve to require 1 extension.

¹⁰²TODO: This

 $^{^{103}}$ Difference between Requires (IQ) Roll and Requires (10) Roll.

 $^{^{104}\}mathrm{Difference}$ between Requires IQ Roll and Requires (10) Roll

lows, with a pre-built system for 100 and technomancers, Sprites are able to com-200 points. technomancers, Sprites are able to communicate via radio communications nat-

% Points	Cost	200 Pts	100 Pts
5%	1	Level 1	Level 1
10%	1	-	-
15%	2	Level 2	-
20%	2	_	-
25%	2	Level 3	Level 2
40%	3	Level 4	-
50%	4	Level 5	Level 3
65&	5	Level 6	-
75%	6	Level 7	Level 4
90%	8	Level 8	-
100%	10	Level 9	Level 5
115%	13	Level 10	-
125%	15	Level 11	Level 6
140%	18	Level 12	-
150%	20	Level 13	Level 7
165%	23	Level 14	-
175%	25	Level 15	Level 8
190%	28	Level 16	-
200%	30	-	Level 9
225%	35	-	Level 10
250%	40	-	Level 11
275%	45	-	Level 12
300%	50	-	Level 13
325%	55	-	Level 14

7.6.1 Sprite Meta-Trait

19 Points

All Sprites share some fundamental qualties that are present in their Sprite meta-trait. While there is still incredible diversity between Sprites, and even less known about their nature than Spirits, there is at least some fundamental similarities between them that can be nailed down.

They act in many ways like a standard device or program, which is one of the reassns they are often referred to as deviceless personas; they're digital only minds, able to keep perfect time and directions, perform complex calculations with ease, remember all stimuli, and lack any form of aging (At least as far as we can tell). Notably, Sprites are fairly alien in many mental concepts, and while they're not impossible to bargain with (Although they require Sprite/Machine Empathy as opposed to any other Empathy advantage), they are entirely unfazed by fear or intimidation (Beyond logical analysis of threats).

What's particularly interesting however is their resonance capabilities. Like municate via radio communications naturally, allowing them to quite literally exist on the wider matrix without any physical body. They are naturally resistant to many forms of digital or electrical threats, whether that be Surge attacks or Damage programs, which makes up for their relative fragility otherwise. Most importantly, the Sprite has access to the Resonance Realms. This allows them to jump out of our normal Matrix and enter them, which can be useful for traversing the Matrix - whether it be tunneling straight to locations like a wormhole or otherwise. Lastly, the Sprite has a direct link to their compiler through the Resonance, allowing them to send and receive mental commands and stimuli amongst each other.

Of course, they're not without their drawbacks, notably they are still programs and of course are still vulnerable to electricity and hacking - no matter how alien their design. As well, if damage programs or other sources of HP loss reduce them to -1×HP, they automatically are destroyed and return to the Resonance Realms (or in some special cases must reform over time on the Matrix).

Attributes ST 0 [-100]

Advantages: Absolute Direction [5]; Absolute Time [2]; Digital Mind [5]; Doesn't Eat or Drink [10]; Doesn't Sleep [10]; High Pain Threshold [10]; Intuitive Mathematician [5]; Photographic Memory [10]; Jumper¹⁰⁵, Resonance Realms (Improved, +10%; Cannot Escort, -10%; Cannot Follow, -20%; Limited Access, Resonance Realms & Matrix, -15%; Critter Resonance, -5%) [60]; Resistant, Surge, +3 (Common) [5]; Telecommunication, Radio (Secure, +20%; Sensie, +80%; Resonance, -15%) [19]; Telecommunication, Telesend (Full Communion, +20%; Accessibility, Summoner Only, -80%; Critter Resonance, -5%) [11]; Unaging [15]; Unfazeable [15]; Unusual Background (Sprite) [5]

Disadvantages: Electrical [-20]; Fragile (Unnatural) [-50]

Perks: Console-Monkey [1]; Internal Firewall [1]

7.6.2 Sprite Level

5 Points

As a Sprite increases in Level, its powers increase alongside. This comes

with a number of mandatory traits that are automatically applied and do not count towards any CP bonuses per Level.

Advantages: Resonance [5]

7.7 List of Sprites

This is a list of templates for known Sprites types, as possible as it is to box them into types. Each of them specializes in a factor of hacking, computer use, hardware, or information use, represented in their statistics.

Every Sprite has a Level rating when summoned. the base template represents a Level 0 Sprite, and underneath the templates are a list of improvements that can be added when compiling at Level 1 and above, along limitations to those improvements. Each Level provides an amount of CP that can be spent on improvements from those lists, or any other trait a GM approves; a portion of this section are powers that the Sprites gains by default at Force 1, instead of gaining the bonus CP.

Some of these powers may have a higher cost when adding them to higher Level sprites and must be bought at said higher levels before spending any other bonus CP; these are marked with a + symbol or a per Force indication on their costs. The minimum cost for all of the Force 1 powers is noted next to the header, for easy addition when creating sprites.

Sprites also have some mandatory traits added to them when increasing to higher Levels, notably the Sprite Level Trait.

Because Sprites are digital and deviceless entities, their attributes and traits do not necessarily tell the whole story. Their DX attributes are actually modifiers, which improve or lower the DX of any body they are controlling, such as a drone or gun turret. When improving their DX, the DX modifier can be improved a number of times as indicated (e.g. limited to Level-1 indicates it can be improved Level-1 times, so in such a case a Level 3 Sprites could improve their DX mod by +2).

Additionally, when Complexity is called for - such as for hacking program defaults or a limit to the number of programs that can be run - a sprite's complexity is equal to 2 + Resonance (And in general functions like a Techno-

¹⁰⁵ Does not include Naked, -30% because it can take data to and from the Resonance Realms.

mancer, as also covered above).

7.7.1 Courier Sprite

-25 Points Level 0

Specialized for the transfer and manipulating of media, the Courier Sprite often is tasked with finding, moving, and protecting valuable paydata for an Emerged. Their forms vary wildly as with all Sprites, but often take the form of physical data carriers such as mailmen, radio antennae, etc. or alternatively digital systems well known for communication, such as e-mail icons, wifi or ethernet symbols, or so on.

They fulfill an interesting middleground in many capabilities, able to break into and acquire data in a variety of systems, while still being relatively durable. Their powers are useful outside normal operations as well, being able to hide or gather data without much recourse.

Attributes: -103 DX -2 [-50]; IQ 9 [-15]; HT 8 [-30] HP 8 [16]; Will 8 [-14]; Per 7 [-15]; Basic Speed 4.50 [5]

Advantages: 38 Sprite [19]; Evil Computer Talent¹⁰⁶ 1 [5]; Resonance Programs (Alter, Analyze, ICE, Listen, Search, Spoof, Stealth) [14]

Skills: 36 Area Knowledge (Cyberspace, Planet) (E) IQ+6 [8]; Computer Operation (E) IQ+2+1 [4]; Computer Programming (H) IQ+0+1 [4]; Computer Hacking (VH) IQ-1+1 [4]; Current Affairs (Cyberspace) (E) IQ+2 [4]; Cryptography (H) IQ-1+1 [2]; Electronics Operation (Security) (A) IQ+0 [2]; Expert Skill (Computer Security) (H) IQ+0+1 [4]; Research (A) IQ+2+1 |8|

Improvements:

Level 1 [25]:

Sprite Level 1 [5]

Cookie [—]

Hash [20+]

Automatic Effects at Higher Levels:

Sprite Level [5]

Optional Effects at Higher Levels, +20 CP per Level:

Evil Computer Talent [5] limited to 1/2 Resonance, rounded down.

+1 DX mod [25] limited to Level-1 +1 IQ [15] limited to Level+8

106 Power-Ups 3 p9

+1 HT [15] limited to Level+8 +1 HP [2] limited to Level+9 +1 Will [7] limited to Level+7 +1 Per [5] limited to Level+6 +0.25 Basic Speed [5] limited to +1.0from base

7.7.2Crack Sprite

-57 Points Level 0

The Crack Sprite is the born hacker of all Sprites. Specializing in stealthy infiltration of systems, they're very competent at hacking, although that is countered by their relative fragility. They come in many forms, like all sprites, but are heavily influenced by the hacker, 133t, and punk cultures of the Emerged, taking the form of various hackers, malware snippets, or simply stealth and/or threatening imagery.

Their ability to suppress detection can prove invaluable, especially when combined with an Emerged's own capabilities, making it very difficult to notice their intrusion and react in time.

Attributes: -134 DX -2 [-50]; IQ 9 [-15]; HT 6 [-60] HP 6 [12]; Will 7 [-21]; Per 8 [-10]; Basic Speed 4.25 [10]

Advantages: 38 Sprite [19]; Born to be Wired¹⁰⁷ 1 [5]; Resonance Programs (Alter, Analyze, ICE, Listen, Search, Spoof, Stealth) [14]

Skills: 39 Area Knowledge (Cyberspace, Planet) (E) IQ+0 [1]; Computer Operation (E) IQ+2+1 [4]; Computer Programming (H) IQ+0+1 [4]; Computer Hacking (VH) IQ+0+1 [8]; Cryptography (H) IQ+0+1 [4]; Electronics Operation (Electronic Warfare) (A) IQ+1 [4]; Electronics Operation (Security) (A) IQ+1 [4]; Electronics Operation (Sensors) (A) IQ+1 [4]; Expert Skill (Computer Security) (H) IQ+0+1 [4]; Research (A) IQ+0 [2]

Improvements:

Level 1 [57]:

Sprite Level 1 [5]

Suppression [52]

Automatic Effects at Higher Levels:

Sprite Level [5]

Optional Effects at Higher Levels, +20 CP per Level:

Born to Be Wired [5] limited to 1/2 Resonance, rounded down.

+1 HP [2] limited to Level+7 +1 Will [7] limited to Level+6 +1 Per [5] limited to Level+7 +0.25 Basic Speed [5] limited to +1.0from base

+1 DX mod [25] limited to Level-1

+1 IQ [15] limited to Level+8

+1 HT [15] limited to Level+5

7.7.3Data Sprite

-64 Points Level 0

Masters of data collection and manipulation, Data Sprites specialize in general purpose computing and specialized data analysis and storage. While not strictly impressive in base capabilities, their wide selection of skills and powers make up for this shortcoming. Their forms tend towards intellectual stereotypes, whether that be office works or "nerds", mathematical tools or iconography, or simple base concepts such as numbers.

Their ability to hide files and leave messages are nigh undetectable and can be extremely useful in the hands of a creative Emerged, allowing for extremely sophisticated and hard to detect messaging systems, even under a corp's own nose!

Attributes: -152 DX -3 [-75]; IQ 7 [-45]; HT 7 [-45] HP 7 [14]; Will 7 [-21]; Per 10 [0]; Basic Speed 4.50 [20]

Advantages: 46 Sprite [19]; Evil Computer Talent¹⁰⁸ 1 [5]; Mathematical Ability¹⁰⁹ [10]; Resonance Programs (Alter, Analyze, ICE, Search, Listen, Trigger) [12]

Skills: 42 Accounting (H) IQ+0+1 Area Knowledge (Cyberspace, [4];Planet) (E) IQ+0 [1]; Computer Operation (E) IQ+2+1 [4]; Computer Programming (H) IQ+0+2¹¹⁰ [4]; Cryptography (H) IQ+0 [4]; Electronics Operation (Electronic Warfare) (A) IQ+1 [4]; Electronics Operation (Sensors) (A) IQ+1 [4]; Expert Skill (Computer Security) (H) IQ-2+1 [1]; Finance (H) IQ-1+1 [2]; Mathematics (Computer Science) (H) IQ+0+1 [4]; Mathematics (Cryptology) (H) IQ-1+1 [2]; Mathematics (Statistics) (H) IQ+0+1 [4]; Research (A) IQ+1+1 [4]

Improvements: Level 1 [64]:

 $^{^{107}}$ Power-Ups 3 p8

 $^{^{108} \}mathrm{Power\text{-}Ups}~3~\mathrm{p}9$

 $^{^{109}}$ Power-Ups 3 p12

 $^{^{110}\}mbox{Bonuses}$ from both Mathematical Ability and Evil Computer Talent.

Sprite Level 1 [5] Camouflage [33]

Watermark [26]

Automatic Effects at Higher Levels:

Sprite Level [5]

Optional Effects at Higher Levels, +20 CP per Level:

Evil Computer Talent [5] limited to 1/2 Resonance, rounded down.

Mathematical Ability [10] limited to 1/2 Resonance, rounded down.

+1 DX mod [25] limited to Level-2
+1 IQ [15] limited to Level+6
+1 HT [15] limited to Level+6
+1 HP [2] limited to Level+8
+1 Will [7] limited to Level+6
+1 Per [5] limited to Level+9

+0.25 Basic Speed [5] limited to +2.0

7.7.4 Fault Sprite

from base

-26 Points Level 0

The brute among them all, the Fault Sprite specialized in loud and quick intrusion to a device or network. Their already impressive base capabilities are further enhanced by their largely unique skillsets, able to assist with almost any overt hacking possible. Their forms are perhaps some of the most varied among all sprites, ranging from stereotypical barbarians and brutes, to skilled swordsman and samurai, even to icons representing forces of nature or immovable objects.

Their ability to inflict long lasting, cyclic damage should not be underestimated as well, giving them the capabilities to slowly whittle down even the most durable systems given time. Additionally, they excell in particularly dangerous situations with their Daredevil trait, making their approach even more effective.

Attributes: -118 DX -3 [-75]; IQ 9 [-15]; HT 9 [-15] HP 9 [18]; Will 7 [-21]; Per 7 [-15]; Basic Speed 4.75 [5]

Advantages: 53 Daredevil [15]; Sprite [19]; Born to be Wired¹¹¹ 1 [5]; Resonance Programs (Analyze, Breach, Damage, ICE, Jam, Listen, Search) [14]

Skills: 39 Area Knowledge (Cyberspace, Planet) (E) IQ+0 [1]; Computer Operation (E) IQ+2+1 [4]; Computer Programming (H) IQ+0+1 [4]; Computer Hacking (VH) IQ+0+1 [8];

Cryptology (H) IQ+1+1 [8]; Electronics Operation (Security) (A) IQ+1 [4]; Expert Skill (Computer Security) (H) IQ+1+1 [8]; Research (A) IQ+0 [2]

Improvements:

Level 1 [18]:

Sprite Level 1 [5]

Electron Storm [13 at Resonance 1]

Automatic Effects at Higher Levels:

Sprite Level [5]

Optional Effects at Higher Levels, +20 CP per Level:

Born to Be Wired +1 [5] limited to 1/2 Resonance, rounded down.
+1 DX mod [25] limited to Level-2
+1 IQ [15] limited to Level+8
+1 HT [15] limited to Level+8
+1 HP [2] limited to Level+6
+1 Will [7] limited to Level+6
+1 Per [5] limited to Level+6
+0.25 Basic Speed [5] limited to +1.0

7.7.5 Machine Sprite

from base

-63 Points Level 0

The most unique Sprite of them all, the Machine Sprite specializes in physical hardware and circuitry, unlike its other software based cousins. This both gives it improved capabilities when it comes to meatspace, being more dextrous and capable of using mediums such as drones. These take a very wide variety of forms, ranging from generic machines or well known brands or types, to stereotypical iconography such as gears and wrenches.

Their powers are extraordinarily useful outside of hacking encounters, allowing for increased performance of critical hardware, spontaneous glitches and issues for enemy hardware, or simply preventing unlikely issues for hardware under its control.

Attributes: -137 DX -1 [-25]; IQ 7 [-45]; HT 7 [-45] HP 7 [14]; Will 7 [-21]; Per 7 [-15]; Basic Speed 3.75 [0]

Advantages: 38 Sprite [19]; Circuit Sense¹¹² 1 [5]; Resonance Programs (Alter, Analyze, Control, ICE, Listen, Search, Trigger) [14]

Skills: 36 Area Knowledge (Cyberspace, Planet) (E) IQ+0 [1]; Computer Operation (E) IQ+2 [4]; Electrician (A) IQ+0 [2]; Electronics Operation (Electronic Warfare) (A) IQ+1+1

[4]; Electronics Operation (Sensors) (A) IQ+1+1 [4]; Electronics Repair (Computers) (A) IQ+1+1 [4]; Electronics Repair (Electronics) (A) IQ+1+1 [4]; Electronics Repair (Robotics) (A) IQ+1+1 [4]; Engineer (Electronics) (H) IQ+0+1 [4]; Expert Skill (Computer Security) (H) IQ-2 [1];

Choose one from:

Driving (Compiler's Choice) (A) DX+1 [4]

Piloting (Compiler's Choice) (A) DX+1 [4]

Running (A) HT+1 [4]

Improvements:

Level 1 [65]:

Sprite Level 1 [5]

Diagnostics [22]

Gremlins [21]

Stability [17]

 $\begin{array}{cccc} \textbf{Automatic} & \textbf{Effects} & \textbf{at} & \textbf{Higher} \\ \textbf{Levels:} & \end{array}$

Sprite Level [5]

Optional Effects at Higher Levels, +20 CP per Level:

Circuit Sense +1 [5] limited to 1/2 Resonance, rounded down.

+1 DX mod [25] limited to Level

+1 IQ [15] limited to Level+6

 $+1~\mathrm{HT}$ [15] limited to Level+6

+1 HP [2] limited to Level+8

+1 Will [7] limited to Level+6 +1 Per [5] limited to Level+6

+0.25 Basic Speed [5] limited to +1.0 from base

 $^{^{111}\}mathrm{Power\text{-}Ups}$ 3 p8

¹¹²Power-Ups 3 p8

8.1 'Ware & Essence Rules

When replacing one's flesh with chrome and bioware, you lose a part of yourself - bit by bit. A metahuman has something intangible, that some Awakened call a soul, some call humanity, but is referred to as Essence. The more technology that is placed into a body, the less Essence it can retain.

This has a number of competing hypothesis (and traditions) for explanation, such as the soul being damaged, or the astral self not being able to connect to the complex technology as well as it does with a biological person. Regardless, those that lose their Essence tend to devolve into all manners of antisocial behaviour. Basically everything the APA could throw at you is on the table.

When installing 'Ware, there are a variety of grades to choose from, ranging - from worst to best - Used up to Deltaware. Better grades generally providing cleaner installations that affect a customer's Essence less negatively, at the cost of a larger price tag.

Higher grades are also much more difficult to acquire, due to regulations restricting their use, secrecy regarding their technology and dissemination, and strong connections required to even access them. Betaware reduces LC by 1, while Deltaware reduces LC by 2.

As to whether a piece is invasive or not is left to the GM, but general guidelines are to read their descriptions here or in Shadowrun's books and that it is usually the case for the expensive, shiny, pieces such as Wired Reflexes or Control Rigs.

When the 'Ware is purchased, consult the 'Ware Modifier table for the grade, type, and invasiveness of the piece. Sum up all of the relevant modifiers. This number is used to determine what proportion of the piece's cost must be spent on Character Points versus with Nuyen. It does not include operating costs, if the GM chooses to use those.

'Ware Modifier	Modifier
Used	-1
Normal	+0
Alphaware	+1
Betaware	+2
Deltaware	+3
Bioware	+1
Non-Invasive (Gene-ware, Cultured Bioware,	+1
etc)	
Invasive (Control Rigs, Cyberlimbs, etc)	-1

After adding up all of the relevant modifiers, one can determine the proportion of points to Nuyen.

Essence Proportion	Modifier
5% CP: 95%¥	+5
10% CP: 90%¥	+4
20% CP: 80%¥	+3
30% CP: 70%¥	+2
40% CP: 60%¥	+1
60% CP: 40%¥	+0
80% CP: 20%¥	-1
90% CP: 10%¥	-2

Example: Rigger Joe takes a Control Rig R1, which is 44 Points. It's definitely an "Invasive Ware" which gives -1, so the GM says he pays 9 of the 44 as Nuyen, costing 27,000¥ and uses 35 unspent CP for the remainder.

Additionally, after determining how many unspent points are going to be used 1/3 - 1/2 of those points must be taken as Disadvantages (For which the user can offset the CP cost of the 'Ware with).

Most often, these should be taken from Mental disadvantages having to deal with social and mental stability in some fashion, but you can also lose skills or advantages as is reasonable.

Additionally, if the user has any Magic related Advantages, at least half if not more of the disadvantages or points lost must be taken from the Magic Advantages or skills.

Example: The GM decides that Joe must take 1/2 the cost in disadvantages. Now, Joe needs to take around 18 points in disadvantages. Firstly, he's become more of bumbling oaf since them, taking Oblivious [-5] and Noisy 2 [-4] for -9 points. He also decides that his newfound capabilities have made him reckless, taking On the Edge (SC 15, x1/2) [-8]. The GM decides that -17 points is good.

Certain 'ware has point costs of very small points or even negative points, most often cyberreplacement parts due to their overall downsides.

For small costs, first look into options such

as lowering Self-Control numbers, lowering social skills, or taking quirks. However, if those are not available, it is fine to change the proportions of CP and nuyen to either ignore CP costs as negligible when this small or Nuyen costs as completely dwarfed by operation costs.

For negative point pieces, players should generally be encouraged to simply by enough enhancements to make it positive. However, it is important to point out that the Cyberware Meta-Trait will often accompany such cases, which must also be accounted for when determining the cost of the implant and will often cost enough to bring the total positive.

If neither of these solutions are desireable for these two cases, the GM can lower the operation costs by 3,000¥ per character point, bringing the total higher overall. In the case of negative point 'ware, this can be used to assess essence disadvantages.

Some players or GMs might be concerned about the idea that a character in the setting being able to afford relatively common cyberware such as a

8.2 Making Cyberware

Unlike our fleshy meat-bodies, cyberware has a wide variety of noteworthy advantages and disadvantages. These are represented by three important things: The Cyberware Meta-Trait, the Cyberware Power Modifiers, and the Cyberware Counter Advantages.

8.2.1 Cyberware Meta-Trait

Any part of a character's body that can be damage, need to take the Cyberware Meta-Trait. This is a collection of advantages that, in total, represent the features of chrome flesh.

When taking the Meta-Trait, it must be limited to whatever parts of the body

that are cybered up. This must use Kromm's Post on Partial DR for Hit Location. Here are some pre-made limitations for ease-of-use:

• Skull: -40%

• Face: -40%

• Eyes: -45%

• Ears: -45%

One Limb: -35%Two Limbs: -30%

• Three Limbs: -25%

• Four Limbs: -20%

• Torso: -25%

 \bullet Torso and Four Limbs: -5%

Cyberware Meta-Trait

26 Points base¹¹³

Advantages: High Pain Threshold [10], Injury Tolerance (Unliving) [20], Injury Tolerance (Independent Body Parts) (Reattachment Only, -50%; Nuisance Effect, Reattachment requires maintenance, -5%)[16], Injury Tolerance (No Blood) [5], Resistant (Immunity, Metabolic Hazards) [30]

Disadvantages: Reprogrammable [-10], Social Stigma (Valuable Property) [-10], Unhealing (Total) [-30], Unnatural Features (Detectable) [-5]

8.2.2 Cyberware Power Modifier

When creating advantages to represent Cybernetics, there are a number of effects that can interact with your Cyberware specifically, whether it be shutting it down, hacking it, or it just requiring maintenance. The collection of these limitations form the power modifier for Cyberware, although they are not likely to apply to every piece of cyberware.

- Temporary Disadvantage, Shutdown (Electrical), -20%
- Maintenance (1 Person, Weekly or Monthly), -5% or -3% ¹¹⁴
- \bullet Nuisance Effect (Detectable by Scanners), -5%

• Mundane Countermeasures, 10%¹¹⁵

When you create or choose a cybernetic advantage, sum all of the respective modifiers and apply it to the advantage as necessary.

For the purposes of this book I will use the following two power modifiers:

- Technological, -35%: (Temporary Disadvantage, Shutdown, Electrical, -20%; Mundane Countermeasures, -10%; Nuisance Effect, Detectable by scanners, -5%)
- Electrical, -25%: (Temporary Disadvantage, Shutdown, Electrical, -20%; Nuisance Effect, Detectable by scanners, -5%)

8.2.3 Cyberware Counter Advantage

Certain pieces of Cyberware have notable negatives if they are shutdown, past the usual of shorting out, freaking out, or shutting down. The prime example of this is a Cyberarm, which, when shut down, would leave you with the One Arm disadvantage.

Advantages that are replaced with Disadvantages when the cyberware is disabled need to create a Counter Advantage Meta-Trait in order to represent this.

This is done by creating a Meta-Trait that includes the Disadvantage and a mirror Advantage that negates it. The mirror Advantage must take any amount of Temporary Disadvantage, Shutdown and Mundane Countermeasures limitations to represent the effects that make it stop working; often these are Electrical and Maintenance.

Example: Jet Stream Sam is getting his first Cyberarm. He's already got his Meta-Trait and Power Modifier, now he needs his Counter Advantage. When his Cyberarm is shutdown, he will have the One Arm [-20] disadvantage. He builds the Counter Advantage to be: One Arm [-20] and NOT One Arm (Temporary Disadvantage, Shutdown, -20%) [16] for a total Meta-Trait of [-4].

8.3 Cyberware

8.3.1 Headware

Cyberware	CP	LC
Datajack	5	4
Wireless Datajack	10	4
Control Rig	24+15	var
Skilljack	var	3
Ultrasound Sensor	10	3
Voice Modulator		

Datajack

5 points

This headwaters provides a physical Fibre optic cable that directly connects a user's brain to a system. The cable is 5 yards long. Due to the nature of cable communications, most are not encrypted, however, users can add Secure, +20% [1]. This requires an eavesdropper to win a quick contest of IQ (if using Telecommunication) or Electronics Operations (Surveillance) versus your IQ or Expert Skill (Cybersecurity).

Statistics: Telecommunication, Cable Jack (Video, +40%; Reduced Range, 1/2, -10%; Power (Technological), -35%) [5] LC 4

Wireless Datajack

10 points

This headware provides an encrypted, wireless, radio communicator that allows for a user to remotely connect their brain to a system. The datajack has a base range of 1 mile, but this may be affected by urban environments. As well, with connection to network access points, its traffic can hop (as any computer does) to other systems to allow access to any connected part of the Matrix, well outside its normal range. It is encrypted, requiring an eavesdropper to win a quick contest of IQ (if using Telecommunication) or Electronics Operation (Surveillance) versus your IQ or Expert Skill (Cybersecurity).

Statistics: Telecommunication, Radio (Secure, +20%; Video, +40%; Reduced Range, 1/10, -30%; Power (Technological), -35%) [10] LC 4

¹¹³The cost will change drastically depending on the limitation. Do not just apply the limitation to the base cost. Do some math.

¹¹⁴Most 'ware in Shadowrun does not seem to require consistent maintenance, so this may only rarely apply.

¹¹⁵Only specific advantages will include mundane countermeasures. It only applies when normally accessible countermeasures can affect the power (such as a fore extinguisher putting out a burn innate attack). This often applies for advantages that can be jammed, spoofed, hacked or dos-ed, stopped by mundane equipment, or controlled.

or Wireless Datajack

44/59/74 points

A Control Rig is the defining piece of equipment for a Rigger. This headware allows a user to jump into any system that he both has complete access to (legally or otherwise) and has a rigger adaption built into it. The rules for how Control Rigs interact with rigging are covered in the Rigging and You section.

Statistics: Possession (Decreased Immunity, Immune for 24 hours, +50%; Telecontrol, +50%; Accessibility, systems with rigger adaptation, -70%; Sumpathetic Injury, -20%¹¹⁶; Digital, -40%; No Memory Access, -10%; Power (Technological), -31%¹¹⁷) [24] LC 2, Rating 3 LC 1

Talent 2, Rigger (Accessibility Only when Rigging, -25%; Power (Electrical), -25%) [15] with higher ratings providing 2 levels each.

Skilljack

5/7/8/10/12/13 points

Skilljacks allow a user to make use of knowsofts and languosofts in order to take advantage of the dense expertise available through the software.

Each slot can hold a single Knowledge skill or Language advantage, with a maximum number of points equal to the Rating. Switching out a slot takes 1 second per point, from either downloading or installing and activating from memory. You can purchase this advantage multiple times to have multiple slots with their own ratings, and as many as you want can be active at a time.

Knowsofts and Linguasofts can be purchased, usually for 100-1,000 Nuyen per point.

Statistics: Modular Ability, 5 per slot, 3 per point (Trait-Limited, Knowledge skills and language advantages only, -10%; Power (Technological), -35%)[3 + 2/4/5/7/9/10]

Ultrasound Sensor

10 points

An Ultrasonic Sensor (Alternatively called Sonar, although there are some technical differences) projects waves of

Control Rig Prerequisites: Datajack high frequency sound, picking up the echoes and using that to create a visual picture of the target.

> The sensor has a base range of 200 yards or 20 yards in air (multiplied by air pressure in atm). Each doubling of distance gives a -2 to sense rolls. The sensor has medium resolution, being able to spot small objects, but requires a Sense roll to determine fine relief such as faces.

> The frequency used is above the normal human range of hearing, but can be heard by those with the Ultrahearing advantage. Under ideal conditions it can be detected out to double its range with no penalty, however, environmental conditions can affect the sensor's capabilities and detection, ranging from -1 from being near noisy sea life to -6 for a busy harbor. The sensor does not work in vacuum.

> Ultrasound Sensors may be modified in a number of ways to better suite their objectives:

- Targeting, +20%. Allows for an aim maneuver to lock on to a spotted target, providing a +3 to aimed attacks for rangefinders.
- Low-Probability Intercept, +10%. When turned on, halves range, but is detectable at $1.5\times$ the halved range instead of double.

Statistics: Scanning Sense, Sonar (Increased Range, Land Only, $\times 10$, +15%; Reduced Range, $\times 1/10$, -30%;

Power (Technological), -35%) [10]

8.3.2Eyeware

Cyberware	CP	LC
Cybereyes		
Protected Vision		
Reinforced Lenses		
Infravision		
Ultravision		
Hyperspectral Vision		
Acute Vision		
Telescopic Vision		
Enhanced Tracking		
Smartlink		

Cybereyes Prerequisites: Cyberware Meta-Trait on eyes

-13 points

Cybereyes replace your mk. 1 human eyeballs with digital optics. This provides you with built in Video Displays and DR 1 for the eyes.

Cybereves can take a large number of enhancements to further improve their capabilities:

- Protected Vision (Power (Technological), -35%) [4]
- Nictating Membrane 1-4 [1/2/3/4]
- Infravision (Power (Technological), -35%) [7]
- Ultravision (Power (Technological), -35%) [7]
- Hyperspectral Vision (Power (Technological), -35%) [13]
- Night 1-9 (Power Vision (Technological), -35%) [1/2/2/3/4/4/5/6/6]
- Acute Vision 1-3 (Power (Technological), -35%) [2/3/4]
- Telescopic Vision 1-2 (Temporary Disadvantage, Tunnel Vision, -30%; Power (Technological), -35%) [2/4]
- Enhanced Tracking 1 (Power (Technological), -35%) [4]
- TODO: Smartgun

Statistics: Accessory (Video Display) [1], Nictating Membrane 1 [1], Blindness [-50] and NOT Blindness (Temporary Disadvantage, Shutdown, Electrical, -20%; Mundane Countermeasures, -10%) [35]

8.3.3 Earware

Cyberware	CP	LC
Cyberears		
Protected Hearing		
Subsonic Hearing		
Ultrahearing		
Discriminatory Hearing		
Parabolic Hearing		
Acute Hearing		

¹¹⁶See Behind the Screen on Riggers for explanation on Sympathetic Injury cost estimation.

 $^{^{117}\}mathrm{Temporary}$ Disadvantage limitations can only discount 80% of their original cost so Electrical is limited to -16%

Meta-Trait on ears

-6 points

Cyberears replace the mk. 1 human ear with a digital version. They come with audio links, and if disabled leave you deaf.

Cyberears can take a large number of enhancements to further improve their capabilities:

- Protected Hearing (Power (Technological), -35%) [4]
- Nictating Membrane 1-4 [1/2/3/4]
- Subsonic Hearing (Power (Technological), -35%) [7]
- Ultrahearing (Power (Technological), -35%) [7]
- Discriminatory Hearing (Power (Technological), -35%) [10)
- Parabolic Hearing 1-2 (Power (Technological), -35%) [3/6]
- Acute Hearing 1-3 (Power (Technological), -35%) [2/3/4]

Statistics: Accessory (Audio Link) [1], Deafness [-20] and NOT Deafness (Temporary Disadvantage, Shutdown, Electrical, -20%; Mundane Coun*termeasures*, -10%) [13]

8.3.4 Bodyware

Cyberware	CP	LC
Bone Lacing		
Dermal Plating		
Internal Air Tank		
Reaction Enhancers		
Muscle Replacement		
Skillwires		
Wired Reflexes		

TODO: meta trait Bone Lacing

Plastic Bone Lacing

17 points

Plastic Bone Lacing covers the external structure of your bones with composite polymer lattices, greatly enhancing their tensile strength alongside improving their impressive natural compression strength. It provides 1 DR to your whole body, with an additional 1

Cyberears Prerequisites: Cyberware DR to your Skull. Alongside that, the reinforcement to your bones makes them usually resilient to crippling: the damage for crippling is doubled, which affect dismemberment as well. Additionally, they cannot be permanently crippled. Finally, the reinforcements improve your unarmed damage, providing +1 to attacks with punches, kicks, etc.

Statistics: Claws, Blunt [3], Damage Resistance, 1 (Tough Skin, -40%) [3], Damage Resistance, 1 (Skull Only, -40%¹¹⁸; Tough Skin, -40%) [1], Unbreakable Bones [10]

Aluminum Bone Lacing

21 points

See Plastic Bone Lacing above. Aluminum Bone Lacing further improves the protections, instead providing 2 DR to the whole body, with an additional 2 DR to the Skull. As well, the added mass improves the characters HP by +1. However, aluminum is detectable by certain scanners through the skin.

Statistics: Claws, Blunt (Nuisance Effect, Detectable by scanners, -5%) [3], Damage Resistance, 2 (Nuisance Effect, Detectable by scanners, -5%; Tough Skin, -40%) [6], Damage Resistance, 2 (Skull Only, -40%¹¹⁹; Nuisance Effect, Detectable by scanners, -5%; Tough Skin, -40%) [2], Hit Points, 1 (Nuisance Effect, Detectable by scanners, -5%) [2]; Unbreakable Bones (Nuisance Effect, Detectable by scanners, -5%) [10]

Titanium Bone Lacing

29 points

See Plastic Bone Lacing above. Titanium Bone Lacing even further improves the protections, instead providing 3 DR to the whole body, with an additional 3 DR to the Skull. As well, the metal's mass improves the characters HP by +2. However, titanium is detectable by certain scanners through the skin.

Statistics: Claws, Blunt (Nuisance Effect, Detectable by scanners, -5%) [3], Damage Resistance, 3 (Nuisance Effect, Detectable by scanners, -5%; Tough Skin, -40%) [9], Damage Resistance, 3 (Skull Only, -40%¹²⁰; Nuisance Effect, Detectable by scanners, -5%; Tough Skin, -40%) [3], Hit Points, 2 (Nuisance Effect, Detectable by scanners, -5%) [4]; Unbreakable Bones (Nuisance Effect, Detectable by scanners, -5%) [10]

Dermal Plating

2/4/6/8/10/12 points

By inserting a mix of composite polymers and self-restoring ceramic plates onto the user's skin, their body can become much more durable. The implants provide DR 1, with higher levels increasing up to 6. However, the Ceramic materials can break down under high stress, following the semi-ablative

Optionally, the Ceramic composite platings can be replaced with more long lasting Steel materials. This removes semi-ablative rules, but add Nuisance Effect, Detectable by scanners, -5%, due to how Steel may be detected by certain scanners. This increases the point cost to 3/6/9/11/14/17 points.

Statistics: Damage Resistance, 1-6 (Semi-Ablative, -20%; Tough Skin, -40%) [2/4/6/8/10/12]

Internal Air Supply

5/7/9 points

The character is implant with a micro tank, holding compressed oxygen for the user. While activated, the system can provide all of the air supply for the user. Choking and strangulation cannot harm nor silence them and chemicals cannot affect if they rely in inhalation. The supply only lasts for a time, letting the user "hold their breath", depending on level: $50 \times$, $100 \times$, or $200 \times$ as long. For a normal HT 10 individual, this provides about 30 minutes, 1 hour, and 2 hours of time.

Statistics: Doesn't Breath (Oxygen Storage, 50×, -40%; Power (Technological), -35%) [5] further have Oxygen Storage, $100\times$, -30% [7] and Oxygen Storage, 200×,-20% [9].

Reaction Enhancers

4/7/10/13 points

By replacing select parts of the central nervous system in the spine with

 $^{^{118}\}mathrm{Uses}$ the partial limitations discussed in Making Cyberware.

 $^{^{119}\}mathrm{Uses}$ the partial limitations discussed in Making Cyberware.

¹²⁰Uses the partial limitations discussed in Making Cyberware.

faster mediums such as fibre optic transmitters, the user's movement and reaction speed to stimuli can be markedly improved.

Each level provides +0.25 Basic Speed.

Statistics: Basic Speed, +0.25 (Power (Technological), -35%) [4] further levels are Basic Speed, +0.5 [7], +0.75 [10], +1.0 [13].

Muscle Replacement

4/20/23/39 points

Vat grown synthetic muscles are used to either supplement or even replace the muscular system, alongside reinforcement of attachment points and supporting systems. Provides ample strength and dexterity, without increasing mass to an extreme degree.

Each level provides +1 ST (with no HP) and every second level provides +1 DX (with no Basic Speed).

Optionally, more dense fibres may be used that increase mass according to strength, removing the *No HP*, -2 on the ST. This increases the cost to [5/23/27/45].

Statistics: ST + 1 (No HP, -2; Power (Technological), -35%) [4] further levels are ST + 2 [7] and DX + 1 (No Basic Speed, -5; Power (Technological), -35%) [13], then ST + 3 [10], and then ST + 4 [13] and DX + 2 [26].

Skillwires Prerequisites: Skilljack

6/8/10/12/14/16 points

Skillwires replace a Skilljack, acting as an addition to the original cyberware. Skillwires make use of Activesofts to allow for the physics feats, accomplished through the software itself.

Each slot can hold a single skill or Language advantage, with a maximum number of points equal to the Rating. Switching out a slot takes 1 second per point, from either downloading or installing and activating from memory. You can purchase this advantage multiple times to have multiple slots with their own ratings, and as many as you want can be active at a time.

Knowsofts, Linguasofts, and Activesofts can be purchased, usually for 100-1,000 Nuyen per point.

Statistics: Modular Ability, 5 per slot, 3 per point (Power (Technological), -35%)[4 + 2/4/6/8/10/12]

Wired Reflexes

8/15/23 points

This extremely invasive procedure replaces large portions of the nervous system while implanting a series of adrenaline and stimulative systems, vastly enhancing the user's reflexes, providing +1.0 Basic Speed per level (with no Basic Move).

The system can be exhausting to keep on, costing 1 FP for every minute. As well, while it is active the user appears twitchy and hyperactive, giving -1 to reactions.

Statistics: Basic Speed +1.0 (No Basic Move, -5; Costs FP, 1, -10%; Odious Personal Habit, Twitchy, -5%; Power (Technological), -35%) [8] further levels give Basic Speed, +2.0 [15] and Basic Speed, +3.0 [23]

8.3.5 Cyberlimbs

Cyberware	CP	LC
Cyberlimbs		
Cybertorso		
Cyberskull		

Cyberarm Prerequisites: Cyberware Meta-Trait for Arm(s)

-6 points

Statistics: One Arm [-20] and NOT One Arm (Temporary Disadvantage, Shutdown, Electrical, -20%; Mundane Countermeasures, -10%) [14]

TODO: More Cyber parts

8.3.6 Cyberlimb Enhancements

Enhancement	CP	LC
Agility Enhancement		
Speed Enhancement		
Armoring		
Strength Enhancement		
Cyber Holster		
Hydraulic Jacks	0	0
Large Smuggling Com-	4	1
partment		
Implant Weapon	0	0

Agility Enhancement Prerequisites: Cyberlimb

8/16 or 11/21 points

This Enhancement greatly improves the dexterity of the Cyberlimb. If using limbs with different DX scores, use the lowest one. Combat skills use bodily DX, so this does not help. If you are buying this enhancement for 3 or more limbs, just buy bodily DX instead.

Statistics: Arm DX, One Arm +1-2 (Power (Technological), -35%) [8/16] or Arm DX, Two Arms +1-2 (Power (Technological), -35%) [11/21]

Armoring Prerequisites: Cyberware Meta-Trait

Var. points

Normal Cyberlimbs have limited armor thickness in order to minimally impact usability. However, those wishing to protect their investments often end up armoring them with thicker designs and more durable materials.

The DR provided by this enhancement requires the location limitation as described in the TODO Cyberware Meta-Trait section, due to being able to armor multiple areas of the body differing amounts. Select the DR - limited from 1 to 9 with the Tough Skin limitation - that you want for the components and apply the location limitation for whichever locations are armored.

Here are some examples:

- Damage Resistance, 1-9 (Skull, -40%; Tough Skin, -40%) [1/2/3/4/5/6/7/8/9]
- Damage Resistance, 1-9 (One Limb, -35%; Tough Skin, -40%) [2/3/4/5/7/8/9/10/12]
- Damage Resistance, 1-9 (Two Limbs, -30%; Tough Skin, -40%) [2/3/5/6/8/9/11/12/14]
- Damage Resistance, 1-9 (Three Limbs, -25%; Tough Skin, -40%) [2/4/6/7/9/11/13/14/16]
- Damage Resistance, 1-9 (Four Limbs, -20%; Tough Skin, -40%) [2/4/6/8/10/12/14/16/18]
- Damage Resistance, 1-9 (Torso, -25%; Tough Skin, -40%) [2/4/6/7/9/11/13/14/16]
- Damage Resistance, 1-9 (Torso and Four Limbs, -5%; Tough Skin, -40%) [3/6/9/11/14/17/20/22/25]

Strength Enhancement Prerequisites: Cyberlimb

2/3/4 or 2/4/6 or 3/6/8 points

Statistics: Arm ST, One Arm +1-3 (Power (Technological), -35%) [2/3/4] or Arm ST, Two Arms +1-3 (Power (Technological), -35%) [2/4/6] or Arm ST, Three Arms (Power (Technological), -35%) [3/6/8] Cyber Holster Prerequisites: Cyberlimb

8/16 or 11/21 points

TODO

Hydraulic Jacks Prerequisites: Two Cyberlegs

13 points

Compact hydraulic systems are installed into both legs alongside shock absorbers and reinforcements to the limbs. These allow the user to propel themselves with great force when jumping and absorb the impact of falls easily.

Double the distance you can jump (B352). As well, if you fall a distance equal to or less than your maximum standing jump + 5 yards, you take no falling damage, assuming you are free to twist and land on your feet. Otherwise, you may attempt a DX roll to halve all falling damage.

Statistics: Catfall (Power (Technological), -35%) [7], Super Jump 1 (Nuisance Effect, Must land on feet to prevent falling damage, -5%; Power (Technological), -35%) [6]

Large Smuggling Compartment Prerequisites: Any Cyber Replacement

2/3/4 points

This smuggling compartment can be placed anywhere in the part that can be hollow out, such as the ribs, pelvis, femur, etc. Each level provides Basic Lift/10 lbs of capacity, while maintaining concealability. Treat your payload as part of your body, not encumbrance.

Implant Weapon Prerequisites: Cyberlimb

Statistics: Payload 2-4 [2/3/4]

2 points

Built into the Cyberlimb, the implant weapon can weight up to Basic Lift in lbs. Smaller weapons fire through the palm or knuckles, while larger ones fold out the hand at the wrist.

For extra concealment, the weapons are usually built out of non-detectable components, and what parts that are necessary are disguised in the structure of the Cyberlimb.

Statistics: Extra Arm (Weapon Mount, -80%) [2]

8.4 Bioware

Bioware enhancements are grown and tailored modifications that are biological in nature, tending to be both less invasive to the body alongside more expensive. Certain types of Bioware can sometimes be disrupted by targeted attacks on the body, in much the same way that one might "attack" a liver with alchohol, or the nervous system with a nerve gas; as such, Bioware that can be disrupted has the Bioware, -5% Power Modifier.

8.4.1 General Bioware

Bioware	CP	LC
Adrenaline Pump		
Bone Density Augmen-		
tation		
Cat's Eyes		
Enhanced Articulation		
Muscle Augmentation		
Muscle Toner		
Orthoskin		
Pathogenic Defense		
Platelet Factories		
Skin Pocket		
Superthyroid Gland		
Symbiotes		
Tailored Pheremones		
Toxin Extractor		
Tracheal Filter		

Adrenaline Pump

15/24/34 points

By flooding your system with specially designed adrenal chemicals, the user's adrenaline response can be greatly enhanced and called on demand. As a Free maneuver, the user can spend 4 FP to gain +1 ST (with no HP), Will, +0.25 Basic Speed, and Hard to Subdue 1. It takes 2 FP every minute to sustain it.

After shutting down, the implant requires 1 hour to regain its resources.

In periods of great stress you must make a Will roll (a 14+ always fails), on a failure, your implant acts up, and after each uncontrolled act you get another Will roll to reassert control. The GM determines what happens during such an episode, but some suggestions are: refusals to activate, spontaneous activation, immediate recharge, and wasting FP

Statistics: Adrenaline Pump Meta-Trait (High Pain Tolerance [10], ST +1 (No HP, -2) [5], Will +1 [7], Basic Speed +0.25 [5], Hard to Subdue 1 [2]) (Reduced Time 1, +20%; Bioware, -5%; Costs FP 4, -25%; Takes Recharge, 1 Hour, -30%; Uncontrollable, -10%) [15] further levels increase ST, Will, Basic Speed, and Hard to Subdue by 1 level, costing [24/34].

Bone Density Augmentation

23/28/33/38 points

By increasing the density and tensile strength of the bones, you can greatly increase the body's capabilities to resist damage. The stronger bones provide +1 HT (and derived attributes) alongside +1 DR and HP for every level. As well, it increases the strength of unarmed attacks, providing +1 damage per die to kicks, punches, etc.

Statistics: Claws, Blunt [3], Damage Resistance 1 (Tough Skin, -40%) [3], HT +1 [15], HP +1 [2] further levels provide +1 DR and HP per level.

Cat's Eyes

4 points

This transgenic alteration splices genetic material in order to develop eye formations that promote low light vision. It provides the user with Night Vision 5. It replaces any natural Night Vision.

Statistics: Night Vision 5 (Bioware, -5%) [5], Unnatural Features (Cat Eyes) [-1]

Enhanced Articulation

5/15 points

By adding artifical lubrication to joints and augmenting tendons and ligaments, flexibility can be greatly improved. This provides +3 to Climbing and Escape rolls, Erotic Art, all attempts to break out of close combat, and to negate penalties for working in close quarters. The next level increases this to +5.

Statistics: Flexibility (Bioware, - 5%) [5] further levels are Double-Jointed (Bioware, -5%) [15]

Muscle Augmentation

7/14/20/27 points

This treatment weaves biological fibres into the user's existing muscles instead of entirely replacing them.

Statistics: ST + 1 (Bioware, -5%) [7] further levels provide +1 ST per level [14/20/27].

Muscle Toner

24/48 points

The treatment muscle fibre elasticity for existing muscles, resulting in better flexibility, tension, and agility for the body.

DX +1 (Bioware, Statistics: 5%) [24] further levels provide DX +2(Bioware, -5%) [48]

Orthoskin

4/8/12 points

Weaving biofibers into the skin can provide the durability of Kevlar, while being nearly indistinguishable from human skin. It provides Split DR 1/3*, with the latter value applying to piercing and cutting damage. Further levels are DR 2/6 and 3/9.

Statistics: Damage Resistance 1 (Flexible, -20%; Tough Skin, -40%) [2], Damage Resistance 2 (Flexible, -20%; Limited, Piercing and Cutting, -30%; Tough Skin, -40%;) [2] further levels provide +1/2 split DR per level [4/6]/[4/6]

Pathogenic Defense

3/5 points

An enhanced spleen can improve the immune system's capability to fight off diseases. Provides +3 to HT rolls versus disease. Further levels provide +8.

Statistics: Resistant, Disease +3 (Bioware, -5%) [3] further levels are Resistant, Disease +8 (Bioware, -5%) [5]

Platelet Factories

1/3 points

Statistics: Resistant, Bleeding +3(Rare: Bioware, -5%) [1] further levels are Resistant, Bleeding +8 (Rare; Bioware, -5%) [3]

Skin Pocket

2 points

It's a Skin Pocket. Statistics: Payload 2 [2]

Superthyroid Gland

34 points

Implanted on top of the Thyroid Gland, this organ supersedes the original. It supercharges your metabolism, giving great boosts to energy. It provides +1 to your DX, ST, and HT (And all secondary attributes except HP), while doubling the required number of meals per day^{121} .

Statistics: Super-Thyroid Gland Meta-Trait (ST +1 (No HP, -2) [5], DX+1 [25], HT +1 [15], Increased Consumption 1 [-10]) (Bioware, -5%) [34]

Symbiotes

5 points

Tailored micro-organisms in your bloodstream serve to enhance your healing ability, while also preventing lasting injuries.

You gain +5 to all HT rolls to recover HP or for crippling injuries. As well, a successful roll to recover lost HP restores 2 HP instead of 1.

The symbiotes require a special feed, that you must imbibe with you meals. This counts as eating six meals a day.

Statistics: Symbiotes Meta-Trait (Very Rapid Healing [15], Increased Consumption 1 [-10]) (Bioware, -5%)

Tailored Pheromones

3/6/9/12 points

Specially tailored pheromones are meant to subtly influence other individual's disposition toward you, while improving your own self confidence.

The pheromones only work if others are able to smell them, usually from talking distance.

They provide Charisma 1 for each

Statistics: Charisma 1 (Accessibility, Metahumans only, -5%; Bioware, -5%; Sense based, Smell, -20%; Mundane Countermeasures, -10%) [3] further levels increase Charisma by 1 [6/9/12]

Toxin Extractor

5 points

A specialized cluster of cells placed in the liver can serve to quickly filter out toxins and poisons.

It provides +3 to all HT rolls to resist poisons.

Statistics:Resistant, Poison +3 (Bioware, -5%) [5]

Tracheal Filter

5 points

Implanted at the top of the trachea, this bioware filters out many common contaminants. Anything mundane contaminants are filtered out, such as dust, pollen, smoke, pollution, tear gas, etc.

Statistics: Filter Lungs (Bioware, -5%) [5]

8.4.2 Cultured Bioware

Bioware	CP	LC
Cerebral Booster		
Damage Compensator		
Mnemonic Enhancers		
Pain Editor		
Sleep Regulator		
Synaptic Booster		

Cerebral Booster

15/29 points

Increasing the brain's surface area with additional tissue increases the user's intellect.

Add +1 to IQ per level.

Statistics: IQ +1 (Bioware, -5%) [15] further levels are IQ + 2 (Bioware, -5%) [29]

Damage Compensator

x points

Mnemonic Enhancers

5/10 points

By attaching additional grey matter to the brain's memory centers, short and long-term memory recall is vastly improved.

You automatically remember the general sense of everything you concentrate on, and can roll IQ to recall fine detail. At further levels, you automatically recall fine detail, and if you the player forget anything, the GM must remind you truthfully.

Statistics: EideticMemoru(Bioware, -5%) [5] further levels are Photographic Memory (Bioware, -5%)

 $^{^{121}\}mathrm{Doubling}$ the number of meals per day should increase Cost of Living by around 10-20%.

Pain Editor

x points

Sleep Regulator

8 points

Modifications to the hypothalamus increase the user's wakefulness and reduce the amount of sleep required.

The user needs 4 hours of sleep each day, and in turn has a 20 hour waking period. This means he loses 1 FP for every 5 hours missed sleep instead of 4.

Statistics: Less Sleep 4 (Bioware, - 5%) [8]

Synaptic Booster

15/29/43 points

Statistics: +1.0 Basic Speed (No Basic Move, -5; Bioware, -5%) [15] further levels are +2.0 Basic Speed (No Basic Move, -5; Bioware, -5%) [29] and +3.0 Basic Speed (No Basic Move, -5; Bioware, -5%) [43]

9.1 Fake SINs

Fake SINs are the lifeline of any SINless runner. They allow you to shop at Stuffer Shack, walk around in public (At least in nice places), rent a house, buy gear legally, assuage the cops, get into places, and so on. Without a SIN, you are persona non grata, meaning that - while it might be considered unethical to most - you have little to no rights and can be fucked by any corpo with a chip on his shoulder.

Whenever it becomes important to determine whether a SIN holds up or not, the player must roll against the SIN's skill. Success means that the SIN holds, revealing no discrepancies. Critical Success means something positive happens; the GM is heavily suggested to tailor this to the situation, but a default result could be that the recent scan lends credibility to it, raising its rating by one level for its next check.

A failure can result in the SIN being burned, with a failure by 1 or 2 usually eliciting confusion and/or further investigation by the scanner - which may serve as an opportunity to rectify the situation, or might serve as cause for increased suspicion!. Meanwhile, failure by more usually results in the SIN being automatically denied and flagged for deletion, which can have wide ranging consequences depending on the reason for the scan, but non-law enforcement individuals may be unlikely to recognize the reason behind the denial (Professional (Law Enforcement) +5, Law (Criminal) +3, or any other suitable skill at a bonus). A critical failure is extra bad; the SIN is automatically burned, and something other terrible thing happens, often being that the SIN registry alerts the authorities.

The level of scrutiny is also important when scanning a SIN. As an example, a normal tarry stop will usually provide no penalty or bonus, but distracted, quick, or non-critical scans may provide a +3 bonus, while something as uninvolved as name checks at the door or drone bulk scanning provides a +6

SIN Rating	Skill	Interval	Cost	LC
Rating 0, Burner	1	Weekly	1,800¥	2
Rating 1, Burner	4	Weekly	2,160¥	2
Rating 2, Burner	7	Weekly	2,520¥	2
Rating 3, Burner	10	Weekly	3,240¥	1
Rating 4, Burner	13	Weekly	4,680¥	1
Rating 5, Burner	16	Weekly	7,560¥	1
Rating 6, Burner	19	Weekly	9,000¥	1
Rating 0, Default	1	Monthly	5,400¥	1
Rating 1, Default	4	Monthly	6,480¥	1
Rating 2, Default	7	Monthly	7,560¥	1
Rating 3, Default	10	Monthly	9,720¥	1
Rating 4, Default	13	Monthly	14,040¥	1
Rating 5, Default	16	Monthly	22.680¥	0
Rating 6, Default	19	Monthly	27,000¥	0
Rating 0, Lifestyle	1	Yearly	9,000¥	1
Rating 1, Lifestyle	4	Yearly	10,800¥	1
Rating 2, Lifestyle	7	Yearly	12,600¥	0
Rating 3, Lifestyle	10	Yearly	16,20¥	0
Rating 4, Lifestyle	13	Yearly	23,400¥	0
Rating 5, Lifestyle	16	Yearly	37,800¥	0
Rating 6, Lifestyle	19	Yearly	45,000¥	0

bonus. This is the only way for Rating 0 SINs to succeed, and skills above 16 should be considered to automatically succeed. On the other hand, involved scans can lower the odds, with a detention or arrest providing a -3 penalty, and something as extreme as a corporation buying data from other jurisdictions or collating long time periods can provide a -6 penalty. This is the only way for a Rating 6 SIN to fail, and skills below 4 should automatically fail.

Additionally, the SIN registries of nations constantly check for anomalies, dead individuals, and so on. While this process is one of the reasons it's possible to obtain fake SINs in the first place, it also will weed out fake identities over time. Each SIN has an Interval associated with it, representing how substantial, complex, confusing, or just difficult it is to audit the identity. After each interval of time passes, the player must roll vs the SIN's skill, with the results being the same as a noraml scan.

Fake SINs come in three categories, Burner, Default, and Lifestyle. Burner SINs are ones that do not last. They are meant to serve as a short term solution rather than a permanent identity. Often times, these types of SINs are provided by Johnsons for specific runs. Default SINs are the most common kind, with a lifespan measured in months, not weeks. These can survive long enough to be lived on, while not being expensive or risky enough to prevent use when committing crimes. Lastly, lifestyle SINs are meant to serve as full identities. If you're considering these, you should also consider the Alternative Identity advantage. Regardless, these are measured in years and are likely to last the whole game as long as they aren't put under serious scrutiny.

If you want to design a fake SIN for a specific circumstance, check out the Behind the Screen section on Fake SINs, which provides a number of possibilities for more finely tuned IDs.

9.2 Armor and Clothing

A runner's armor is his best defense against bullets, but it's also just as important to wear armor that won't get you shot at in the first place! The Sixth World is one where armored clothing is relatively common (for those who can afford it), but that doesn't mean that preparing to get shot isn't noteworthy to those in the know!

9.2.1 Reflex Armor and Clothing

Reflex armor makes use of STF (Sheer-Thickening Fluid) to reinforce normal improved kevlar. This fluid, used to treat the kevlar, is made up of ceramic nanoparticles suspended in non-newtonian liquids designed to stiffen on impact. After treatment it allows for the kevlar to stiffen up when hit, greatly improving resistance while still maintaining flexibility and maneuverability.

However, those looking for alternative solutions may take to the Magnetic Liquid design. This design uses ferrous metallic particles suspended in a carrier fluid to stiffen into metallic plates when impacts are detected by sensors. It can protect the user against a wider variety of threats, but comes at the expense of both being more expensive alongside detectable by magnetic anomaly scanners (Or any sensor that can detect ferrous metals). Flexible suits built out of this material increase their cost by 33%, but increase their secondary DR from 1/3 to 1/2 (e.g. 12/4* increases to 12/6*).

All armor has a modifier to its concealment equal to its DR/3+4 (HT66), which is further discussed in the Holdout skill section. As well, some armor pieces can apply bonuses to Holdout (B200), such as the Lined Coat, but these are usually assessed by the GM or noted in the description.

Armor	Location	DR	Weight	Cost	LC	Notes
Actioneer Business Clothes	Torso, Groin, Legs, Arms	12/4*	6.38	1737.8¥	3	[1,2,3]
Armor Clothing	Torso, Arms	8/2*	2.08	623.62¥	4	[1,4]
Armor Jacket	Torso, Arms, Skull	18/6*	5	1499.90¥	3	$\begin{array}{ c c c c c }\hline [1,3,5] \end{array}$
Armor Vest	Torso, Groin	16/5*	2.87	860.16¥	3	[1,3]
Chameleon Suit	All	8/2*	8.37	5311.74¥	3	[1,4,6]
Full Body Armor	Torso, Groin, Arms, Legs, Neck	18/6*	8.23	2467.68¥	3	[1,3]
Full Helmet	Skull	18	3.02	756¥	3	
+Visor	Eyes, Face	15	1.05	420¥	3	
Lined Coat	Torso, Arms	15/5*	3.9	1169.28¥	3	[1,3,7]
Urban Explorer Jumpsuit	Torso, Groin, Arms, Legs	9/3*	4.03	1209.60¥	3	[1,4]
STF Gloves	Hands	6/2*	0.11	32.26¥	3	[1,8]

- [1] The full DR only applies against piercing and cutting damage. Use the second DR for all other damage types.
- [2] Incorporates an Undercover Holster (HT154).
- [3] Concealable under clothing or as normal clothing.
- [4] Concealable as light clothing or can be very easily hidden under clothes.
- [5] DR to skull only applies to Rear, when hood is up.
- [6] Incorporates Thermo-Optic Chameleon Surface (UT98).
- [7] Provides a +4 bonus to Holdout for items hidden underneath.
- [8] Extremely concealable as any very light clothing or under anything.

9.2.2 Trauma Plates

Trauma plates are small Ceramic Nanocomposite plates that are meant to cover the upper torso from threats ranging from pistol rounds to heavy rifles. They can be carried in any plate carrier, load bearing gear, or certain armors by default as indicated (Full Body Armor, etc). Most plates are designed to cover the chest, but some for smaller vests only cover vital locations, while larger plates - largely only used by military or corporate soldiers - can cover the entire torso.

Trauma plates can also be made out of Titanium Nanocomposites, which prevent them from degrading quickly under fire at the expense of higher weight. Any plate can be made out of Titanium Nanocomposites which increases weight by 20%, but removes the semi-ablative trait.

TODO: Check prices, one of these is wrong.

Armor	Location	DR	Weight	Cost	LC	Notes
Trauma Plate, Level I	Chest	6F	1.5	450¥	3	[1]
Trauma Plate, Level II	Chest	12F	3	900¥	3	[1]
Trauma Plate, Level III	Chest	30F	7.5	2,250¥	3	[1]
Small Trauma Plate, Level I	Vitals	6F	0.3	450¥	3	[1]
Small Trauma Plate, Level II	Vitals	12F	0.6	900¥	3	[1]
Small Trauma Plate, Level III	Vitals	34F	1.7	2,250¥	3	[1]
Large Trauma Plate, Level I	Torso	6F	2	597.60¥	3	[1]
Large Trauma Plate, Level II	Torso	12F	3.98	1195.20¥	3	[1]
Large Trauma Plate, Level III	Torso	30F	9.96	2988¥	3	[1]

^{[1] -} The DR is semi-ablative.

9.3 Weapons

9.3.1 Assault Cannons

GUNNER(Cannon)(DX-4, or other Gunner at -4)

9.3.2 Grenade Launchers

GUNS(Grenade Launcher)(DX-4, or most other Guns at -4)

Wea	apon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes	1
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9.3.3 Light Machine Guns

GUNS(LMG)(DX-4, or most other Guns at -2)

Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Ingram Valiant, 5.56mmCL	6d pi	5	400/2,200	11.96/2.16	13	100(5)	11B†	-6	2	X	1	[1,2]

- [1] Laser Sight (UT149).
- [2] Barrel mounted compensator (TS76).

9.3.4 Machine Guns

GUNNER(Machine Gun)(DX-4, or other Gunner at -4)

Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
GE Vindicator Minigun, 5.56mmCL	6d pi	5	400/2,200	24.72/4.32	50!/100!	200(5)	14M	-8	2	х	1	[1, 2]
Stoner-Ares M202			'	'	'				'			
RPK HMG, 12.7mmCLR	8dx2 pi+	5	1,000/7,100	39.91/17.05	13!	100(5)	19M	-8	2	x	1	

^{[1] -} Integrated Smartgun system. Provides HUD Link (UT149, PY55:8), Targeting Software C3 (UT149), Tiny Computer (UT22). Provides +2 to Guns skill.

9.3.5 Pistols

GUNS(Pistol)(DX-4, or most other Guns at -2)

Holdout Pistols	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Fichetti Tiffani Needler, 10mmMF	1d+2 pi-	1	100/1,200	1.3/0.09	3×3	4+1(3)	8	-1	1	125¥/23.7¥	3	[1]
Streetline Special, .25CLP	1d+1 pi-	1	120/1,300	0.76/0.04	3	6+1(3)	7	-1	2	175¥/20.4¥	3	[2]
Walther Palm Pistol, .45CLP	2d pi+	1	280/1,100	1.09/0.05	4	2(3i)	9	-1	2	147Y/0.4Y	3	
Light Pistols	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Ares Light Fire 70, .380CLP	2d-1 pi	2	190/1,000	1.29/0.19	3	16+1(3)	8	-2	2	580¥/22¥	3	
Ares Light Fire 75, .380CLP	2d-1 pi	2	190/1,000	1.89/0.19	3	16+1(3)	8	-2	2	1,200¥/22¥	2	[8]
Beretta 201T, 9mmCLP	2d+3 pi	2	260/1,200	2.65/0.3	6	21+1(3)	9	-2	2	835¥/26.5¥	3	[10]
Colt America L36, .45CLP	2d pi+	2	290/1,100	1.63/0.28	3	11+1(3)	10	-2	2	1,050¥/25.3¥	3	
Fichetti Security 600, 9mmCLP	2d+3 pi	2	260/1,100	1.6/0.43	9	30+1(3)	8	-3	2	630¥/30.4¥	3	
Taurus Omni, .38 Special CLP	2d+1 pi	1	240/950	2.48/0.1	3	6(3i)	9	-2	2	705¥/0.72¥	3	[6,11]
Heavy Pistols	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Ares Predator V, .50 AE CLP	4d+2 pi+	2	300/1,500	4.35/0.55	3	15+1(3)	12	-4	4	1,862¥/39.1¥	3	[7]
Ares Viper Silvergun, 28G MF	1d+2 pi-	2	105/1,300	3.96/1.16	9×7	30+1(3)	11	-4	1	1,150¥/39.1¥	1	
Browning Ultra-Power, .40CLP	2d+2 pi+	2	310/1,300	2/0.19	3	10+1(3)	8	-3	3	894¥/21.7¥	3	[6]
Colt Government 2066, .45CLP	2d+1 pi+	2	290/1,200	2.43/0.36	3	14+1(3)	10	-2	3	893¥/27.5¥	3	
Remington Roomsweeper, 28G Slug	4d pi++	2	115/1,350	3.21/.31	3	8(3)	11	-3	4	400¥/23.1¥	3	
Remington Roomsweeper, 28G MF	2d pi-	2	130/1,500	3.21/.31	3×4	8(3)	11	-3	1	400¥/27.9¥	3	
Ruger Super Warhawk, .454CLP	6d pi+	2	440/2,400	3.08/0.2	2	6(3i)	12	-3	5	788¥/2.4¥	3	
Taurus Omni, .357CLP	3d pi	1	250/1,100	2.49/0.11	2	6(3i)	10	-2	2	705¥/0.96¥	3	[6,11]
Machine Pistols	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Ares Crusader II, 9mmCLP	2d+2 pi	2	260/1,100	1.92/0.57	3/9#	40+1(3)	9	-3	2	1,638¥/34.7¥	2	[4,7]
Ceska Black Scorpion, .32CLP	2d pi-	2	170/650	3.27/0.35	9	35+1(3)	7†	-3*	2	468¥/2.4¥	3	[3]
Steyr TMP, 9mmCLP	2d+3 pi	2	260/1,100	3.04/.43	15	30+1(3)	8†	-2	2	1,350¥/31.3¥	2	[6]

^{[1] -} Programmable Camouflage (UT99)

^{[2] -} Includes integral D Cell.

^{[2] -} Partially made of composite materials; -3 to detect with sensors.

^{[3] -} Detachable/Folding Stock, see Pistol Stock for rules. (HT160)

^{[4] -} Barrel mounted compensator (TS76).

- [5] Design acts as a compensator (TS76).
- [6] Laser Sight (UT149).
- [7] Integrated Smartgun system. Provides HUD Link (UT149, PY55:8), Targeting Software C3 (UT149), Tiny Computer (UT22). Provides +2 to Guns skill.
 - [8] Integrated Sound Suppressor, gives -6 to hearing rolls (PY55:11).
 - [9] No semi-automatic fire. Minimum RoF 3.
 - [10] Detachable stock
 - [11] Can switch between .38CLP and .357CLP cylinders.

9.3.6 Rifles

GUNS(Rifle)(DX-4, or most other Guns at -2)

Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
AK-97, 7.62mmCL	6d+1 pi	4	450/2,400	9.3/0.75	11	38+1(3)	9†	-5	2	473¥/42.9¥	2	
Ares Alpha, 10mmCL	7d pi+	5	550/3,000	7.68/1.92	10	42+1(3)	10†	-4	3	3,188¥/98.2¥	1	[1,2,3]
Underbarrel GL, 40mm	1d pi++	2	75/450	2.5/2.4	1	6(5)	10	-1	1	_	1	
Colt M23, 5.56mmCL	5d+3 pi	4	400/2,200	6.12/0.6	15	40+1(3)	9†	-4	2	998¥/39.1¥	3	
FN HAR, 7mmCL	6d+1 pi	4	850/4,500	7.81/1.04	13	35+1(3)	9†	-4	2	X	2	[3,4]
Yamaha Raiden, 10mmCL	7d+1 pi+	5	500/2,900	9/2.74	9	60+1(3)	10†	-5	3	3,688¥ $/135.3$ ¥	1	[1,2,3,5,6]
Sniper Rifles	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Test												
Sporting Rifles	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes

- [1] Fine, Accurate.
- [2] Integrated Smartgun system. Provides HUD Link (UT149, PY55:8), Targeting Software C3 (UT149), Tiny Computer (UT22). Provides +2 to Guns skill.
 - [3] Design acts as a compensator (TS76).
 - [4] Laser Sight (UT149).
 - [5] No semi-automatic fire. Minimum RoF 3.
 - [6] Integrated Sound Suppressor, gives -6 to hearing rolls (PY55:11).

9.3.7 Shotguns

GUNS(Shotgun)(DX-4, or most other Guns at -2)

Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Defiance T-250, 12G	1d+2 pi-	3	45/900	6.28/0.33	3x9	5+1(3i)	10†	-6	1/5	347¥/1.75¥	3	[1]
Enfield AS-7, 10G	2d pi-	3	45/900	11.89/1.6	9x9	10+1(3)	$12^{†}$	-5	1/7	1,440¥ $/21.2$ ¥	2	$\begin{bmatrix} 1,2 \end{bmatrix}$
PJSS Model 55, 12G	1d+2 pi-	3	45/900	8.13/0.13	2x9	2(3i)	10†	-6	1/4	420¥ $/0.7$ ¥	3	[1]

- [1] First rcl is for shotshell, second is for slug.
- [2] Laser Sight (UT149).

9.3.8 Submachine Guns

GUNS(SMG)(DX-4, or most other Guns at -2)

Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Colt Cobra TZ-120, 9mmCLP	3d-1 pi	3	260/1,100	5.52/0.46	14	32+1(3)	8†	-3*	2	1,711¥/22.11¥	3	[1,2,4]
FN P93 Praetor, 5.7mmCLP	3d+1(2) pi-	4	160/800	5.4/0.36	16	50+1(5)	8†	-3	1	1,820¥/33.6¥	2	[3]
HK-227, .45CLP	2d+1 pi+	3	300/1,200	4.32/0.72	11	28+1(3)	8†	-4*	2	2,195¥ $/27$ ¥	3	[1,5,6]
Ingram Smartgun X, 9mmCLP	3d pi	3	260/1,200	6.04/0.46	19	32+1(3)	8†	-3*	2	1,259¥ $/22.1$ ¥	3	[1,3,4,5,7]
SCK Model 100, 9mmCLP	3d+1 pi	3	260/1,200	3.61/0.43	9	30+1(3)	8†	-4*	2	1,850¥/22.1¥	2	[1,5]
Uzi IV, 9mmCLP	3d-1 pi	3	260/1,100	7.27/0.34	9	24+1(3)	8†	3*	2	805¥/19.5¥	3	[1,4,7]

- [1] Retractable/Folding Stock (HT160).
- [2] Barrel mounted compensator (TS76).
- [3] Design acts as a compensator (TS76).
- [4] Laser Sight (UT149).
- [5] Integrated Smartgun system. Provides HUD Link (UT149, PY55:8), Targeting Software C3 (UT149), Tiny Computer (UT22). Provides +2 to Guns skill.
 - [6] Integrated Sound Suppressor, gives -6 to hearing rolls (PY55:11).
 - [7] No semi-automatic fire. Minimum RoF 3.

9.3.9 Tasers

GUNS(Pistol)(DX-4, or most other Guns at -2)

Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
Defiance EX Shocker	1d-3 pi-	0	7	2/0.1	1	4(3)	7	-2	2	420¥/20¥	4	[1,2,3]
follow- up	HT-6(0.5) aff											
Yamaha Pulsar	1d-3 pi-	0	20	1.1/0.25	3	4(3)	7	-2	2	368¥/16¥	4	[1]
follow- up	HT-4(0.5) aff											

- [1] On a failed HT roll victim is stunned while the trigger is depressed and for (20-HT) seconds afterward, and can then roll vs. HT (With the same penalties) to recover.
 - [2] Built in biomonitor detects condition of target.
 - [3] Can be used as melee Stun Gun, with Reach C and No Parry.

9.4 Ammunition

Ammunition in Shadowrun is overwhelmingly made of Caseless ammunition and Combustible Cased Telescopic ammunition, allowing for decreased weights and increased magazine sizes. This section contrains ammunition for all the weapon provided in this book, however the GM should feel free to add additional types as necessary, which can be accomplished by halving the weight from contemporaries from GURPS High Tech. *Alternatively*, for GMs that wish to maintain the universal ammunition classes from Shadowrun, there are optional generic versions included as well.

Ammunition	WPS	CPS
10mm	0.021	0.24¥
10mm MF	0.021	0.96¥
.25 CLP	0.006	0.04¥
.380 CLP	0.0105	0.08¥
9mm CLP	0.013	0.12¥
.38 Special CLP	0.0165	0.12¥
.50 AE CLP	0.0335	0.4¥
.40 CLP	0.0175	0.12¥
.45 CLP	0.0235	0.2¥
.454 CLP	0.033	0.4¥
.357 CLP	0.0175	0.16¥
.32 CLP	0.009	0.04¥
5.7mm CLP	0.0065	0.16¥

Ammunition	WPS	CPS
28G PC	0.035	0.2¥
$12G PC^{122}$	0.065	0.35¥
10G PC	0.075	0.65¥

Ammunition	WPS	CPS
7.62mm CL	0.018	0.3¥
7.62mm CLR^{123}	0.028	0.4¥
10mm CL	0.0415	0.75¥
5.56mm CL	0.0135	0.25¥
7mm CL	0.027	0.35¥
$12.7 \mathrm{mm} \ \mathrm{CLR}$	0.155	3¥

9.5 Firearm Accessories

The UT148 Firearm Accessories are *not* included by default on Shadowrun's guns. Usually, none of the equipment is included by default, however GMs may find that diagnostic computers (UT151) should be included by default. If using pre-made equipment from UltraTech (*Not Transhuman Space*), lower cost by 250\$.

Players should also look into the Pyramid #3/55 section, which covers many ideas, updates, and improvements to basic Ultratech equipment and accessories.

Smartgun

550¥

Provides HUD Link (UT149, PY55:8), Targeting Software C3 (UT149), Tiny Computer (UT22). Provides +2 to Guns skill.

Compensator

87.5¥, 0.05/0.125/0.175 lb TS (76).

9.5.1 Laser Sight

75¥, 0.125 lb UT (149)

9.5.2 Folding Stock

100¥, 0.4 lb. HT 160.

9.6 Drones

Drones are semi-autonomous electrical robots that can provide a wide variety of utility, ranging from combat, to scouting, to repair work, and more.

9.6.1 Drone Meta-Trait

22 Points

All drones have a number of traits that are in common with on another. This Meta-Trait combines them all in order to keep the statblocks reasonably concise to read. The drone meta-trait deals purely with the body of the drone, and as such only include physical traits and attributes - anything that a pilot program specifies overrides this template!

Notably, drone bodies indicate their DX as a bonus instead of a flat trait. This is because digital minds / riggers use their own DX, modified by the drone body's (e.g. a rigger with DX 12 jumping into a Doberman acts as if he had DX 14).

All drones have Firewalls that come with their models. For drones SM-5 and smaller, this is usually a Complexity 3 Inferior Firewall; for up to SM+1, this is usually a Complexity 4 Standard Firewall; for up to SM+4, this is usually a Complexity 5 Standard Firewall; higher SM drones are usually the same, however it is possible for drones SM+8 to be Complexity 6, for drones up to SM+12 to be Complexity 7, and for drones up to SM+16 to be Complexity 8, although once you're past 4 it's more of a server than a drone. Some drones will instead opt for Superior Firewalls instead of higher Complexities.

It's also important to note some advantages and disadvantages that one might mistake drones for having. Many drones will likely make use of singular cameras, which might imply the One Eye [-15] disadvantage. However, many cameras can make use of varied detection and processing tactics that practically remove any loss of depth perception. Many Injury Tolerances may seem immediately likely, such as No Vitals or No Brain. However, these are just different object in a drone, notably the brain usually being the CPU.

Advantages: Absolute Direction (Requires Signal, -20%; Mundane Countermeasures, -10%) [4]; Doesn't Sleep [20]; High Pain Threshold [10]; Injury Tolerance (No Blood, No Neck, Unliving) [30]; Injury Tolerance (Independent Body Parts) (Reattachment Only, -50%; Nuisance Effect, Reattachment requires maintenance, -5%) [16]; Resistant (Immunity, Metabolic Hazards) [30]; Telecommunication, Radio (Secure, +20%; Sensie, +80%; Mundane Countermeasures, -10%; Reduced Range, x1/10, -30%) [16]

Disadvantages: Electrical [-20]; Maintenance (1 Person, Monthly) [-2]; No Sense Smell/Taste [-5]; Reprogrammable [-10]; Restricted Diet, Electricity (Very Common) [-10]; Short Lifespan 1 [-10]; Social Stigma (Valuable Property) [-10]; Unhealing (Total) [-30]; Unnatural Features (Detectable by scanners) [-5]

Perks: Accessory, Computer $[0^{124}]$

Quirks: Affected by Magnetism [-1]; Cannot Float [-1] Traits: Complexity Limited IQ [0]; Machine [0]; Sexless [0]

9.6.2 Pilot Program Meta-Trait

-213/-161/-109/-57/-5/47 Points

The pilot program is the brain of a drone. While they're not especially bright, they have enough intelligence to respond to general commands given by their owner alongside enough problem solving to compete with most animals well enough.

It's important to note that drone IQ is not equivalent to animal (or low human) IQ though. Drones are narrow intelligences, which means that while they aren't as great at general tasks, they excel rather well at what they're designed to do. This means they tend to have high skills, with low attributes; your smart car is really good at the complex task of driving your around town, following traffic laws, responding to emergencies, and more - but it does not really understand these concepts (navigation, object recognition, laws, and ethics), it is just pre-programmed with ways to react to them (with the line blurring for Rating 6 programs), and is even less competent at tasks outside its prior programming like map-making.

As well, many pilot programs are designed to meld specifically with the equipment that they are entrusted with. In much the same way that you might take note of the many quirks in your vehicle or body, the pilot program will adjust its capabilities to match the minor variations in each drone. While this does allow for the stellar capabilities of drones, it does also tend to make them only useful for a specific piece of hardware after a short period of training. It's even heard of that pilot programs will do this with other equipment as well, such as firearms or sensors that it uses regularly.

Each pilot program comes with a specific Rating. This indicates how complex and sophisticated their programming is, giving them higher intelligence, coordination, processing, and defense. For *general problem solving*, the GM should consider comparing the IQ of the program to an animal of equal or - more often - less IQ, in order to guesstimate their capabilities.

¹²⁴The cost for Accessory, Computer will be included on the drone sheets themselves.

The original Shadowrun did not place any restriction on Pilot Rating for Drones (Barring some indirect ones...), however these programs should be treated as having a Complexity equal to their Rating/2 (rounded up). This will likely only ever greatly impact extremely small drones.

Attributes: IQ equal to Rating [-135 to -60]. DX, Per, and Will equal to Rating+6 [-296 to 74]

Advantages: Absolute Timing [2]; Digital Mind [5]; Intuitive Mathematician [5]; Photographic Memory [10]

Disadvantages: Hidebound [-5]; Incurious (SC 6) [-10]; Low Empathy [-20]; No Sense of Humor [-10]

Skills:¹²⁵ Computer Operation (E) IQ+4 [12]; Electronics Operation (Sensors) (A) IQ+3 [12]; Expert Skill (Computer Security) (H) IQ+2 [12]; Driving, Piloting, or Running (Specific drone model) (A) HT/DX+2 [8]; Tactics (H) IQ+2 [12]

Perks and Quirks: The GM should feel free to add some mental Perks and Quirks as pilot programs adjust to their models!

Traits: Complexity Limited IQ [0]

9.6.3 Autosofts

Anyone can purchase an autosoft for a skill at a rate of 2,000\forall per CP. Common ones include Guns, Gunner, Observation, and Stealth. Autosofts have a complexity based on their CP, starting at Complexity 2 for 1 CP, and increasing by +1 Complexity per doubling of CP. Riggers may run Autosofts for drones in their network, as covered in the Rigging Section.

Shiawase Kanmushi

0 Points (Running) 1,000¥

The Shiawase Kanmushi is shipped with a Rating 2 Pilot Program [-161] by default.

Attributes: ST 1 [-63]; DX +3 [75]; HT 8 [-30]; Speed 6.75 [20]; Move 1 [-25]; HP 1 [0]

Advantages: Clinging [20]; Drone Meta-Trait [22]; Perfect Balance [15]

Disadvantages: Quadraped¹²⁶ [-35];

Perks: Accessory, Computer, Complexity 2 [1]; Hard to tell from insect¹²⁷ [1]

Quirks: Aesthetic Neck¹²⁸ [-1]

Traits: SM-15 [0]

S-B Microskimmer 9.6.5

0 Points (Driving (Hovercraft)) 1.000¥

The S-B Microskimmer is shipped with a Rating 2 Pilot Program [-161] by default.

Attributes: ST 1 [-63]; DX +3 [75]; HT 8 [-30] Speed 6.00 [5]; Move 0 [0]; HP 1 [0]

Advantages: Drone Meta-Trait [22]; Flight (Low Ceiling, 1 Foot Ceiling -30%¹²⁹; Slow, Move 1, -45%) [10]

Disadvantages: Increased Consumption (2 Hour Endurance) [-20]; Legless (Aerial) [0]

Perks: Accessory, Computer, Complexity 2 [1]

Traits: SM-11 [0]

9.6.6 MCT Fly-Spy

The MCT Fly-Spy is shipped with a Rating 3 Pilot Program [-109] by default.

1 Points (Piloting: Ornithopter¹³⁰)

Attributes: ST 1 [-63]; DX +3 [75]; HT 10 [0]; Speed 5.75 [0]; Move 3 [-10]; HP 2 [2]

Advantages: Drone Meta-Trait [22]; Flight (Winged, -25%) [30];

Disadvantages: Increased Consumption (2 Hour Endurance) [-20]; Quadraped¹³¹ [-35];

Perks: Accessory, Computer, Complexity 3 [1]

Quirks: Aesthetic Neck [-1]

Traits: SM-9 [0]

Ares Duelist 9.6.7

87 Points(Running) 4.500¥

The Ares Duelist is shipped with a Rating 3 Pilot Program [-109] by default, alongside a Rating 3 Broadsword Autosoft (Included in the template) and two standard TL 9 Broadswords already on its weapon mounts.

Attributes: ST 12 [14]; DX +0 [0]; HT 10 [0]; Speed 5.00 [0]; Move 5 [0]; HP 22 [20]

Advantages: Damage Resistance 5 [25]; Drone Meta-Trait [22]; Extra Arm 2 (Weapon Mount, -80%) [4]

Skills: Broadsword (A) DX+1 [4]

Perks: Accessory, Computer, Complexity 4 [1]

Quirks: Aesthetic Neck¹³² [-1]; Distinguishing Features (Anthromorph, Red-Samurai Aesthetic) [-2]

 $^{^{125}}$ These cover only the core skills for all Pilot Programs. Many other drones have specific skills, which are covered in either the autosofts or drone sections.

 $^{^{126}}B263$

 $^{^{127}}$ This is simply a perk that makes the drone harder to distinguish than other drones. This could be represented by a +1 to Disguise or similar skill, or that a success by 0 on a Sense check to notice it passes it off as a bug.

¹²⁸The drone has a neck, however it does not have any weaknesses associated with it. From Transhuman Space.

 $^{^{129}\}mathrm{Simple}$ projection from the limitation's official values.

¹³⁰ GURPS Vehicles: Steampunk Conveyances. Defaults: Autogyro, Glider, Helicopter, Light Airplane, Low-G Wings, Ultralight, or Vertol, all at -5.

 $^{^{132}}$ The drone has a neck, however it does not have any weaknesses associated with it. From Transhuman Space.

9.6.8 GM-Nissan Doberman

The GM-Nissan Doberman is shipped with a Rating 3 Pilot Program [-109] by default.

80 Points(Running) 5,000¥

Attributes: ST 9 [-7]; DX +2 [50]; HT 10 [0]; Speed 5.5;

Move 7 [10]; HP 16 [14]

Advantages: Damage Resistance 8 (Cannot Wear Armor, -40%) [24]; Drone Meta-Trait [22]

Disadvantages: Quadraped [-35]

Perks: Accessory, Computer, Complexity 4 [1]

Quirks: Aesthetic Neck [-1]

Traits: SM-1 [0]

9.6.9 MCT-Nissan Roto-drone

The MCT-Nissan Roto-drone is shipped with a Rating 3 Pilot Program [-109] by default.

41 Points (Piloting: Helicopter) 5,000¥

Attributes: ST 6 [-28]; DX +2 [50]; HT 10 [0]; Speed 5.5; Move 4 [-5]; HP 10 [8]

Advantages: Damage Resistance 7 (Cannot Wear Armor, -40%) [21]; Drone Meta-Trait [22] Flight (Winged, -25%) [30]; Extra Arm (Weapon Mount, -80%) [2]

Disadvantages: Horizontal [-10]; No Legs (Aerial) [0]; No Manipulators [-50];

Perks: Accessory, Computer, Complexity 4 [1]

Traits: SM-1 [0]

9.6.10 Steel Lynx

The Steel Lynx is shipped with a Rating 3 Pilot Program [-109] by default.

146 Points (Running) 25,000¥

Attributes: ST 14 [26]; DX +1 [25]; HT 12 [30]; Speed 6 [5]; Move 7 [5]; HP 20 [12]

Advantages: Damage Resistance 18 (Cannot Wear Armor, -40%) [54]; Drone Meta-Trait [22]; Extra Arm (Weapon Mount, -80%) [2]

Disadvantages: Quadraped [-35]

Perks: Accessory, Computer, Complexity 4 [1]

Quirks: Aesthetic Neck [-1]

Traits: SM+1 [0]

9.7 Drone Modifications

The best part of being a rigger is modifying your precious metal children to your heart's content. Luckily, GURPs makes this even easier than Shadowrun, following normal character creation process for the drone.

It is noteworthy however, that unless you are buying a drone as a body (such as for an AI), many items can be simply included as an Accessory by paying for their normal cost isntead of taking a corresponding advantage (e.g. Accessory, Small Tactical Radar [1] and 5,000¥ instead of Scanning

Sense). The GM should assign costs to anything not available to equipment, and a good heuristic is: $points^2$, rounded up. (I fully intend to come back and add many of the Rigger 5 modifications pre-built here later.)

9.8 Vehicles

TODO: Once I create my GURPS Vehicle applet, until then it will have to wait!

9.9 Foci and Reagents

Foci are astral constructs that are tied to physical housing, allowing those who bind to them to use the stored mana for highly specialized tasks. Much like other astral constructs, foci have Force values, which measure how powerful they are. As well, they have a wide variety of highly specialized benefits, which must be selected and constructed for the user.

Foci, like any other awakened aspect, are highly personal. It's unlikely that you'll find some chummer selling these in a store, even a magical-focused one, unless you're a straight Hermetic or Shaman tradition. They only work for the traditions that they were made for, and are hard to craft for those who aren't intimately familiar with that tradition in the first place (Imagine a Christian Theurgist making a focus for a Black Mage!). Even beyond that, many foci are personalized to the individual who made them!

As such, most foci are custom-made or custom-ordered, which requires recipes or enchanters respectively - both of which can be hard to acquire!

Because of how involved all aspects of Magic are, player won't be able to simply purchase a focus, plug it in, and walk away with the bonuses. Focuses are advantages with Gadget Limitations, however, depending on what they apply to, it can require applying those Gadget Limitations to multiple improvements, as detailed in each section. As well, the player must remember that whenever they upgrade or add advantages, spells, or powers that are affected by their foci, the costs change and *must* be recalculated!

All Foci have one of the listed modifiers. These assume that the foci is made out of or reinforced by strong metallic, composite, or other durable material. Many shamanic traditions might make them out of wood, hair, or materials with DR 2 or less, in which case increase the value of the limitations by -5%.

Charm Focus: This is a small (Around 3") focus, made out of materials like wood, straw, leather, etc.

Charm Focus, -70%: Breakable, DR 2, -20%; SM -8, -5%; Can Be Stolen, Quick Contest DX, Does not work for Thief, -15%; Nuisance Effect, Dual-Natured, -5%; Unique, -25%)

Ring Focus: This is a tiny ring, made out of a durable metal or composite.

Ring Focus, -60%: Breakable, DR 5, -15%; SM -10, -0%; Can Be Stolen, Quick Contest DX, Does not work for Thief, -15%; Nuisance Effect, Dual-Natured, -5%; Unique, -25%)

Wand Focus: This is a middling sized wand, usually in the ballpark of 16" long. It's generally considered to be made out of metal, metal wood, or reinforced wood, giving it enough durability to survive glancing blows.

Wand Focus, -75%: Breakable, DR 5, -15%; SM -4, -15%; Can Be Stolen, Quick Contest ST, Does not work for Thief, -15%; Nuisance Effect, Dual-Natured, -5%; Unique, -25%)

Staff Focus: This is a sizeable staff, around the size of a good walking stick (55"). It's generally considered to be made out of metal, metal wood, or reinforced wood, giving it enough durability to survive glancing blows.

Staff Focus, -80%: Breakable, DR 5, -15%; SM -1, -20%; Can Be Stolen, Quick Contest ST, Does not work for Thief, -15%; Nuisance Effect, Dual-Natured, -5%; Unique, -25%)

Tattoo Focus: A tattoo on the awakened's body, usually around 3"x3" in size. Larger or smaller tattoos are entirely possible (Such as a Yakuza's entire sleeve!), in which case change the SM limitation accordingly.

Tattoo Focus, -60%: Breakable, DR 0, -20%; SM -6, -10%; Nuisance Effect, Dual-Natured, -5%; Unique, -25%)

One-Handed Weapon Focus: This is a weapon around the size of a longsword, ace, or mace. It is assumed to be made of mixed wood/composites and metals, usually giving DR 4, but sometimes allowing for DR 5. Weapons made entirely out of metal tend to be DR 6 (or sometimes a bit more), in which case replace DR 4-5, with DR 6-15, -10%.

One-Handed Weapon Focus, -80%: Breakable, DR 4-5, -15%; SM -2, -20%; Can Be Stolen, Quick Contest ST, Does not work for Thief, -15%; Nuisance Effect, Dual-Natured, -5%; Unique, -25%)

Two-Handed Weapon Focus: This is a weapon around the size of a greatsword or polearm. It is assumed to be made of mixed wood/composites and metals, usually giving DR 4, but sometimes allowing for DR 5. Weapons made entirely out of metal tend to be DR 6 (or sometimes a bit more), in which case replace DR 4-5, with DR 6-15, -10%.

Two-Handed Weapon Focus, -85%: Breakable, DR 4-5, -15%; SM +0, -25%; Can Be Stolen, Quick Contest ST, Does not work for Thief, -15%; Nuisance Effect, Dual-Natured, -5%; Unique, -25%)

9.9.1 Power Focus

Power Foci increase an awakened's *entire Magic attribute!* They are very powerful, and also accordingly expensive.

Power Foci must apply their Foci Limitation to the point difference for *every single trait that increases from Magic*. This usually includes, the Magic Advanatage, all spells, summoning, binding, all critter powers, and sometimes other foci!

Example: Yukon is having custom-made a Force 1 Power Focus. He has Magic 4 [30] naturally, alongside the Fireball [46] spell, which he spent [13] points on. The increase to Magic 5 is [7.5] points, and the Magic 5 Fireball is [55] points. This means the increase costs 7.5 + (55 - 46)/5 [9.3] points. Yukon applies the Charm Focus, -70% to this, bringing the total to [2.79], rounded up to [3] points.

9.9.2 Spellcasting Focus

Spellcasting Foci increase an awakened's capabilities within one category of spells.

Spellcasting Foci must apply their Foci Limitation to the point difference for every single spell in the Foci's category, alongside a Magic limited to One Category.

Example: Yukon is having custom-made a Force 1 Power Focus. He has Magic 4 [30] naturally, alongside the Fireball [46] spell, which he spent [13] points on. The increase to Magic 5 is Magic (Combat Spells Only, -80%) [1.5] points,

and the Magic 5 Fireball is [55] points. This means the increase costs 1.5 + (55 - 46)/5 [3.3] points. Yukon applies the Charm Focus, -70% to this, bringing the total to [0.99], rounded up to [1] points.

9.9.3 Reagents

Most Reagents costs are noted in the ability's description, indicating the value of reagents that must be spent. These can be in singular or multiple amounts, as long as the value is met. Reagents can also be used to reduce drain, in which case around 1,600¥ worth of reagents reduces one FP drain, while 1,000¥ reduces one HP drain¹³³. TODO: Decide whether the just average the two instead of having two styles.

You can spend time to purify and improve collected reagents, using alchemical processes and equipment. If you have a settled lifestyle, usually the equipment for this can be covered in the settled income (With higher Status have better toolkits, workstations, etc). In such a case, you simply earn reagents of value according to the Jobs rule (B516), with Alchemy as your job skill; higher Status characters are able to afford better equipment and therefore distill more or higher quality reagents.

For wanderer characters.. well why would you have an entire lab's worth of alchemical equipment? If that is the case, you should buy toolkits for the Alchemy skill, and earn reagents of value equal to a job your Status. Remeber that many wanderer characters are low Status, or at least cannot gain high Status, meaning that they are not likely to be able to create much.

You may also gather raw reagents yourself, from areas of magic potency related to your tradition. This can earn you reagents valued up to a job's wages of your Status, although it often will be equivalent Status -1 to 0 without access to a well hidden or maintained source.

 $[\]overline{}^{133}$ Priced according to HP or FP (Energy Reserve, -10%) [1.8 or 2.7]/5*3,000\footnote{\text{F}} for one use.

10 Critters

10.1 What is a Critter

Critter is a broad term in Shadowrun, that technically means any non-human fauna, but is more often used to refer to Awakened fauna and sometimes Emerged fauna.

10.2 Awakened Critter Powers

Critter powers act in many ways like spells, however they majorly differ in the fact that they lack drain. Critter powers are usually able to be used as much as the user wishes, which makes them quite powerful and expensive.

They are usually unavailable to most characters, being limited to magical creatures or individuals afflicted with special magical effects or diseases, such as the Bestow power or HMHVV.

10.2.1 Common Traits

Many critter powers have some common setups that can be listed under a group of modifiers:

• Direct Power, +245%: Malediction, LoS, +250%; No Signature, +20%; Sense-Based, Reversed, Vision & Touch, -15%; Substantial Only, -10%

10.2.2 Accident

39 Points

The critter causes seemingly normal accidents to occur around the the target. The critter rolls Will+Magic vs. the target's Per; success gives the target the Unluckiness disadvantage for minutes equal to margin of victory. If the margin of victory is 5 ore more, or the target rolls a critical failure, they are also Cursed for minutes equal to margin of victory.

Unluckiness provides a single, not directly lethal way that the target will be screwed over with during the timeframe. This can be anything that is remotely plausible, from arbitrarily missing a vital die roll, to weapons breaking, to enemies showing up at the worst time, etc. If unsure, the GM can always treat this

as the reverse of Lucky, making the target roll thrice and take the worst for an important roll - although they are entirely within their right to consider the roll an automatic failure instead. As well, whenever anything wrong could happen to someone on the target's team, it will happen to them.

Cursed is much more lethal. Like its cousin Unluckiness, whenever something wrong happens, it always affects the target. Whenever something good happens it always misses the target. For the timeframe, the GM should be pernicious if not outright hostile to the target. If something remotely plausible could hose them, it should. Guns should refuse to work, everyday accidents should happen repeatedly if they can fit inside the timeframe, the GM should call for re-rolls or outright failures to rolls, or anything else, or a combination of them all (A very likely occurrence!). This is truly a -75 points disadvantage in a minute long timeframe, and the target should earn those points with prejudice.

Statistics: Affliction (Based On (Per), +20%; Direct Power, +245%; Disadvantage, Unluckiness, +10%; Disadvantage, Cursed, Side-Effect, +15%; Magical, -10%) [38]

10.2.3 Animal Control

25/50/75 Points

The critter has the ability to influence the behaviour of other non-sapient animals. This power affects all animals withing a 2 yard radius of a point, allowing them to control entire swarms of smaller animals. To do so, roll a Quick Contest of the critter's IQ+Magic vs the highest Will of the group.

Modifiers: Long-Distance Modifiers to the furthest subject, -1 per slave already under control, +2 for concentrating a full minute, or +4 for concentrating a full hour.

If the critter wins, the animals will obey the every command of it for as long as it concentrates or the animals leave the critter's line of sight, and for minutes afterwards equal to margin of victory. The critter can only give them commands that are relatively normal behaviour for the animals (such as a flock

of birds following or attacking something, not using a pistol or stealing a motorcycle), and the animals themselves perform the task as they best see fit which can often have unpredictable results due to their low IQ.

If the critter is incapacited or forces them to do something against their "principles" (e.g. making a flock of birds fight each other, or a rat avoid a free meal), roll another Quick Contest. If the animal wins, they break free.

If the critter loses any Quick Contest, they are unable to affect these animals for 24 hours, and they also feel a mental coercion coming from the critter, which can make certain territorial animals attack!

Critters with higher Magic can affect extremely large areas, allowing for truly massive swarms of animals to be under their control. Fear the Force 12 Rat Spirit and its army of vermin!

Magic	Radius	Point Cost
Magic 1-6	2 yd	25
Magic 7-12	4 yd	50
Magic 13-18	8 yd	75

Statistics: Mind Control (Area of Effect, 2 yards, +50%; Long Range, +50%; Accessibility, Only commands that are natural to the animal, -30%¹³⁴; Accessibility, Non Sapient Animal, -50%¹³⁵; Suggestion, -40%; Terminal Condition, Out of sight, -20%; Magical, -10%) [25] further levels increase Area of Effect's level [25]

10.2.4 Binding

3.3/3.9 Points per Level

This power is somewhat different than the original Shadowrun one, which covered a very wide array of any ability that could bind something to something else (Whether it be sticky grapple, binding attack, or sticky climbing). This power is the ability to grapple and opponent with some sort of substance either shot by the critter (sticky webbing) or found in the environment (grappling with the earth).

The power is an attack with Range 100, Acc 3, RoF 1, Rcl 1. On a successful hit, the target is grappled, meaning

¹³⁴ Priced on the fact that making animals perform any number of more complex tasks could be very useful, but you are limited to semi-natural behaviour

¹³⁵Priced on the fact that you'll most see tons more humans, which are also more valuable targets. Same with many critters.

and are at -4 DX.

The binding itself has a ST equal to the levels of the power. It can also be continuously applied, adding +1 ST per additional layer. If an opponent wants to escape, they must win a Quick Contest of ST or Escape against the binding's ST with a bonus equal to the critter's Magic. If they fail, they lose 1 FP but may try again.

The binding can alternatively be destroyed. Innate attacks hit automatically, but other attacks are at the usual -4. External attacks risk hitting the victim (B392). The binding itself has DR equal to 1/3 its level (round down). Eeach point of damage to the binding reduces its ST by 1, destroying it at ST

Certain attacks rely on environmental conditions to work, the most obvious case being an Earth Spirit requiring ground of some sort nearby that it can bind the target with.

Critters usually have a number of levels in this ability equal to their Willpower.

Statistics: Binding (Increased Range, LoS, +40%; Environmental, -20%; Magical, -10%) [3.3 per level] for abilities without Environmental, it is [3.9 per level]

10.2.5 Concealment

12/21/32/34/60/77/88/99 Points

The critter has the ability to mystically hide themselves alongside people and things nearby from perception. When active, anything of the critter's choice within 2 yards of it becomes harder to view, taking penalties to all Vision based rolls (Including those using Ultravision, Infravision, and LADAR) and on any rolls that rely on Vision (Such as shooting rolls).

There is no bonus to notice this concealment, as onlookers and cameras simply fail to process or record them - however, if anyone does manage to break past the concealment and notice them, the power is immediately terminated and cannot be used again for 5 minutes¹³⁶. The penalty also does not affect anyone that the critter conceals, allowing for perfect vision out of the area.

The penalty is determined by the critter's Magic, which can also increase

they cannot Move or Change Posture the radius that it can affect things, all 10.2.7 Elemental Attack detailed below.

Magic	Penalty	Radius	Points
Magic 1-2	-2	2 yd	12
Magic 3-4	-3	4 yd	21
Magic 5-6	-4	8 yd	32
Magic 7-8	-5	16 yd	45
Magic 9-10	-6	32 yd	60
Magic 11-12	-7	64 yd	77
Magic 13-14	-8	64 yd	88
Magic 15+	-9	64 yd	99

Statistics: Obscure, Vision (Defensive, +50%; Extended, Ultra, Infra, & LADAR, +60%; Selective Area, +20%; Stealthy, +100%; Magical, -10%; Terminal Condition, Being spotted, -20%) [6 per level] further levels add Area of Effect, +50% [1 per level]

10.2.6 Confusion

42/56/70/84/98 Points

The critter has the ability to instill Confusion in a target in can see that can also see or hear the critter (Choose only one).

Roll a Quick Contest between the Critter's Will+Magic vs the Target's Will, modified by normal Fright Check Modifiers (B360) as applicable. If the Critter wins, the target must immediately roll 3d on the Confusion Table (P85), adding their Margin of Failure to the result.

If the target succeeds on their result, they are immune to the Critter's power for 1 hour, they also gain a +1 bonus to resist for every time the Critter has targeted them in the past 24 hours.

Higher Magic critters are doubly more effective at this, imposing an additional -1 penalty every 3 Magic as detailed below.

Magic	Penalty	Point Cost
Magic 1-3	-0	42
Magic 4-6	-1	56
Magic 7-9	-2	70
Magic 10-12	-2	84
Magic 13-15	-2	98

Statistics: Terror, Confusion (Active, +0%; Increased Range LoS, +70%; Sense Based, Vision, Reversed, -20%; Magical, -10%) [42] further levels add -1 to resist [14]

Variable Points

The critter can attack using an elemental force hurling at their foe. Roll to hit using Innate Attack (Projectile). The cost and effects vary depending on the element of choice, and are covered below. See Innate Attack (B60) for more detailed rules on the statistics of the attacks.

This power is generally bought at a level equal to the critter's Magic, although the GM can make some exception for more or less powerful attacks.

Not every elemental attack is created equal as well. Modifiers can be added or subtracted from these in order to better represent a specific use-case (e.g. Changing Ice to Burn damage with No Incendiary, -10% to represent severe frostbite as opposed to a literal chunk of ice). While doing so, one should generally aim for a window of 3-7 points per

Weapon	Damage	Acc	Range	Points	Notes
Fire	1d burn	3	25/50	5	[1]
Lightning	1d burn	3	25/50	5	[2,4]
Water	1d cr	3	25/50	5.5	[3]
Ice	1d cr [1d]	3	10/20	4.75	
Earth	1d cr	3	25/50	5.5	[5]
Metal	1d(2) pi-	3	25/50	4.2	

- [1] Treat all flammability classes (B433) as 1 level lower.
- [2] Surge. Critical hits disable electronics. Damage over HP/3 must make HT roll to avoid shorting out for seconds equal to margin of failure; critical failure disables until repaired.
- [3] Double all basic damage for the purposes of calculating knockback.
 - [4] No incendiary.
 - [5] Deals double blunt trauma.

Fire: Innate Attack, Burning (Incendiary 1^{137} , +10%; Increased 1/2DRange, $\times 5$, +10%; Magical, -10%; Reduced Range, $\times 1/2$, -10%) [5 per level].

Lightning: Innate Attack, Burning (Increased 1/2D Range, $\times 5$, +10%; Surge, +20%; Magical, -10%; No Incendiary, -10%; Reduced Range, ×1/2, -10%) [5 per level].

Water: Innate Attack, Crushing (Double Knockback, +20%; Increased $1/2D \ Range, \times 5, +10\%; Magical, -10\%;$ Reduced Range, $\times 1/2$, -10%) [5.5 per level/

Ice: Innate Attack, Crushing (Fragmentation 1, +15%; Increased 1/2D

 $^{^{136}\}mathrm{Timeframe}$ taken from Maximum Duration -0% limitation.

 $^{^{137}\}mathrm{Power\text{-}Ups}$ 4, p
19 covers increasing flammability class (B433) for incendiary,

Range, $\times 5$, +10%; Magical, -10%; Reduced Range, $\times 1/5$, -20%) [4.75 per level].)

Earth: Innate Attack, Crushing (Double Blunt Trauma, +20%; Increased 1/2D Range, ×5, +10%; Magical, -10%; Reduced Range, ×1/2, -10%) [5.5 per level])

Metal: Innate Attack, Small Piercing (Armor Divisor (2), +50%; Increased 1/2D Range, $\times 5$, +10%; Magical, -10%; Reduced Range, $\times 1/2$, -10%) [4.2 per level].)

10.2.8 Energy Aura

Various Points

Weapon	Damage	Points	Notes
Fire	1d burn	5.5	[1]
Lightning	1d burn	5.5	[2,3]
Ice	1d burn	4.5	[3]

[1] - Treat all flammability classes (B433) as 1 level lower.

[2] - Surge. Critical hits disable electronics. Damage over HP/3 must make HT roll to avoid shorting out for seconds equal to margin of failure; critical failure disables until repaired.

[3] - No incendiary.

Fire: Innate Attack, Burning (Always On, -40%; Aura, +80%; Incendiary 1¹³⁸, +10%; Magical, -10%; Melee Attack, C, -30%;) [5.5 per level].

Lightning: Innate Attack, Burning (Always On, -40%; Aura, +80%; Surge, +20%; Magical, -10%; Melee Attack, C, -30%; No Incendiary, -10%) [5.5 per level].

Lightning: Innate Attack, Burning (Always On, -40%; Aura, +80%; Magical, -10%; Melee Attack, C, -30%; No Incendiary, -10%) [4.5 per level].

10.2.9 Engulf

29/36/44 Points

The critter physically engulfs their target. To use the ability, the critter must first grapple their target, whose SM cannot exceed the critter's. On their next turn, and on each successive turn, roll a Quick Contest: 10+Magic vs. the victim's higher of ST or HT. If the critter wins, the target takes damage equal to the margin of victory; otherwise no damage. Usually, this is large-area injury (B400), unless the GM decides otherwise. As well, any Aura attack will be able to continually hit the victim.

If the victim fails to break out between the time that he is grappled and when the critter makes Quick Contests, he's pinned (B370). This type of pin is completely hand free (usually providing the +3 for more free hands). However, a victim with abilities such as Innate Attack or Spines hit the critter automatically while engulfed.

Higher levels of Magic make the attack *even more potent*. At certain levels, add an armor divisor to the attack.

Magic	AD	Point Cost
Magic 1-3	(1)	29
Magic 4-6	(2)	36
Magic 7-9	(3)	44
Magic 10-12	(5)	51
Magic 13+	(10)	66

| Statistics: Constriction Attack (Based on (Magic), +20%; Engulf, +80%; Magical, -10%) [29] further levels adds Armor Divisor 2, +50% [36]; 3, +100% [44]; 5, +150% [51]; 10, +200% [66]

10.2.10 Fear

42/56/70/84/98 Points

The critter has the ability to instill Fear in a target in can see that can also see or hear the critter (Choose only one).

Roll a Quick Contest between the Critter's Will+Magic vs the Target's Will, modified by normal Fright Check Modifiers (B360) as applicable. If the Critter wins, the target must immediately roll 3d on the Fright Check Table (B360), adding their Margin of Failure to the result.

If the target succeeds on their result, they are immune to the Critter's power for 1 hour, they also gain a +1 bonus to resist for every time the Critter has targeted them in the past 24 hours.

Higher Magic critters are doubly more effective at this, imposing an additional -1 penalty every 3 Magic as detailed below.

Magic	Penalty	Point Cost
Magic 1-3	-0	42
Magic 4-6	-1	56
Magic 7-9	-2	70
Magic 10-12	-2	84
Magic 13-15	-2	98

¹³⁸Power-Ups 4, p19 covers increasing flammability class (B433) for incendiary,

Statistics: Terror, Fright (Active, +0%; Increased Range LoS, +70%; Sense Based, Vision, Reversed, -20%; Magical, -10%) [42] further levels add -1 to resist [14]

10.2.11 Guard

21/42/84 Points

The critter has the ability to prevent dangerous mishaps from occurring in its vicinity. Whenever an event that would be extremely dangerous - usually one that can cause a major wound, fright check, incapacitation in a dangerous place, or similar levels of threat - causes an Active Defense roll, resistance roll, HT, is a critical hit on an attack roll, or something similar, the ability can activate.

For allies, the critter makes the target either roll two more times and take the best; while for opponents they must roll two more times and take the worst. This can only occur once every 24 hours.

The ability can only activate for *true* emergencies. Combat is not by default an emergency - especially for combat characters - it has to be dangerous beyond that. This is why it is usually a major wound, critical hit on an attack roll, or fright check.

Higher Magic critters can Guard more times per day, as indicated in the table below:

Magic	Timeframe	Point Cost
Magic 1-6	1/day	21
Magic 7-12	2/day	42
Magic 13+	6/day	84

Statistics: Luck (Wishing, +100%; Emergencies Only, -30%; Defensive, -20%; Magical, -10%) [21] further levels are Extraordinary Luck [42] and Ridiculous Luck [84]

10.2.12 Influence

58 Points

 $\begin{array}{c} \text{Mind control with suggestion TODO} \\ \text{DESC} \end{array}$

Statistics: Mind Control (Independent, +70%; Long Range, +50%; Rationalization, +20%; Accessibility, only on sapient creatures¹³⁹, -10%; Magical, -10%; Reduced Duration, ×1/60, -65%; Suggestion, -40%) [58]

 $^{^{139}\}mathrm{Based}$ on the flip limitation seen on Animal Control

54 Points

This power allows a critter to greatly speed up or slow down certain objects. It only works on things that are already predisposed to motion, such as vehicles or creatures - no slowing down a door to block your opponents!

As well, the creature is only able to affect things within its own domain! For many mundane creatures, this means their home turf and likely the area surrounding it. For spirits, this tends to be associated with whatever their types is, with Air spirits affecting things that fly and Earth spirits affecting things touching the ground. In cases where these are not present, it doesn't necessairly prevent activating this power, it just makes the results at best unpredictable.

When attempting to speed something up, the creature rolls against their Will+Magic. The target gains Enhanced Move in half levels equal to the Margin of Success 3 gives Enhanced Move 1.5×3 maximum speed). Due to the uncoordinated use of this movement, all DX and Handling rolls are made with a -2 penalty and the user must focus completely on directing themselves; count this as an All-Out maneuver!

When applying this to vehicles and creatures with Enhanced Move already, do not multiply their Enhanced Move. Instead, add the Margin of Success to their Enhanced Move in half levels (e.g. A horse with Enhanced Move 1, giving ×2 max speed, increases their Enhanced Move to 2.5 with Margin of Success 3, giving ×6 max speed!)

When attempting to slow something down, the creatures rolls a Quick Contest of Will+Magic vs the target's Will or HT for objects. If the critter wins, the target has their Basic Move reduced by 20% per Margin of Victory, to a maximum of 0 move at MoV 5.

The GM is entirely within their rights to call for a Control Roll whenever this ability is applied, especially when applied without any prior warning!

It is all around harder to affect technological targets, providing a -6 to all rolls against them, whether to speed up or slow down.

You can only have one type of these effects active at a time, no slowing down

and speeding up - although you can apply the same affect multiple times (Although to different targets of course).

Statistics: Affliction (Direct Power, +245%; Movement, Margin-Based, +180%; Accessibility, Things predisposed to motion, -20%¹⁴⁰; Environmental, -20%; Hard-To Use 2 (Accessibility, Technology Only, -20%), -8%; -Magical, -10%) [47]

Movement: Enhanced Move, ×1.5 (All-Out, -20%; Handling Penalty 2, -10%; Magical, -10%) [6]

Statistics: Affliction (Direct Power, +245%; Slower Move, Margin-Based, +30%; Accessibility, Things predisposed to motion, -20%; Environmental, -20%; Hard-To Use 2 (Accessibility, Technology Only, -20%), -8%; Magical, -10%) [32] with Alternative Abilities [7]

10.2.14 Search

29 Points +2 Points per Level

The critter has the magical ability to find objects or individuals that are familiar to them. To do so, the critter concentrates for 10 minutes and then makes a Per+Magic roll, modified by long-distance range modifiers to the target. On a success, they learn the direction of the thing that most matches their search, or whatever qualifies as the most significant source (e.g. if they are looking for their summoner, they might get their twin brother if not in range). As well, they will generally know how many familiar objects or individuals are present within range.

To narrow down the search, the critter must analyze their results. Roll against IQ+Magic; success lets them determine more precise details, with better margin of success providing better results. Some example results (In order of low to high difficulty) are: Search through all of the results they got for one specific one, discern between false positives, determine basic qualities about the target (such as emotional state, metatype, etc), determine more advanced qualities (such as health, vague knowledge of effects on them, etc).

The critter can search for any item that they are normally familiar with, but if provided images or drawings can also search for ones that they are passingly familiar with, at a penalty. If the critter is able to get a good mental image from their summoner, alongside it being an object or creature that is easy to discern (e.g. A specific car with a license plate, as opposed to a car's model), make the roll at a -3. If instead, they can't get a mental image and instead rely on a drawn one or if the object or creature is not easy to discern, make the roll at -6. If they have to rely on only a drawing and the object or creature is hard to discern, make the roll at -10.

Higher Magic creatures are doubly effective at tracking down objects, gaining a +1 bonus for every 2 Magic past 2. This is noted in the table below.

This ability does not immediately let the spirit know exactly where the target is (Especially not enough to target them with attacks or effects), even though it provides direction. This is enough for them to generally track them down regardless, although they may need to detect multiple times to track down for longer searches.

Individuals or objects that are behind mana barriers or otherwise protected from divination will be harder to detect. The effects of this will usually be covered in their sections. TODO: Come back later.

Magic	Bonus	Point Cost
Magic 1-2	+0	29
Magic 3-4	+1	31
Magic 5-6	+2	33
Magic 7-8	+3	35
Magic 9-10	+4	37
Magic 11-12	+5	39
Magic 13-14	+6	41
Magic 15-16	+7	42

Statistics: Detect, Known Objects and Beings (Very Common; Long Ranged, +50%; Immediate Preparation Required, 10 Minutes, -45%; Magical, -10%) [29] further levels add Acute Sense (Search) [2].

10.3 Infected

TODO

10.4 Emerged Critter Powers

Many of these powers use the Critter Resonance, -5% power modifier. This

¹⁴⁰This accessibility is somewhat hard to classify, but is based on the assumption that it could be used with some objects such as falling items, doors, etc. usefully.

works exactly like the Resonance Complex Form power modifier, being made up of the Supernatural Counters, -5% component.

10.4.1 Camouflage

33 Points

The critter has the ability to hide files from matrix searches, making them unable to be detected without specifically searching for that specific file.

To do so, the critter rolls Will + Resonance, or a Quick Contest of Will + Resonance versus the file's Will (Usually Complexity \times 2) for files it doesn't own. The owner can waive resistance rolls for the file. Success makes the file undetectable to any matrix search that isn't looking for that specific file. General searches, searches for files of its class, closely related files, or even descriptors that closely match it all fail.

This lasts for 10 minutes per margin of success/victory, and can be renewed by the critter as normal. Using this power as well, it entirely undetectable to mundane means.

Statistics: Affliction (Camouflage, +100%; Based on Will, +20%; Extended Duration, $\times 10$, +40%; Malediction 1, +100%; No Signature, +20%; Cybernetic Only, -50%; Critter Resonance, -5%) [33]

Statistics: Camouflage is Invisibility, Matrix Searches (Can Carry Objects, No Encumbrance¹⁴¹, +10%; Accessibility, Not for searches specifically for this file, -0%¹⁴²; Accessibility, Files Only, -30%¹⁴³; Critter Resonance, -5%; Machines Only, -50%) [10]

10.4.2 Cookie

TBD Points

I'm gonna be real, you can do this with the normal matrix system exactly the same. So unless there's a reason or alternative to be implemented here, I'm going to leave this out for now.

10.4.3 Diagnostics

22 Points

The critter is able to perform rapid repairs, diagnostics, and optimizations

on the hardware of an item, allowing to be heavily optimized for a very specific task

To use this power, the critter must All-Out-Concentrate and roll a suitable Electronics Repair, Mechanic, Electrician, or so on Skill with a +1 bonus for All-Out Concentrate alongside a bonus equal to its Resonance.

The critter must describe explicitly and in detail what they are optimizing the hardware for (e.g. I'm optimizing the smartgun's targeting platform in order to compensate for the complex fluid dynamics of the heavy wind in order to let the firearm's user shoot the target with a three rounds burst to the face hit location, before the opponent is able to draw their firearm or move).

Success on the skill can give a bonus based on how closely your optimization matched reality. If it matched *almost exactly*, the user of the hardware gains a bonus to their skill to use it equal to the margin of success.

If the situation is not quite the same, the bonus is halved, rounded down to a minimum of +1 (e.g. the opponent doesn't intend to draw his weapon, the wind temporarily dies down, or another person enter's the smartgun's view).

If the situation is clearly different, the bonus is divided by 3, and rounded down to a minimum of +0 (e.g. the smartgun was out of ammo, the user first full-auto instead of a burst, someone tackles the target before the shots go off).

The GM should add a bonus of up to +2 or a penalty of any size for particularly good or bad descriptions. Especially, if the player tries to make their description overly vague in order to guarantee their optimization comes true, they should be taking at least a -2 penalty, if not much more.

Statistics: Visualization (Blessing, +50%; Reduced Time, 6, +120%; All-Out Concentrate, -25%; Aspected, Hardware, -20%; Critter Resonance, -5%; Requires (Hardware Skill) Roll, +0%) [22]

10.4.4 Electron Storm

13/18/23/28/33/38 Points

The critter surrounds its target in a

hail of dangerous and corrupting datastreams, causing severe damage over time.

The critter must Concentrate for 1 second and make a Quick Contest of Computer Hacking + Resonance versus HT (+3 for Hardened systems). Success deals 1d burn damage directly to the target device. Additionally, the next second, it deals an additional 1d burn damage; this cycle can be halted with a successful Computer Hacking or Expert Skill (Computer Security), either destorying the datastreams as they come in, or programming safeguards against their continued attacks. At the GM's option though, this power is quick and deadly enough to warrant a Fright Check! There's nothing subtle about this of course, even if the target doesn't know what Resonance is.

At higher Resonances, the critter can sustain the power for even longer. For every 2 Resonance above 1, the power lasts for 1 *more* second, causing cyclic damage as described above.

Resonance	Cycles	Points
Resonance 1-2	1+1	13
Resonance 3-4	1+2	18
Resonance 5-6	1+3	23
Resonance 7-8	1+4	28
Resonance 9-10	1+5	33
Resonance 11-12	1+6	38

Statistics: Innate Attack, Burn 1d (Based on IQ, +20%; Based on HT, +20%; Cyclic 1, +100%; Malediction 1, +100%; Accessibility, Only on Matrix, -40%; Critter Resonance, -5%; Cybernetic Only, -50%; Requires (Computer Hacking) Roll, +0%) [13] further levels add more Cyclic.

10.4.5 Gremlins

21 Points

The critter has the ability to cause a device to malfunction for seemingly no reason at all. To do so, the critter concentrates for 1 second and rolls a Quick Contest of Will + Resonance versus HT. Success gives the device the Unluckiness disadvantage for minutes equal to margin of victory. If the margin of victory is 5 or more, or the target rolls a critical failure, they are also Cursed for minutes

¹⁴¹Equivalent of saying the file can carry a good amount of data or whatnot.

¹⁴²I figure most searches would be for vague overall tags and ideas, instead of a specific file, meaning it ends up with 6% or less, which is a 0% accessibility

¹⁴³No people, or devices, etc. which make up at least 4/5 of good targets.

equal to margin of victory. These disadvantages apply to all atempts to use the device!

Unluckiness provides a single, not directly lethal way that the device and its users will be screwed over with during the timeframe. This can be anything that is remotely plausible, from arbitrarily missing a vital die roll, to weapons breaking, to computers receiving forced updates, etc. If unsure, the GM can always treat this as the reverse of Lucky, making the target roll thrice and take the worst for an important roll - although they are entirely within their right to consider the roll an automatic failure instead. As well, whenever anything wrong could happen to any number of related devices (such as all those carried on a user's person, or all those inside a building), it will happen to this

Cursed is much more lethal. Like its cousin Unluckiness, whenever something wrong happens, it always affects the device and its users. Whenever something good happens it always misses them. For the timeframe, the GM should be pernicious if not outright hostile to them. If something remotely plausible could hose them, it should. Guns should refuse to work, everyday accidents should happen repeatedly if they can fit inside the timeframe, the GM should call for re-rolls or outright failures to rolls, or anything else, or a combination of them all (A very likely occurrence!). This is truly a -75 points disadvantage in a minute long timeframe, and the device and any and all users should earn those points with prejudice.

Statistics: Affliction (Gremlins 1, +8%; Gremlins 2, Side Effect, +12%; Based on HT, +20%; Malediction 1, +100%; No Signature, +20%; Cybernetic Only, -50%; Critter Resonance, -5%) [21]

Statistics: Gremlins 1 is Unlucky (Aspected, Hardware, -20%; Critter Resonance, -5%) [8] and Gremlins 2 is Cursed (Aspected, Hardware, -20%; Critter Resonance, -5%) [57]

10.4.6 Hash

20/21/22/23 Points

By protecting a file with Resonance algorithmic encryption, a critter can prevent any attempts to access or decrypt a file.

To do so, the critter must currently have the file on its icon/device, Concentrate for 1 second, and roll a Will + Resonance. If the file is not owned by the critter, then this is a Quick Contest of Will + Resonance versus Will, which can be waived by the file's owner. Success makes the file illegible to anyone for 1 minute per margin of success.

The critter must keep the file on hand the whole time, as leaving or transferring it elsewhere causes the encryption to immediately unravel.

At higher Resonances, the critter gains greater bonuses to its rolls, adding +1 for each Resonance past 1.

Resonance	Bonus	Points
Resonance 1	+0	20
Resonance 2	+1	20
Resonance 3	+2	21
Resonance 4	+3	21
Resonance 5	+4	22
Resonance 6	+5	22
Resonance 7	+6	23
Resonance 8	+7	23

Statistics: Affliction (Hash, +100%; Based on Will, +20%; Malediction 1, +100%; Accessibility, Must maintain contact, -20%144; Accessibility, Only on Files, $-20\%^{145}$; Critter Resonance, -5%; Cybernetic Only, -50%; Melee Attack, C, -30%) [20] further levels add Reliable, +5%

Statistics: Hash is Resistant, Immunity to Decryption (Occaisonal; Critter Resonance, -5%) [10]

10.4.7Stability

The critter has the ability to turn even the most dire hardware failures into astounding successes.

Whenever a piece of hardware that the critter has complete access to and is being observed by the critter is directly involved with a Critical Failure - or if the hardware is owned by an opponent and involved with a Critical Success the critter can activate this power.

Doing so requires a free action and a successful IQ + Resonance roll. This allows the critter to roll an additional two times and take the best result out of all three rolls. This power can only be used once every hour of out of character time, or alternatively once every day in game.

Statistics: Luck (Wishing, +100%; Accessibility, Only on Critical Failures, -35%¹⁴⁶; Accessibility, Only on Hardware the critter has full access to, -20%¹⁴⁷; Aspected, Hardware, -20%; Critter Resonance, -5%; Requires IQ Roll, -10%) [17]

Suppression 10.4.8

52 Points

The critter has the ability to worm their resonance into the systems on the network to delay alarms and warnings from hosts, giving the Emerged and their allies extremely valuable to complete their objectives.

Using this power requires a Expert Skill (Computer Security) + Resonance roll every minute for it to be on. If alarms or warnings are activated on the network while this power is on, they are stopped for 30 seconds; afterwards this power shuts down and cannot be activated again for 5 minutes.

This does not stop anyone or anything that was attempting to raise the alarm from acting, simply that they are unable to activate alarms through the network. They can still jack out and run around screaming, attack the critter, and so on.

Statistics: Obscure, Matrix Alarms 10 (Area of Effect¹⁴⁸, +50%; Defen-

17 Points

¹⁴⁴Based on two idea: Firstly is that while you'll be able to play around it, you'll lose around half of your capabilities if you need to keep the file personally on you at all times. Secondly, the Terminal Condition limitation has -20% for common conditions, which I would consider removing from their possession as being.

 $^{^{145}\}mathrm{No}$ communications, no firewalls or keys, nothing but a normal file

¹⁴⁶Critical Failures usually only make up around 1-5% of possibilities, however their effects are much worse than that, so I've used the category above that.

¹⁴⁷Practically all of the hardware the critter would use this on it will have access to. In contrast, this restricts almost all use of preventing opponent's hardware from working, which is about 50% reductions overall.

148 This is simply a justification for it covering allies and all, can also be treated as Cosmic, Covers Network, +50%.

 $^{^{149}\}mathrm{Should}$ cover loud and silent equivalent alarms.

 $^{^{150}}$ Priced as such because, most of the value would come from being able to use it when alarms are not on yet, and additionally, alarms should not be on very much.

sive, +50%; Extended, Silent Alarms¹⁴⁹, +20%; Stealthy, +100%; Critter Resonance, -5%; Maximimum Duration, 30 seconds, (Accessibility, only when alarms are on, -40%¹⁵⁰), -45%; Requires (Expert Skill (Computer Security) Roll, -10%)) [52]

10.4.9 Watermark

26 Points

The critter leaves a hidden message on a matrix icon it can touch, up to about a minute long, in the matrix that can be read by other Resonanceentities or an Resonance individual that it knows.

To do so, the critter Concentrates for 1 minute and rolls Computer Programming + Resonance. If successful, look up the margin of success on the Size column of the Size and Speed/Range Table (B550); the corresponding linear measurement is the maximum radius that the critter can set the trigger up for.

If a valid target enters the area, they immediately hear the message once (and only them).

Statistics: Telesend (Delay, Triggered, Resonance-entity enters area, +50%; Critter Resonance, -5%; Melee Attack, C, -30%; Immediate Preparation Requires, 1 minute, -30%; Requires (Computer Programming) Roll, +0%) [26]

10.5 Example Critters

11 Behind the Screen

This section is purely dedicated to detailing the reasoning and design behind the many facets of this document. It's purpose is twofold, for helping GMs modify the rules to their liking and for myself to keep tracking of how these systems were made in the first place.

11.1 Rules

11.1.1 Home Rules

Critical Hits & Active Defenses: This was chosen for pretty much one singular purpose, being the asymmetry between NPCs and PCs in the number of rolls. Because the story naturally follows the PCs at all times, they will often be making an order of magnitude more rolls that the GM, even in combat.

As well, in order to make good use of time, sane GMs will not be rolling every single relevant action for NPCs, instead simply having them perform the actions. This means that, while NPCs just have to get lucky for a single roll in combat, PCs have to be continually lucky throughout all encounters.

Usually, this is just normal game design, compensated heavily by the fact that PCs are highly competent at what they do compared to NPCs. However, this can fall apart in Shadowrun (Especially GURPS) due to both the lethality of combat and the hyper-specialization of characters.

In combat, 7d pi damage to a character is deadly almost no matter what, and even more so when it comes in a 15 bullet care package. A critical hit already means that a character has to deal with critical effects and 6 or more bullets, which is incredibly lethal even with Active Defense.

As well, for both extreme ends of the specialization spectrum, Deckers are additionally frail in such combat situations where they lose any capability of Active Defense and Street Samurai are additionally punished for creating dodge focused characters (A staple of Shadowrun) as opposed to armor tanks.

Overall, this was included to remedy those minor disparities and in general increase the lifespan of characters and campaigns.

Arm DX and ST: Original Arm DX and ST are priced without taking into account their lack of HP and Basic Speed. They are accordingly repriced in order to make these already mediocre traits more competitive.

Costs FP and HP: Costs FP and HP are somewhat notorious in GURPS for the contention regarding their price. The value between an ability that can be used at will, with no opportunity cost, and repetitively in short bursts, is much different compared to an ability that can be used nearly at will, with a small pool of regenerating resources, and only in quite small bursts.

Compared to other -5% and -10% limitations such as Nuisance Effects and Reduced Range, the impact that FP has on the trait is quite large.

Some Home Rules suggest doubling the value, but I find that this creates an even worse over valuation of Costs FP and HP. Costs FP 1 and Costs FP 2 are extremely similar in effect, not doubled: They cost a medium-small proportion of

resources, with a similar continuing cost over time as applicable

As well, as you increase in value, it becomes strange to consider options such as: Costs FP 4, -40% compared to Limited Use, 1 per day, -40%. Arguments about the validity of Limited Use's pricing aside, an ability that leaves you somewhat winded for 0.5 hours, while still being usable twice in an encounter and multiple times in a day compared to an ability with no maleffects being usable only once per day, is a strange equality. It seems plain to me that the semi-mild FP cost is much less impactful (Especially in campaigns without Extra Effort or with long timescales).

That is why the compromise of double value for the first cost and normal value for all further costs was chosen.

Extra Effort in Combat: Extra Effort has always been focused on the idea of providing FP costs for combat to represent over exertion, adrenaline, etc. However, it ignores the interesting interaction high Will provides with Extra Effort out of combat. As well, many of the traits are extremely valuable for their opportunity cost (Heroic Charge, I am looking at you), so this serves to lower their value somewhat.

11.1.2 Character Creation

Attribute Limits: One of the goals in the Attribute cost rebalancing was to make Talents more viable and overall promote Specialist characters as opposed to extremely competent generalists.

This is most difficult around attribute levels of 14 and 15, where defaulting can be better than some people's skills alongside singular point investments be insurmountable to lower attribute companions. Due to how high the point totals for Shadowrunners can be, it can be pretty easy for the Fridge Decker to simply take IQ 15 and easily school the mage on thaumatological skills or for the DX 15 Street Samurai to be extremely competitive with a Rigger.

Of course, there is a point to having character both be rewarded for their point investment alongside for playing their niche, whether it be a braniac or 'wared up badass, which is why the costs are just balanced to incentivize Specialists, not ban generalists.

Wealth Levels and Independent Income: Due to how the system for 'Ware works, in that you can convert the CP cost to Nuyen, these traits can make it extremely easy to just buy Beta/Deltaware everything in an attempt to create a disproportionately powerful character.

As well, high wealth characters often don't fit the genre for Shadowrun, being that the default character is assumed to literally be a rightless non-citizen committing crimes against the elite for money.

Wealthy [20] provides 150,000¥, which normally converts to 50 points of 'Ware, or a 40 point increase from the baseline. If the 80% lifestyle rule is enforced, this becomes 10 points of 'Ware, or an 8 point increase from the baseline. This provides money for all sorts of equipment, while still providing the other benefits from Wealth (Improved job pay, higher status, etc).

Very Wealthy [30] provides 600,000¥, which converts to 200 points of 'Ware, a 190 point increase from the baseline.

And if the 80% lifestyle rule is enforced this becomes 40 points, a 38 point increase - or at best a 30 point increase if you only enforce the lifestyle rule for characters with higher Wealth. This is why it is advised to watch it very close, because it can be extremely profitable for collecting Cyberware.

If you want to allow it (Especially since its values approach Resources A from Shadowrun), it is advised to not enforce the 80% rule for other characters as strictly (Lowering the proportions) or perhaps not enforcing at all.

Independant Income only exacerbates the problem, providing regular CPs per month, for a small upfront cost. Given that many Shadowrun campaigns will have periods of downtime in between missions, this can easily become extremely cost effective.

11.2 Magic

11.2.1 Spells

Drain FP/HP: See Christopher Rice's work creating a resistible Costs FP. This system uses his second recommendation in Picking Over The Bones.

In essence, it means that each Force X ability has a limitation Costs FP X and NOT Costs FP X (Limited by Margin, X^* -5%), or double this for Costs HP as detailed below at Spell Force (11.2.1).

Level	Value	Level	Value
1	-0.5%	9	-22.5%
2	-1.5%	10	-27.5%
3	-3.0%	11	-33.0%
4	-5.0%	12	-39.0%
5	-7.5%	13	-45.5%
6	-10.5%	14	-52.5%
7	-14.0%	15	-60.0%
8	-18.0%	16	-68.0%

Each level after subtracts 0.04%, as -0.05% + 0.01%.

For Costs HP these values are as follows:

Level	Value	Level	Value
1	-1%	9	-45%
2	-3%	10	-55%
3	-6%	11	-66%
4	-10%	12	-78%
5	-15%	13	-91%
6	-21%	14	-105%
7	-28%	15	-120%
8	-36%	16	-136%

Each level after subtracts 0.08%, as -0.10% + 0.02%.

Spell Force

When casting a spell, the user selects a Force, which determines the level on an ability, alongside the FP/HP Drain. This is built according to this thread on Variable Costs FP, because the official Variable FP ignores the -80% cap.

So: For each Magic, we take one of two types: FP Levels and HP Levels.

FP Levels are a summary of levels up to Magic (I.e. there are 6 FP levels for Magic 6). Each level's cost is determined by taking:

Advantage N (FP Drain N) - Advantage N-1 (FP Drain N).

Where N is the levelled trait for levels 1..Magic.

HP Levels are the same, but we START at N=Magic+1, and go up to Magicx2.

As an example: We take a basic Corrosive Innate Attack [10] and Magic 2

(IAC is Innate Attack, Corrosive while FPD is FP Drain and HPD is HP Drain) Level 1: IAC 1 (FPD 1, -0.5%) [9.995] Level 2: IAC 2 (FPD 2, -1.5%) [19.7] - IAC 1 (FPD 2, -1.5%) [9.85] = 9.85

Level 3: IAC 3 (HPD 3, -6%) [28.2] - IAC 4 (HPD 3, -6%) [18.8] = 9.4 Level 4: IAC 4 (HPD 4, -10%) [36] - IAC 4 (HPD 4, -10%) [27] = 9

Summing them all up gives 38.245, for a total [39] points. Break this out gives up: 1 Level 1 attack with 1 FP Drain. 1 Level 2 attack with FP 2 Drain that removes the cost for its lower Level 1 attack. 1 Level 3 attack with HP 3 Drain that removes the cost for its lower Level 2 attack. 1 Level 4 attack with HP 4 Drain that removes the cost for its lower Level 3 attack.

All in all, with variable you can now switch between the 4 levels, and each one has a different Drain FP level alongside giving that amount of dice. Of course, you definitely do not end up with something silly like 1+2 FP Drain and 3+4 HP Drain, any more than 3 Levels with Costs FP 1 would give you 1+1+1 FP Cost on a normal ability! These are applied to the overall total!

While this is definitely more complicated, I can utterly assure you it is the best system for leveled advantages! The alternative list of things I have gone through:

Alternative Abilities: Alt Abilities between the HP and FP levels. Creates a curve where higher levels end up cheaper than earlier ones. Sometimes it waffles between that! Makes for high prices at its cap, but never really accounts for the massive capability a F16 Spell can have!

Counter-Limitations: Create 1 level with FP Drain and 1 level with HP Drain and Counter FP Drain. This one is better than Alt Abilities as it does not decrease the cost at higher levels NEARLY as much. But it still happens. As well, higher levels abilities tend to increase cost by singular points or less, leading to a similar issue from before.

This completely ignores ideas that just don't work to start, such as Either/Or Limitations. Some of these don't technically ALLOW you to create a spell that functions like in Shadowrun, meaning that you end up with some weird garbage that is really close to a fair price most of the time, but can be 10+ off at other times, all while NOT EVEN TECHNICALLY FUNCTIONING AS YOU WANT.

For AoE that increases by Force:

%	at	each	\mathbf{m}	radius	25	50.00003324	79.24817	7772
100.00	00066	55	116.	0964819		129.248211	140.3678	394
150.00	00099	97	158.	4963554	1	66.0965152	172.9716	3959
179.24	18244	12	185.0	0221089	1	90.3678727	195.3446	3596
200.00	00133	3						

Combat Spells:

 $^{^{151} \}mathrm{Is}$ Requires Attribute (10) Roll, -20%, Requires Skill Roll (Spellcasting), -0%

Every combat spell as a selection of modifiers applied: *Increased Range, LOS, +40%; Magical, -10%; Requires (Spell-casting) Roll, -20%*¹⁵¹; *Variable, +5%.* This is combined into: *Combat Spell, +15%.*

Acid Stream : Levels: 9.8085 19.2735 28.1835 36.3135 43.4385 49.3335 53.7735 56.5335

Toxic Wave : Levels: 12.8085 25.2735 37.1835 48.3135 58.4385 67.3335 74.7735 80.5335

Punch: Levels: 12.80175 24.85925 35.71425 44.87925 51.86675 56.18925 59.69925 63.46925

Clout: Levels: 13.3475 26.1225 37.9725 48.5225 57.3975 64.2225 68.6225 71.5225

Blast: Levels: 12.84325 25.28575 37.08075 47.96575 57.67825 65.95575 72.53575 77.15575

Death Touch: Levels: 11.078 21.698 31.578 40.418 47.918 53.778 57.698 60.018

Manabolt: Levels: 14.4746 28.6286 42.2646 55.1726 67.1426 77.9646 87.4286 95.3246

Manaball :Levels: 9.8712 19.5592 28.9512 37.9272 46.3672 54.1512 61.1592 67.2712

Fireball : Levels: 12.14325 23.88575 34.98075 45.16575 54.17825 61.75575 67.63575 71.55575

 $\begin{array}{lll} \textbf{Lightning Bolt} & : \text{Levels: } 12.3475 \ 24.1225 \ 34.9725 \ 44.5225 \\ 52.3975 \ 58.2225 \ 61.6225 \ 64.5225 \end{array}$

Ball Lightning: Levels: 12.14325 23.88575 34.98075 45.16575 54.17825 61.75575 67.63575 71.55575

Shatter:

Powerbolt:

Powerball:

Knockout :

Stunbolt:

Stunball:

Detection Spells:

Detection Spells are straight forward in their basic design: Create an Affliction with the Detection Spell modifier and add the Advantage for the spell effect to it.

The Detect Spell Modifier is basically a combo of modifiers that lets you give the spell effect to some via touch via Spellcasting and let it last for 1 day while you maintain concentration.

When doing higher levels using things like Reliable +5% or Acute Sense [2] e.g. +20%, you actually end up cancelling basically everything out and just adding the cost of the enhancement! So each level gives +1.5 or +2 points, respectively.

Example using Analyze Device: Aff (+155%, +150%, -0.05%) [40.45] Aff (+155%, +170%, -1.5%) [42.35] - Aff (140%, +150%, -1.5%) [40.35] = [2]

The issue here, is that, it IGNORES the effects of Drains FP/HP. This is because the Drain only decreases the cost of the base! As such, there's no interaction with the enhancement.

As such, we have to include the +20% modified by Costs FP/HP. This doesn't cause multiple stacking of FP/HP Loss as a meta-trait (i.e. using the whole affliction causes it). This may not be 100% correct, but it feels way more accurate.

Analyze Device : Levels: 40.98 43.85925 46.50675 48.81675 50.67675 51.97425 52.76175 53.57175

Health Spells:

Heal: Levels: 42.6 47.1 51.6 56.1 60.6 65.1 68.1 71.1

This is unfortunately my worst creation here. There's not much to say in the Heal does not like using HP to heal HP, perhaps with good reason. Much of it is good, but there are two parts that are basically just BS Made up:

Injurious Magic. This is the limitation that says: Hey, whenever you spend FP you must spend HP instead. This was chosen for two reasons over Empathic, firstly you can't take Capped with Empathic (For what reason, I don't fucking know). Secondly, it turns it into a 1:1 ratio instead of 1:2, which fucks with any scaling for high forces. As such, this was based on the -30% limitation, with an accessibility to limit its use to top half of the Magic. This feels mostly right, since it is be default worth less than the -50% for Empathic's 1:1 ratio, but provides the 2:1 ratio.

Resistable Drain, +5% per level. There's no getting around that this is completely and utterly arbitrary. It's based on the assumption that Margin-Based was -5% per level, so we're just applying it to Healing flat and saying it works for its base FP. One might say: Hold on retard, why not take Reduced FP (Margin-Based) to lower the cost? That's because it's retardely expensive and makes no sense in a fair game. For a Force 6 spell that is: Reduced FP (Margin-Based 6, -30%), +84%. EIGHTY FOUR PERCENT. For, what will basically mean you reduce 6 Drain to 3 most of the time. Eight Four Percent is almost 2 cheating cosmics. It's more than XenoHealing, All Life. It's stupid is what it is.

Illusion Spells:

Agony :

This is the first AoE Spell I made. SO. Here's comes that. I want AoE to be linear radius. That means we need a logistic regression of the cost of AoE. This is 72.138 * ln (radius in yards)%. We can take this and add it as a decreasing enhancement to powers in essence. I'll put the table of it above.

Confusion: Levels: 24.49 25.44975 26.33225 27.10225 27.72225 28.15475 28.41725 28.68725

Mass Confusion: Levels: 29.465 35.2355 38.7065 41.1285 42.7805 43.8295 44.4395 45.0495

Chaos: Levels: 29.49 30.44975 31.33225 32.10225 32.72225 33.15475 33.41725 33.68725

Chaotic World: Levels: 34.465 40.2355 43.7065 46.1285 47.7805 48.8295 49.4395 50.0495

Invisibility :Levels: 55.485 58.3745 61.0545 63.3845 65.3145 66.6295 67.4795 68.2195

Invisibility works largely as expected. It uses Kromm and PK's ruling on Quick Contests in order to make is a contest between Will/Per and Spellcasting. The only slightly weird bit, is that Glamour does not go above HT-5, -5%. This is because HT-6 is basically considered moot, fairly enough. This means that, while we'll keep stacking penalties ourselves, there's actually no increase in cost past Magic 6, since they're effectively the exact same in price.

Building this one might be a bit confusing, but it's quite similar to a Detection Spell's design. First, you make the Invisibility advantage and level it like a generic advantage. Then you add that to an affliction, and create levels for the affliction for each corresponding level of Invisibility. Then, apply drain and everything to the affliction advantage.

 Phantasm
 Levels:
 34.17
 47.156625
 54.510375
 59.410375

 62.610375
 64.584125
 65.715375
 66.835375
 Levels:
 36.67

 49.656625
 57.010375
 61.910375
 65.110375
 67.084125

 68.215375
 69.335375
 Levels:
 40.42
 53.406625
 60.760375

 65.660375
 68.860375
 70.834125
 71.965375
 73.085375

Manipulation Spells:

Manipulation spells don't usually have distinct levels to them just like Detection Spells. Most of the time, they will gain +1 level of Reliable, +5%, unless there's something better for that spell.

11.3 Spirits

Spirits are actually kind of straight forward. There are a number of abilities that represent the powers. Spirits gain a combination of traits and powers that puts them close to 0 CP. Every Force allows a user to add 35.5 free CP - 10.5 for Spirit Force - Automatic Trait CP. Then, as each Force and type costs around the same amount, create brackets for ally point values & that becomes the necessary points to modular ability $\mathbf{w}/$.

Of note, we specifically allow for allies above the normal limit.. because while Force 14 Spirits could very easily be Patrons (Being 325 points for a 200 points campaign...), they are more often one time deals with extremely powerful beings... a common theme in Shadowrun.

11.3.1 Spirit Math

Because calculating the cost for the Summoning and Binding advantages are campaign dependant, this section goes over how it is generally done, for those playing outside the general 200 and 100 point games.

Looking at the Spirit Ally Cost Table in Magic tells you the Percentage of Starting Points that an Ally with Appears Constantly, Special Abilities, Summonable, and Favor. You first need to determine what Force you can summon at a given percentage.

For example, for a 100 point game, a Force 1 spirit averages around 0 points, with each Force adding 25.5 points. This means that a Force 1 is equivalent to 5%, while each increase in Force happens at multiples of 25%. For a game of 300 points, Force 1 is still 5%, but each increase in Force happens at multiples of 1/10% (10%), meaning that Force 2 matches 10%, Force 3 matches 20%, Force 4 matches 25%, and so on. Note down the point values for each Force; you will want to determine this up to double your highest Magic stat in the game, I recommend for Magic 8.

Next, you need to price your Modular Abilities for Summoning and Binding. Their sections detail the base cost and modifiers - 4+4/lvl with +20% modifiers on Summoning and 4+2/lvl with +20% modifiers on Binding - however, they still need respective FP Drain and HP Drain modifiers, which can be found here.

Each Force of Spirit is made by taking the Modular Ability with individual levels to summon each Force (As calculated at the beginning) and then applying the Drains FP limitation at a level equal to each given the Force for Forces that are equal to or less than the Magic Level, and the Drains HP limitation for those that are above.

As an example: For a 200 point campaign, Magic 4 Summoning is made up of a Force 1, 2, 3, and 4 level with Drains FP and a 5, 6, 7, and 8 level with Costs HP.

TODO: FIX: Force 1 allies requires 1 point as seen on the table, meaning you need 4 (slot) + 4 (1 point) * (1 + 0.2 - 0.005) = 9.56 points. Force 2 requires 2 points, however you only need to pay for any increase from Force 1, which is a single points - as such it costs 4 * (1 + 0.2 - 0.015) = +4.74 points. Force 3 also costs 2 points, so it does not have any increased cost. Force 4 is 3 points, costing 4 * (1 + 0.2 - 0.05) = +4.6 points.

Force 5 now uses Drains HP and also requires 4 points, costing 4 * (1 + 0.2 - 0.15) = +4.2 points. Force 6 costs 5

points, so it is 4*(1+0.2-0.21)=+3.96 points. Force 7 is 6 points, costing 4*(1+0.2-0.28)=+3.68 points. Force 8 is 8 points, meaning it costs 4*2*(1+0.2-0.36)=+6.72 points.

Add up all of these values, 9.56 + 4.74 + 0 + 4.6 + 4.2 + 3.96 + 3.68 + 6.72 = 37.46 points, which rounds up to a final cost of 38 points for Magic 4 Summoning.

Now do this for every Magic. :}

I recommend a spreadsheet.

11.4 Resonance

Resonance functions very similarly to Magic. Each Complex Form has a Level that causes a certain amount of Drain. This drain is FP or HP based on your Resonance. Almost none of the Complex Forms are anything resembling an attack, so instead using the progression for Manipulation spells and so on

These also all include the FP limitations on the level up enhancements (e.g. Reliable w/ (Drain FP), etc). Yeah it's not 100% legal, but it feels right.

Editor: Levels 1 and 2 are technically 4 and 6, because the default limitations are at 15%, so the +5% for the first Reliable is ignored.

Pulse Storm Levels: 23.358 30.46015 36.99065 42.68865 47.27665 50.47715 52.41965 54.41765

Puppeteer: Levels: 22.45 27.24875 31.66125 35.51125 38.61125 40.77375 42.08625 43.43625

Resonance Spike Levels: 12.3475 24.1225 34.9725 44.5225 52.3975 58.2225 61.6225 64.5225

Static Bomb This one's a bit weird, because -10 is the max penalty. So Forces higher than 10 don't provide anything normally, but I'm allowing higher penalties.

Levels: $8.139\ 16.049\ 23.589\ 30.609\ 36.959\ 42.489\ 47.049\ 50.489$

Wiretap Levels: 20.97 23.84925 26.49675 28.80675 30.66675 31.96425 32.75175 33.56175

11.4.1 Designing Resonance Powers

Because Resonance Powers in many ways need to be analogues to real world contemporaries, they can sometimes seem a little disconnected from realistic matrix work, especially when compared to Deckers.

I've settled on a group of assumptions that influence their design, which are:

• If devices are on the same network, they're considered to be practically touching. This is supported by Technomysticism's ruling that networks count as touching.

- If devices have the Melee Attack trait, they need to either be holding/containing their target (i.e. having a target file in memory), or need to be able to engage it in cybercombat.
- As discussed in the Complex Form section, software and hardware are given analogous HT and Will scores.

11.4.2 Sprites

The Sprite meta-trait is kind of weird. They're a digital construct that doesn't necessarily require a device to exist on the internet, or at least can exist on the wider matrix without a dedicated device. That's why they lack a lot of traits that might be obvious options for them, like Doesn't Breath, because they're physical traits and/or utterly inconsequential.

11.4.3 GURPS Pyramid #3/91 - Thaumatology IV

The Technomysticism article proved invaluable in merging the Decker and Technomancer systems while still allowing for magical-esque powers for the Emerged. However, it's core component is the Netrunning advantage, otherwise known as Possession (Digital), which NOT how technomancer's work.

Netrunning Netrunning has a number of issues that make it not align well for Emerged.. in no particular order:

Firstly, failure makes the system permanently immune to you, which can of course be ignored with the Reduced Immunity - but that costs a literal fortune.

Secondly, the Technomancer's brain literally shows up on the matrix as a device, working as any computer would beyond some minor losses (no PANS, no storage, no programs, etc); this means that Netrunning, which has the user temporarily mentally live inside a computer, doesn't work well.

Thirdly, a Technomancer doesn't live inside the device they're interacting with, nor is it constrained by it; this is to say that a Technomancer's Living Persona determines their ASDF traits, not whether they're possessing a desktop or commlink (Although the could do that in the normal rules as an alternative). They also are not inside the computers: if their internet is shut off they return the meat world, not get trapped inside the host.

Fourthly, they don't gain admin control of the system after entering it. This note depends on if you're looking at the Pyramid article or Psionic Powers' Netrunning. The latter is more realistic to the Possession trait, especially since it's costs 100 fucking points! Possession lets you control a human body in any way it normally works, so it's stupid to assume you only gain user access to a computer after a successful possession.

Fifthly, the power needs to work over the matrix alone, so requiring touch or allowing ranged sight is an obvious no no.

Telecommunication All of of this points towards Telecommunication, Radio serving as the superior version. In general, where Netrunning allowed for something to work, Telecommunication can usually fit in exactly the same, but it does require some work and analysis to perform correctly.

The Technomancer still needs to function as a computer with just their mind, but without possessing any computer to get their stats. This is done with the Digital Mind trait and using the Complexity rules from Thaumatology IV; this trait must still be limited to only work in the Matrix, as the Technomancer would otherwise be immune to Mind Control spells at all times!

Lastly, the Technomancer still needs some way to run the Cyberpunk programs, which is an adventure in and of itself:

Resonance Programs Interacting with the Decker system requires at least some capability to use the Cyberpunk programs. However, while they're easy for a decker to grab, not so much for a Technomancer. What's worse is that they provide a number of basic functions for a computer - in essence a mix of programs like ICE, Listen, Trigger, Alter, and Control would make up a normal Operating System for the computer!

Ostensibly, Telecommunication + Digital Mind should cover the ability to act like a normal computer, so many of the functionality for an everyday commlink should work with those, but the question is how to allow the other programs?

Thaumatology IV as a pretty decent idea, being that Resonance Advantages could be used as programs. However, their analysis is pretty flawed when implemented: Their system allows those who purchase the advantages to instead roll against the programs as if they had them, adding Talent to make up for Higher Complexity. This is flawed in two large ways, however.

Firstly, the advantages are waaaay more expensive that the functionality of a single fucking program. Mind Control (Cybernetic Only) is [25], which is insane to only function for a couple of programs! It takes less than [30] to have a good deck and every hacking program through money! As well, Technomancers can hack normally mixed with Complex Forms, and as such need to be able to switch between the two. As such, I consider it that the Advantages automatically incorporate the ability to use the programs as with the Resonance Program advantage, which I'll get into later.

Secondly, Technomancers are going to have a really rough time once Decker's realize they can buy Talent too. Thaumatology IV says that Technomancers can compete with high complexity systems through their Power Talent, but that falls apart when a Decker simply takes the Born to Be Wired Talent, gaining the bonuses of High Complexity and Talent. As such, the Resonance Program advantage is designed to allow the Technomancer to run the programs at Complexities up to their Living Persona's complexity (3+Resonance), which bridges that gap easily.

The Resonance Program itself is built around modified Accessory perks. As pointed out by Kromm, it's possible to modify Accessories into creating entire powers from them. Because programs are easily purchasable for characters and can be internally incorporated for characters with the Digital Mind advantage, they should be prime candidate for that. As such, I used these ideas to modify the perk and create an Accessory that could be used as a power.

11.5 Matrix

11.5.1 Host Ratings

Description	IQ	RSL	Complexity ¹⁵²	Skill
Home LAN	10	IQ-6 - IQ-3	4 (+0/+1)	4-8
Personal Site	10	IQ-3 - IQ-2	4 (+0/+1)	7-9
Mom & Pop	10	IQ-3 - IQ-2	5 (+1/+2)	8-10
Small Business	11	IQ-1 - IQ	5 (+1/+2)	11-12
School	11	IQ-1 - IQ	6 (+2/+3)	12-14
Local Police	11-12	IQ-1 - IQ	6 (+2/+3)	12-15
University	11-13	IQ-1 - IQ+1	6 (+2/+3)	12-17
Low Gov.	11-13	IQ - IQ+1	7 (+3/+4)	14-18
Maj Gov.	13-14	IQ - IQ+1	7 (+3/+4)	16-19
Secure Site	14-15	IQ - IQ+1	8 (+4/+5)	18-21
Military	15-16	IQ - IQ+1	8 (+4/+5)	19-22
Megacorp	16-17	IQ - IQ+2	8-9 (+4-+6)	20-25

11.6 'Ware

11.6.1 Control Rig

One of the defining components of the Control Rig is the fact that you take damage whenever your drones do. This is very similar the Ally disadvantage, however it also needs to have a second layer of resistability. Given that the most common AR does average 21 damage, alongside most drones that will get shot having 8 DR, I'm judging this as needing 13 MoS to ignore.

Thus, if we start with -25% being: Death of one party reduces you to 0 HP, we can vaguely equate this to: Death of 1 party does 11 irresistible damage, given that 11 is a good estimate for average HP. So we can start with: Death gives 3d damage.

As for how to do duplicated damage... This one is really hard. I could think that the possibility of: Costs HP 13 w/Accessibility, Only when Hit, -80% at -28% is a decent option. But that's incredibly bodgy. I think it's honestly better to just wing it, since I believe that another -25% makes sense here and comes close to that value anyways.

Then, we toss on Margin-Based. -55% for 11 and -65% for 13. Yes I do go above its max 10, bite me. This gives -11.25% -8.75%, summed to -20%.

11.7 Equipment

11.7.1 Fake SINs

I'm not a fan of the Basic Set Temporary Identity. There's firstly no disparity in rating, but especially the weekly roll against 8 makes it incredibly useless for many runners, as you'll be buying a new SIN every mission and likely needed to jump ship constantly on your housing. It's not the worst, and perhaps fits the grungier Neuromancer style of cyberpunk, but I don't think it's great for Shadowrun, which characterizes the SIN registries as labyrinthine, corrupt, and almost useless outside of a given jurisdiction.

These are a custom case of Alternative Identity, Illegal [15]. Firstly, I make use of the One-Use, x1/5 multiplier, commonly seen for things like Favor on contact. I modify it by Unreliable, to create an ability to fails via the unreliable skill (i.e. fail on a i=11, -20%). This modifies the x1/5 and

I also flip the dice so that it's roll to succeed not roll to fail, and also extended it a bit, giving:

- One-Use 19, x1.0
- One-Use 16, x0.84
- One-Use 13, x0.52
- One-Use 10, x0.36
- One-Use 7, x0.28
- One-Use 4, x0.24
- One-Use 1, x0.20

Then, I have to decide on a monthly interval check, as we see with the Temporary Identity equipment. I initially considered Accessibility, declaring a "base" time and using this to calculate it, but it doesn't really produce meaningful results. Instead, I simply settled on -80% being weekly, and every +20% incrementing a category, giving:

- Weekly, -80%
- Biweekly, -60%
- Monthly, -40%
- 6 Months, -20%
- Yearly, +0%

As well, I allowed for partial points, because I'm using the 3000¥ === 1 point system, which gave me some results for really shitty SINs. These results get pretty close to the Cyberpunk p20 recommended prices, which I consider a success.

11.7.2 Armor

All armor is made using Pyramid #3/85. I've got a program out there to make it much faster, if you want to make some armor yourself.

Actioneer Business Clothing: This one's going to actually be fairly unique. Since Shadowrun is early TL9, Basic Nanoweave is obviously banned, and we could use STF (Also known as Reflex)... but Arachnoweave is perfect for a fancy ass business suit... However, that's too expensive for its style so Reflex it is... I'll save it for the Run & Gun Suits. It also has an undercover holster, with cost and weight included.

Armor Clothing: Due to its description as being T-Shirt like, I made it on the high end of light clothing. It's lacking groin coverage.

Armor Jacket: Obviously bulkier than something like the Actioneer, given that it's often described as a hoodie of sorts. It's lacking groin coverage and also only has 1/2 Skull for rear only.

Armor Vest: Chest only, but covers groin and is in between armor jacket and Actioneer.

Chameleon: Firstly, this includes a Thero-Optic Cameleon Surface, adding its cost and weight. It's nominally the same DR as a vest, but it also covers the entire body! Therefore I've made it much lower (Because it's supposed to be a stealthy piece of equipment, so it should impact equip load as little as possible).

Full Body Armor: This is pretty simply DR 18 to the full Torso, Limbs, and Neck. It lacks boots and gloves because those are often just separate. It's also the same DR as the jacket, since covering more spots should make up for it.

Trauma plates however.. those are difficult. The average Trauma plate is about $0.806ft^2$. If you have a good grasp on area, that is a good bit less than the front half of your upper chest. These things are designed to protect your organs. Not your stomach. Not your groin. Not your side. Not your entire torso (Excluding when combined with additional plates.. which weight much more).

We'll be using these sizes... from games I've played in, plates can be really good for their weight, making characters near unstoppable to non-AP rounds to the torso. Random hits improves this a fair amount, but will never put someone down in one hit. To make the change a little bit less lethal, I'm using a surface area of 2.5 instead of 2.75 (1/2 chest) for the plates. The larger plates are torso sans groin.

The helmet is a lot easier; Solid Titanium over skull for 3lb dr 18. Visor is a bit of a cheat, Polymer Nanocomposite but I allowed it to be Transparent.

TODO: Re-visit with respect to cost in mind.

11.7.3 The Spreadsheet

Used to calculate TL 9 bullets.

One of the sticking point with Douglass Cole's spreadsheet, is the fact that its 1/2D range are both more realistic and also entirely don't match the GURPS 1/2D. For long arms, they should be doubled - while for pistols they should be halved! I have opted for realism (Not that it even matters), but if the inconsistency bothers you, feel free to fix it.

11.7.4 Equipment Weight

One of the major staples of Shadowrun's equipment is how much it is just "better tody guns". Most of the firearms are heavily inspired by real life versions, just with things like Smartlinks and Caseless ammunition. Most of the improvements naturally come to weight, through the use of more advanced materials and techniques.

Casless Ammunition is bullets that have the actual projectile embedded in a solid propellant with no brass casing. They're most useful for having no spent casings to leave as evidence and saving immensely on weight. As shown in the links, the G11 had a 5.1:1 for 7.62mm and 2.08:1 ratio of bullets for 5.56. Another real example is the LSAT, which currently sees 44/43% weight reductions in weapon weight and 40% less ammo weight for Cased Telescopic Ammo (1.65:1).

Ultratech varies on the improvements. 10mmCLP to 10mm auto is 1:7 (Which, admittedly the CLP is a garbage designed round by weight). 5.57CL to 5.56 NATO is 1:2.08. 7.62x39 to 7mmCL is 1.33:1, while 7.62 NATO is 2.07:1. 18.5mm vs 12G is 1.95,1.4,1.19,1.08:1, depending on your 12G shell. While the 4.73 was a smaller round, the Ultratech numbers cut real close to what was already accomplished in the 1900s with the G11.

I'm assuming that the technology has progressed reasonably, maturing for general use and slightly improving since then. Barring outliers like the 5.1:1 for the G11 and 1:7 for 10mm CLP, it hangs around a ratio just under 2:1. This makes general sense, as estimates seem to place it saving 40-60% weight. We can take the easy route and use a 2:1 ratio, i.e. halving all bullet weights.

For weapons, it's probably likely that we'll see some level of improvements, but not anything amazingly drastic. Given that the LSAT saved 44% weight compared to its bretheren, it's possible we could also shoot for 50% weapon weight reduction. However, this doesn't make sense for a lot of firearms; weight is a major factor in felt recoil, so while it's great to lower a heavy LMG's weight, a pistol is not so much. As well, strength correlates extremely closely with weight of a material, meaning that weight reductions tend to reduce material strengths, while we're also increasing the chamber pressure of the rounds too! As such, it could help heavy weapons a good bit, but less so for others.

However, the Ultratech ones are pretty palid in this respect. The prime comparison is the Light Support Weapon, weighing 15 lbs compared to the LSAT's 9.8/9.9 lbs. That's closer to the SAW's 17lb empty. We see this a bit across the board: Most TL8 Rifles hit 7-9 lbs, Ultratech's are 7-8 lbs. TL8 Pistols are just under 2-3, TL9 is 2-2.5/3. Overall there's very marginal improvements, when the LSAT demonstrates that likelihood for great savings. I don't think this is so much a factor of CT Ammo though, as the SAW is an early TL8 weapon, while the LSAT is a a late TL8 / early TL 9 weapon, so there are lots of improvements in the interim, such as simpler actions and improved materials. As well, based on early edition weights, they were closer to UT level's of improvement. I'm going to shoot for 30-50% reductions for LMG size, 10-20% for Rifle, and 5-15% for Pistol size.

11.7.5 Equipment Cost

This is not as simple as, TL9 character has 1.5x the money, so 1.5x TL8 gun and ammo cost. Weapons don't just miraculously become more expensive. Additionally, most Shadowrun guns lack components considered standard in Ultratech's TL 9 guns! In fact, prices are pretty similar across the board, with perhaps a small markup overall. This seems to range from 0-10%, so I'll markup guns and magazines (All are high density alloys anyways) by 5%. Rifle magazine costs are 1/3 cost, because otherwise they're like 3x as much. I'm doing 1/2 for other magazines too, since they're costing a bit too much in comparison.

Overall, ammo is much cheaper. This ranges from 0% to around 60%, with the majority being 40-50% discounts, and higher discounts on smaller calibers. I'm going to go with 60% pistols, 50% rifles, 40% anything bigger. Ofc, we'll add cost mulitpliers for weird stuff like MF as normal.

11.7.6 Ammunition

Overall, the story is simply: Halve the weight of the ammo. Some ammo isn't in HT though.

10mm MF is based on 10x25mm auto.

28G is 0.07 WPS. and 0.4\$ base.

7.62mm CL is based on the 7.62x39mm.

10mm CL is an entirely new one. It's supposed to be a somewhat more realistic 10mm round at 288 grains. We're assumign the full cartiridge is double the weight. We'll price it like 10x68mm Mauser at 1.5\$.

 $7 \mathrm{mm}$ CL is also entirely new. It's made as 189 grains, also assumed to be doubled weight in full. I'll put it at 0.7\$ Base.

11.7.7 Holdout Pistols

Fichetti Needler: Flechette rounds are always a bit of a hassle on small caliber weapons. We'll assume it's the minimum caliber (10mm), This gives NP of $(10\text{mm}/2\text{mm})\hat{3} / 40 = 3.125$, giving NS 0.57. 10mmCLP is consistently 3d pi+, 3d*NS=5.88 ==1d+2. For it's weight, I'm going in between the other two palm pistols for 1.2 lbs unloaded. Ammo is 4*0.021*1.1 = 0.0924. Dedicated Flechette guns will be somewhat less expensive, and their inability to switch off flechette rounds will improve that somewhat. I'll make it 120¥. MF is x4 cost. Magazine is (5*4*.24+33)*1.05 = 39.69/2 + .96*4 = 23.685. Programmable camoufalge is 1000¥ and 2lb, but for SM -7, we need to scale it down to 1/200. 5¥ and .01lb

Streetline Special: Baby Browning. .25 ACP with TL9 improvements. This is one of the few cases I'll use the High-Tech ranges over Cole's, because 850/2,600 seems.. a bit off? 0.6*.9. 6*0.006*1.1 = .04. Magazine is $(5*6*.04+33)*1.05 = 35.91/2 + \text{ammo cost } 6*.04 = 20.355 \mathbf{Y}$. I'm just gonna round up to 175 for the composite materials.

Cole Spreadsheet Statistics: 25000 6.4 15.6 6.4 53.6 180 1.8 3 6.4 180

Walter Palm Pistol: Remington Model 95. Because of its high damage, we'll consider it in .45 ACP, like the Bond Arms Derringer. That weights 18.5 oz so weight medium optimization it's (1.156)*.9 = 1.04. Ammo is .0235*2 = .047.

Cole Spreadsheet Statistics: 21875 11.43 23 11.43 76 230 1.5 5.5 11.43 230

11.7.8 Light Machine Guns

Ingram Valiant: This one is a bit difficult. There's no official art or description I could find, so all there is to go on is its 5.56 equivalent damage and clip size. Nothing stick, making me think it's an original. All in all, I think I'll base it off an M249, because its same caliber, relatively close clip size, and unrepresented elsewhere for how iconic it is. I'm using LSAT weights. Ammo is 100*0.0135*1.6 (Plastic Drum) = 2.16.

Cole Spreadsheet Statistics: 68750 5.7 45 9.29 521 62 4.1 11.1 5.7 62

GE Vindicator: While this is classified as an LMG minigun, it uses Gunner skill due to its use case. Because it has lower damage, it probably doesn't use 7.62 like its inspiration M134. We'll say it instead uses 5.56 like the XM214. The XM214 had pretty variable RoF from 7! to 100!, with some versions having 16! and 66!, and official in 16! and 100!. For rule of cool and nothing else I'll match the GAU-2B/A (HT 135) in 50! and 100!. ST is difficult: It's obviously much less than the 20M of the original and 17M of other MMGs which are 50lbs. It itself is clocking in with an empty weight of 22 (Before TL9 materials). It would also be above 22lb/11ST or 30lbs/12STLMGs, due to lots of ammo, battery weight, ammo, and feeding system. I'm settling on a middle ground of 14ST for now. This also, really makes me question the clip sizes.. LMGs being 1/2 size is one thing... 1/5 - 1/10 for most miniguns? That's really low. This thing only gets 2-4 seconds of shooting.

Weight is difficult here. We'll use the XM214's weight of 22 lb, with a medium optimization of 30% for 15.4 lb. Add on 5 lb for integral D cell for 20.4 lb. Ammo is 200*0.0135*1.6 (Drum magazine as seen in art) = 4.32 lb.

Cole Spreadsheet Statistics: 68750 5.7 45 9.29 533 62 4.1 11.1 5.7 62

11.7.9 Medium Machine Guns

Stoner-Ares M202:

11.7.10 Heavy Machine Guns

RPK HMG: The original RPK was an LMG in 7.62, so it will obviously not fit the bill here. However, the NSV (Or the Kord) both serve as a similar enough example that matches well in all aspects. I'll use the NSV Weight with heavy optimization for 40% (55-16.9)*.6 = 22.86. Ammo is 100*0.155*1.1 (Estimate for disintegrating belt or similar method) = 17.05.

Cole Spreadsheet Statistics: 65000 12.98 108 12.98 1560 745 4.1 52 12.98 745

11.7.11 Light Pistols

Ares Light Fire 70/75: Both of these are originals as far as I can tell. They're basically identical, so I'm using the same statline for them too. They're low damage light pistols, so I based it off .380ACP with a short barrel length. Weight is based off old edition weights. +0.5 for 75's silencer with +0.1 for better sealing and design to justify no increase of bulk. As for the magazine, it's 16*0.0105*1.1=0.19. Since the light fire's supposed to be super cheap, the 70 I'll make 580%. The 75 is operator's, so I'll bump it to 600%. Magazine is (5*16*.08+33)*1.05=41.37/2+16*.08=21.965. Supressor is 600% and .5 lb (Already included above).

 $Cole\ Spreadsheet\ Statistics:\ 26875\ 9\ 17.3\ 9\ 64\ 95\ 1.85\ 6.7$ 9\ 95

Beretta 201T: Based off the M9. High end weight optimization, so (2.8-0.5)*.85 = 1.95. Bullets are 21*0.013*1.1 = 0.3. Magazine is (5*21*0.12 + 33)*1.05 = 47.88/2 + 21*.12 = 26.46. Shoulder stock is 100, and I'll knock weight to 0.4lb Cole Spreadsheet Statistics: 41125 9 19 9 125 124 1.85 8 9 124

Colt America L36: Based off something like the Defender. Normal weights 24oz and edium weight optimization, so (1.5*0.9)=1.35. 11*0.0235*1.1=0.28. Defender is 1000\$. Magazine (5*11*.2+33)*1.05=46.2/2+11*.2=25.3

Fichetti: This one is likely an original, but it does bear a little resemblance to glocks. Either way, its stats align with 9mm, so we'll be using that. I'll make it's weight the Glock 19 with medium optimization, so $(1.8\text{-}0.5)^*.9 = 1.17$. Ammo is $30^*0.013^*1.1 = 4.29$. I'll make this 630¥. Magazine $(5^*30^*.12+33)^*1.05 = 53.55/2 + 30^*.12 = 30.375$

 $Cole\ Spreadsheet\ Statistics:\ 41125\ 9\ 19\ 9\ 115\ 124\ 1.85\ 8\\ 9\ 124$

11.7.12 Heavy Pistols

Ares Predator V: Seems like it was based off the Deagle. Light Optimization, since weight is an important feel for a Deagle gun, (4.6-0.6)*0.95=3.8. 15*0.0335*1.1=0.55. Magzine (5*15*.4+33)*1.05=66.15/2+15*.4=39.075. 550 for smartgun.

Cole Spreadsheet Statistics: 45000 12.7 33 12.7 152.4 300 1.6 9.625 12.7 300

TODO: Lower caliber. Ares Viper Silvergun: Once again, flechette guns are original. This one is intended to be more deadly than the Needler, so it'll have to be higher than 10mm. We'll go with 28 gauge (13.97mm) even though it's a mild bit comically large, because it's common use, and will give a noticeable improvement from the minimum 10mm. NP = $(13.97/2.13\text{mm})\hat{3}/40 = 7.1$, NS = 0.38. Unfortunately, Cole's sheet won't do 28G well, and Ultratech shotguns are closer to a downgrade from High Tech ones (Shorter Range, same damage, similar shots and RoF, same pellet count, etc). I'll give it 2.8 lb unloaded, inbetween most other ST 12 and 10 guns. Ammo is 30*0.035*1.1 = 1.155. I'll make it 1,150¥. Magazine is (5*30*.2+33)*1.05 = 66.15/2 + 30*.2 = 39.075

As such, we'll have to eyeball. 12G slugs are 4d+4, functionally equivalent to 5d. A similar round to that is 5.56, which when TL9'ed usually becomes 6d. 6d/4 = 1d+2, which would imply +1 damage to buckshots. Because 28G would likely be 1 step worse than 20G, which is usually 1d pi-, this would imply 28G is 1d-1 pi- and becomes 1d pi- for TL9. This is 4d pi+, which becomes 1d+2 pi- flechettes. Since 20G is around $9\dagger$, if we lower to 7-8, then x1.5 we get ST 11 or 12. We'll go with 11 since it's considered a common weapon.

Cole Spreadsheet Statistics: None, see above.

Browning Ultra Power: Obviously based off the Browning Hi-Power. .40S&W given the TL9 treatment. Old, so low optimization, (2.4-0.5)*0.95 = 1.81. 10*0.0175*1.1 = 0.19. Magazine (5*10*.12+33)*1.5 = 40.95/2 + 10*.12 = 21.675. 75 for laser.

Cole Spreadsheet Statistics: 42468.75 10 21 10 119 180 1.8 3.4 10 180

Colt Government: Its description literally says it. Given it the TL9 treatment. Medium optimization as middleground between 3 TL difference and needing to maintain the old style, (2.8-0.5)*0.9 = 2.07. 14*0.0235*1.1 = 0.36. Magazine (5*14*.2+33)*1.05 = 49.35/2 + 14*.2 = 27.475.

Cole Spreadsheet Statistics: 21875 11.43 23 11.43 127 230 1.5 5.5 11.43 230

Remington Roomsweeaper: Likely an original. Due to its DP it's likely not 12 gauge, 20 gauge would be around 13ST, so 28 gauge it is. To differentiate between the Silvergun, we'll go with 2..57mm flechettes. $(13.97/2.57)\hat{3}/40=4=\text{NP}$, so NS = 0.5. Since the Silvergun decided TL9 28G is 4d slugs, we get 2d pi-. While similar in weight to the Silvergun, I'm gonna assume it's a bit more for its versatility. I'll make it 2.9 unloaded. 8*0.035*1.1=.308. Supposed to be pretty cheap, so 400\$. Magazine is (5*8*.2+33)*1.05=43.05/2+.2*8=23.125

Cole Spreadsheet Statistics: None

Ruger Super Warhawk: Obviously based on the Ruger Super Redhawk. The issue is that, the .454 Casull is MUCH more powerful on Cole's sheet, pushing 6d pi+. This is largely because it seems to overtune the velocity (Reaching 580 m/s instead of 490ish, which is still 5d+1). This seems to be a discrepancy just between Cole's and Hurst's work, and I'm in favor of Cole's more, since other less powerful rounds do 5d. So we'll TL9 ify from Cole's numbers, fudging them a bit to get the more correct velocity.

Medium optimization, so (3.6-0.4)*0.9 = 2.88. 6*0.33 = 0.2.

Cole Spreadsheet Statistics: 81250 11.43 35 11.43 330 335 1.5 1 11.43 335

Taurus: Taurus makes a lot of revolvers. I'm choosing the Taurus Tracker due to their similar descriptions (Focus on ruggedness) and its ability to be chambered in both 357 and 38 Special +P. The original weighs 40 oz unloaded, and I think light optimization is best based on its description, so $(2.5)^*.95 = 2.38$. For .357 it's $6^*0.0175 = 0.105$. For 38 special it's $0.0165^*6 = 0.1$. Tracker is 600\$. 75¥ for laser sight.

Cole Spreadsheet Statistics: 21875 9.1 29.3 9.1 165 125 1.5 6 9.1 125 Cole Spreadsheet Statistics: 43125 9 33 9 152 125 1.7 2 9 125

11.7.13 Machine Pistols

Ares Crusader II: This one has no real equivalent. The best we can say is that it's high damage, high accuracy, but with large clip size. Guess I'll go with glock 18. We'll go with medium optimization, so $(2.6\text{-}1.1)^*.9=1.35$. For ammo, $40^*0.013^*1.1=0.572$. We'll cost it as 1,000¥. Magazine is $(5^*40^*.12+33)^*1.05=59.85/2+40^*.12=34.725$. 88 for compensator with .05lb

Cole Spreadsheet Statistics: 41125 9 19 9 114 124 1.85 8 9 124

Black Scorpion: CZ Scorpion. Although I vaguely think High Optimization could work so such an old gun, I'm going to stick with Medium to be safe, $(3.7\text{-}0.9)^*.9 = 2.52$. 35*0.009*1.1 = 0.347. Magazine (35*5*.04+33)*1.05 = 42/2 + 35*.04 = 22.4. 100 and 0.4 lb for stock.

Cole Spreadsheet Statistics: 25625 8 17.3 8 115 73 1.35 9 8 73

Steyr TMP: The.. uh the Steyr TMP. Medium Optimization $(3.8-1)^*.9 = 2.61$. $30^*.013^*1.1 = .429$. Magazine $(5^*30^*.12+33)^*1.05 = 53.55/2 + 30^*.12 = 31.275$. 75 for laser

Cole Spreadsheet Statistics: 41125 9 19 9 130 124 1.85 8 9 124

11.7.14 Rifles

AK-97: Based on the AK-47 of course. It's assumed to have a round similar to the $7.62 \times 39 \,\mathrm{mm}$, just with the increased performance that is seen at TL9. This was done by estimating the qualities of the 7mmCL, and then applying those improvements to the $7.62 \times 39 \,\mathrm{mm}$. The gun is considered rugged and heavy, so low Optimization (10% for rifles), so (11.3-1.8)*.9 = 8.55. Ammo is 38*0.018*1.1 = 0.752. Magazine (5*38*.3+33)*1.05 = 94.5/3 + 38*.3 = 42.9

Cole Spreadsheet Statistics: 66000 psi, 7.36mm barrel bore, 39mm case length, 7.36mm chamber bore, 420mm barrel length, 122 grain bullet, 3 Aspect Ratio, 32mm burn length, 7.36mm caliber, 122 grain accelerated mass.

Ares Alpha: This one is much simpler, as it seems to be a Shadowrun original, as such it's likely just a sane version of the Storm Carbine. I worked back from a semi-accurate 10mm round to 10mmCL, then modified it a bit to match High-Tech rules, such as being pi+. The grenade launcher is the Ultratech Grenade Launcher, losing 0.5 lbs for losing RoF 3, and gaining .25 + .15 lbs for 1 more grenade. I'm basing its weight off of the SCAR-H, high optimization $(8.8\text{-}1.6)^*.8 = 5.76$. $42^*0.0415^*1.1 = 1.92$. Magazine $(5^*40^*.25+33)^*1.05 = 87.15 + 40^*.25 = 97.15$. I like it's book price, but we'll lower for grenade launcher and such

2350. Magazine (5*42*.75+33)*1.05 = 200.025/3 + 42*.75 = 97.175. +550+88 for smartgun and compensator. +200 for CI.

Cole Spreadsheet Statistics: 35000 psi, 10.6mm barrel bore, 72.4mm case length, 10.6mm chamber bore, 400mm barrel length, 280 grain bullet, 3 Aspect Ratio, 60mm burn length, 10.6mm caliber, 280 grain accelerated mass

Colt M23: Obvisouly based of the Colt series of rifles, likely the AR-15, but perhaps the M16. The round is based off the 5.56 with a proportional boosting similar to the 7.36 round. Medium optimization, (7.2-0.7)*0.85 = 5.525. Ammo is 40*0.0135*1.1 = .594. Magazine (5*40*.25+33)*1.05 = 87.15/3 + 40*.25 = 39.05

Cole Spreadsheet Statistics: 68750 psi, 5.7mm barrel bore, 45mm case length, 9.29mm chamber bore, 508mm barrel length, 62 grain bullet, 4.1 aspect ratio, 12mm burn length, 5.7mm caliber, 62 grain accelerated mass.

FN HAR: is in a bit of a weird position. On the one hand, it has a lower damage than guns like the Ares Alpha, but is billed as a Heavy Assault Rifle, which is supported by its lower clip size and ostensibly being on the FN FAL. It may be based on the FAMAS, as seen by its video game depiction however. I've decided that lower damage alongside its video game depiction lean towards the FAMAS. With medium optimization it's 7.96*.85 = 6.77. 35*0.027*1.1 = 1.04.

Cole Spreadsheet Statistics: 56000 psi, 7mm barrel bore, 43mm case length, 9mm chamber bore, 48mm barrel length, 189 grain bullet, 3 aspect ratio, 32mm burn length, 7mm caliber, 189 accelerated mass.

Yamaha Raiden: Exact same as Ares Alpha, but with a longer barrel. I'm just increasing its weight by 0.5, 5.76 + 0.5 = 6.26. Ammo 60*0.0415*1.1 = 2.739. Bit more than Alpha, so 2,450¥. Magazine (5*60*.75+33)*1.05 = 270.9 / 3 + 60*.75 = 135.3. +550+88+600 for smartgun, compensator, and silencer.

11.7.15 Shotguns

Shotguns are a bit troublesome overall. Cole's sheet doesn't easily handle them, and his works dealing with multiprojectile... are not to my taste (Which is to say, I don't think that his method of grouping pellets into bigger metapellets is a great idea, nor do I think that things like 00 Buck should be 1d+3 pi with RoF 3x8.. I don't think a single 00 Buck pellet matches a pistol in terms of penetration).

As such, I'll have to be winging it, because (As I've mentioned in some other places), TL9 shotguns are garbage; they have worse range, worse accuracy, same damage, similar RoF, similar clip sizes, and similar weights. In total, they're just slightly downgraded TL8 shotguns.

I'll be TL9-ifying a shotgun by considering the improvement in damage a similar round got from TL9 and applying that to a slug. Then, I'll work backwards from the slug to get the improved shot damage.

12G: 4d+4 slugs are effectively 5d. 5.56 does 5d originally and 6d at TL9, which would give 1d+2 pi- for TL9 12G Shot. 20G: 4d slugs. This damage is really uncommon unfortunately, but for similar ish damage weapons like some SMGs, we can guess at 5d slugs, which gives 1d+1 pi- TL 20G shot. 28G: I've done 28G like twice before for pistols; it's 1d pishot, 4d slug. 10G: 2d-1 shot.. At this point it seems obvious

that it ends up 2d. And since I don't need range numbers, I'll take that!

For ranges, I'm just tacking on 1/8 to both (The TL8 Ranges ofc).

Defiance T-250: This one is a bit tricky. Official art looks very much like the Remington 870, but Shadowrun already Remington 990. Even more so, the 990 doesn't particularly look like the 870, instead looking like a Benelli or Remington 887. As such, I'll let the Defiance be based off the 870... not that there's much difference in shotguns anyways. I'll use medium optimization for rifles, so $(7.6\text{-}0.6)^*.85 = 5.95.5^*0.065 = .325$.

Enfield: This one is also a bit tricky, but it's likely the USAS-12 based off its official art. Because of its much higher damage, I'll load it with 10G (Dear god). Medium Optimization, $(14.2\text{-}2.1)^*.85 = 10.285$. The USAS Clip is extremely heavier than others, likely because it's SHELLS. Since it's twice as much as expected, I'll double this one too, for $10^*0.075^*1.1^*2 = 1.65$. Magazine $(5^*.35^*10+33)^*1.05 = 53.025/3 + 10^*.35 = 21.175$. +75 for laser.

PJSS: Another weird one. It's by description a double barreled shotgun, but doesn't look like that in the art... Oh well, double barreled it is. We'll base weight of the LeFever with heavy optimization, so $(10.3-0.3)^*.8 = 8$. Ammo is 2*0.065 = .13.

11.7.16 SMGs

Colt Cobra TZ-120: The TZ is somewhat difficult because it doesn't have a clear description, drawing, or real world counterpart. The Cobra series are all revolvers and its folding stock makes it seem closer to a machine pistol than a straight up SMG. Its name is somewhat reminiscient of the CZ Scorpion too, but that matches with the Black Scorpion better, so we'll push closer to the CZ Evo 3. That one is 6.10 LOADED. I could calculate GURPS magazine weight, but some decent sites say around 5.62 lbs unloaded. Medium optimization, using pistol ones, so $(5.62)^*.9 = 5.058$. Ammo is $32^*.0.013^*1.1 = .458$. There's lots of mixed, but I'm going with a 1,450\$ price tag base. Magazine $(5^*32^*.12+33)^*1.05 = 54.81/3 + 32^*.12 = 22.11 +100$ for stock, +88 compensator.

Cole Spreadsheet Statistics: 41125 9 19 9 115 124 1.85 8 9 124

FN P93 Praetor: Obviously based off the P90. As such, it got the upgraded 5.7 treatment. One of the noteworthy parts is that Cole's sheet has the 5.7x28mm's range much lower than the book. High optimization is possible, but the P90 is already a fair bit overoptimized, so I'm going with Medium for (6.6-1) = 5.04. Ammo is 50*0.0065*1.1 = .358. Magazine (5*50*.16+33)*1.05 = 76.65/3 + 50*.16 = 33.55 + 88 compensator

Cole Spreadsheet Statistics: 62547.5, 5.7 28 6.2 264 31 2.25 4.2 5.7 31

HK-227: This is likely either based off the popular HK MP/5/7 or the HK UMP. Given its lower damage, accuracy, and clip size, I'm going with the UMP. Medium optimization, (6.5-1.6)=3.6. Ammo is $28^*.0235^*1.1=.724$. Magazine $(5^*28^*.2+33)^*1.05=64.05+28^*.2=26.95$. +100+550+600 for stock smartgun and silencer.

Cole Spreadsheet Statistics: 21875 11.43 23 11.43 200 230 1.5 5.5 11.43 230

Ingram Smartgun X: Based off the Mac-10. Given the general upgrade treatment. Given it's considered a quality gun, we'll go with medium optimization over low, for (7.5-1.3)*.9=5.58. Ammo is 32*0.013*1.1=0.458. Magazine (5*32*.12+33)*1.05=54.81/3+32*.12=22.11. +100+75+550+88.

 $Cole\ Spreadsheet\ Statistics:\ 41125\ 9\ 19\ 9\ 146\ 124\ 1.85\ 8\\ 9\ 124$

SCK Model 100: This is a weird one. The SCK-65 was a Japanese test firearm that never made it production. However, its official arts looks strikingly like the FB PM-63. I'm going to mostly take inspiration from the later, although it will be pretty modernized. We know it's mass was 3.53 lb, which I'll take as unloaded and add low optimization, since it seems to be on the low end already, for $(3.53)^*.9 = 3.177$. Ammo is $30^*0.013^*1.1 = 0.429$. Supposedly on higher end, so 1,200. Magazine is same as colt cobra.. +100+550 stock and smartgun

Cole Spreadsheet Statistics: 41125 9 19 11 164 124 1.85 8 9 124

UZI IV: Easily just the Uzi at TL9. Due to the fact that it has lower accuracy and damage than its comparables, I'm opting that it has a much shorter barrel than the original. Medium optimization, for (8.8-1.1) = 6.93. Ammo is 24*0.013*1.1 = 0.343. Magazine (5*24*.12+33)*1.05 = 49.77/3 + 24*.12 = 19.47. +100+75 stock and laser.

Cole Spreadsheet Statistics: 41125 9 19 9 120 124 1.85 8 9 124

11.7.17 Tasers

These are a lot easier. The Defiance can just be a stronger normal taser, while the Pulsar I simply doubled range to account for it being wireless. Other than that it's standard changes like shots and RoF. Given that their powers are all stronger than a normal taser, I'll keep their weights. Cartridge costs are just the 16\$ for Tasertron and Taser's 20\$ one.

11.8 References

This is a section to cover any references I used when designing this that did not make their way into the paragraphs themselves.

How to build a technopath.

An Obsidian Portal wiki with solid group of pre-made items, drones, etc. They're not 100% to my taste, but they serve as a good inspiration.

Stable Diffusion, for creating the "Art" here, because I am not an artist.

Has some good firearm weights, pretty sure it's based on the original edition's weights.

Used for a variety of gun ideas and art designs for better determining what to base the weapons off of.