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AMAZING ENGINE®

System



TSR



An
AMAZING ENGINE®
Universe Book

KROMOSOME



by
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Table of Contents

4	The AMAZING ENGINE® Role-Playing System	
for Players		
20	**The Graffiti Mindset**	Introduction to the Attitude
23	**Things Fall Apart**	Eco, War, Tech, Corp, Politics
37	**Slackers & Microcorps**	Characters
45	**Treachery & Skill**	Skill Pools
61	**Capitalization & Finance**	Funds
65	**Soft Machines**	Equipment & Genemods
91	**Hostile Takeovers**	Combat Rules
96	**Ars Electronica**	Netrunning Rules
for Game Masters		
119	**Story Arcs & Finales**	Gamemastering *Kromosome*
121	**Intellectual Property**	Experience & Resources
122	**The Invisible Hand**	Power Groups
127	**Faces**	Famous AIs & NPCs
133	**Destinations**	Adventure Sites
136	***Kromosome* Campaigns**	What It's About
138	***Kromosome* Adventures**	What PCs Do
142	**Appendix 1: Languages**	Foreign Terms
143	**Appendix 2: Sources**	Reading & Viewing
144	**Appendix 3: Character Record Sheet**	What it Says



The Amazing Engine® Role-Playing System

Note: If you are already familiar with the basic rules for this game system, feel free to turn directly to the Universe Book portion of this product. Any rules modifications specific to this setting are included there.

The AMAZING ENGINE® role-playing system is more than just a single role-playing game, be it fantasy world or science fiction universe. Instead, the AMAZING ENGINE system provides the basics for creating a wide variety of role-playing settings—anything from consulting detectives investigating fairy realms to deadly aliens stalking hi-tech space marines—and as much as can be imagined in between.

System Guide and Universe Books

To do this, the AMAZING ENGINE system consists of two parts. The first part comprises the basic rules for creating player characters and having those characters use skills, fight, and move: the System Guide, which you are reading right now. These rules are found in all AMAZING ENGINE products. This section also details how players and GMs can change settings while transferring benefits player characters have gained from previous play.

The second part of the system comprises the rest of each Universe Book. Each Universe Book is a complete role-playing game. It is not necessary to buy every Universe Book to play in the AMAZING ENGINE system. Game masters can run campaigns in just a single universe, choose only science fiction or only fantasy, or play in both according to their personal whims.

The AMAZING ENGINE system is more than a mere collection of universes. In this system, the advances a player character gains in one universe can be used to help PCs in other universes. Starting in a new setting does not call for starting over from the beginning; this means players and GMs can experiment with the wide range of universes.

The Player Core and Player Character

The heart of the AMAZING ENGINE system is the combination of the *player core* and the *player character*. The player core is the framework around which PCs are built. The same player core is used from universe to universe.

The PC is the actual collection of numbers, skills, and other abilities used to role-play in a given universe. A player will have a different character in each universe, but these characters may all be generated from the same core.

When creating player cores, the players must make certain decisions about the kind of characters they want. They can choose different emphases for the four different pools (see next page) that define a character: Physique, Intellect, Spirit, and Influence. These choices, made while creating the player core, reflect in all PCs created from that core. Each pool offers a pair of choices. Does a player want characters that are generally strong and influential, or ones who are intellectually superior and athletic? Physical characters can be either muscular or quick; spiritual characters can possess great psychic potential or strong wills.

Of course, the same ability is not always the best in every universe. A muscular but psychically weak character who does quite well in the BUGHUNTERS® game may be at quite a disadvantage in the MAGITECH™ game, where wizards needing strong psyches to manipulate magic are a common sight. Therefore, the same player character is not used in every universe. Instead, the player core allows each character to be tailored to the needs of each universe—within the limits of the player's original choices. Players who emphasized Physique will still have characters who are either faster or stronger than most others. Those who chose Intellect will have smarter characters, either in learned skills or intuitive understanding. The player core forms the archetype around which a single player's characters are all set.

The Ability Pools

The player core consists of four different ability pools: Physique, Intellect, Spirit, and Influence. Each pool has two attributes that define the player character. When creating the player core, only the ability pools are used. When creating a PC, or playing that PC in a single universe, only the attributes are used. Once the first character is generated, ability pools never affect the actions of a PC and attributes never affect ability pools. The ability pools' corresponding attributes are:

Fitness and Reflexes. These attributes of Physique measure all things physical about the character.

Learning and Intuition. These attributes of Intellect define the character's mental power for learning useful skills.

Psyche and Willpower. These attributes of Spirit are the sources of the PC's mystical potential and strength of will.

Charm and Position. These attributes of Influence generate the values affecting the character's social interactions.

The Attributes

As noted, the eight attributes are more precise breakdowns of the corresponding ability pools, and they define a specific character in a specific universe. Beginning characters' attributes have values from 3 to 50, with 25 being the approximate average score. (Characters generated from the core later in a campaign may have higher scores.)

Fitness. A measure of bodily strength, Fitness reflects the characters' muscles and their ability to use them effectively. Fitness affects the amount of damage characters can cause in hand-to-hand combat, and the amount of body damage they can take.

Reflexes. This attribute measures characters' reaction speed and hand-eye coordination. It is used for scoring a hit in combat, and (along with Willpower) determines the amount of stamina damage characters can take.

Learning. This measures characters' knowledge in areas requiring long training or study. In some universes, it may represent a degree or period of schooling. Learning affects the number and kind of, and chance of success at, skills characters can have.



Intuition. This encompasses the characters' ability to remember random trivia, innate wit, street smarts, comprehension, and worldliness. Intuition is applied to skills picked up through observation and practice, without long periods of study. Like Learning, Intuition affects the number and kind of, and chance of success at, skills characters can have.

Psyche. The universe is filled with more things than can be measured or imagined by physical science—or at least an AMAZING ENGINE universe may be. Psyche represents the characters' potential to perceive and manipulate the spiritual and metaphysical world. In a given universe, this may determine the characters' magical ability, psychic powers, or plain old luck.

Willpower. As a measure of mental fortitude, this ability indicates how well the characters can endure pain (along with Reflexes, in the form of stamina points), block mental attacks, or resist psychic possession.

Charm. In RPGs, characters must interact. This attribute rates the characters' personalities and the way others are disposed toward them. Charm is used to influence reactions of NPCs and can affect the success of some magical and psychic skills.

Position. This attribute provides a rough rank for characters on the ladder of social advancement, whatever form the rungs take in a particular universe. Depending on the setting, Position may translate into military rank, fame (or infamy), wealth, title, class, or even occupation. Position is used to deal with officials, finance large purchases, and secure special resources, and also at special social functions.

Generating the Player Core and Player Character

The process of creating the player core is woven into the steps of creating the first player character. As you create this character, you will have to make a number of choices for the core that will affect the character. In later steps, numbers rolled for the PC's attributes will affect the final results of the player core. Thus, the procedure for creating your first PC (and player core) is slightly different from that used when creating subsequent PCs from the same core.

The first task in creating a character is to decide what kind of character you like. You can do this even before knowing what kind of universe your GM is going to use. Do you prefer strong characters, able and ready to fight; charmers who can talk their way out of any situation; intellectuals good at solving problems; or magically-charged wonder-workers? Think about your ideal character.

The next step is to translate your ideal into game form by ranking the four ability pools of the core from best to worst. Using a sheet of paper (or the Player Core Sheet on page 18), write the numeral 1 (best) next to the pool for which you want the best chance for high scores. Then rank the remaining pools (2, 3, and 4), remembering that the one ranked lowest will usually have the lowest scores. Later die rolls do not guarantee anything.

In the third step, begin creating your first actual PC by choosing four of the eight attributes and rolling four 10-sided dice (4d10) for each one. Add the four results, and note the total in the space next to the attribute name. (Do this in pencil, since the attributes may be modified in a later step.) The attributes chosen need not correspond to the ranking of attribute pools done previously. You can choose one, both, or no attributes of any given pool in this step.

Now, generate scores for the four remaining attributes by rolling 3d10 and adding the results. Note the totals in their appropriate places.

Once the basic numbers have been generated, modify the attributes based on the rankings you gave the ability pools (1–4). The rankings determine the number of points available to divide between the two attributes of that pool (15, 10, 5, or 0). You can divide these points however you wish, but no ability pool can have more than 50 total points.

Rank 1: 15 points
Rank 2: 10 points
Rank 3: 5 points
Rank 4: 0 points

The modified numbers are your PC's attribute scores.

With the PC attributes determined, you can now finish creating the player core by figuring your ability pools' dice ratings. Do this by adding the two attribute scores of each pool and dividing by 10. Fractions are rounded up to the next whole number. Write these numbers next to "Dice." Although this total has no effect on a PC during play, it is needed for creating other characters in other universes.

Creating Characters from the Player Core

Once you have created a player core, you are ready to create new characters for other AMAZING ENGINE settings. These characters are made using the player core, and follow different steps from those you used for your first (or "prime") character.

You build PCs from the core by assigning dice to the different attributes. Each ability pool has a dice rating (this was the last step you performed in creating your prime character). These dice are divided in whole numbers between each pool's attribute pair. In addition to these dice, all new PCs have 7 "free" dice the players can assign as they see fit. However, unless stated otherwise by the universe-specific rules, no attribute can have more than 5 dice assigned to it. Once all dice have been assigned, the appropriate numbers are rolled and totalled, just as before.

After the dice are assigned, rolled, and totalled, the next step is the same as for your prime character from this core. Using the same rankings you assigned to your ability pools, use the points each rank gives (15, 10, 5, and 0) to modify your PC's attributes. As before, no PC can have an attribute rating higher than 50.

Once the attributes have been modified, the character creation process stops. *Do not* recalculate the dice ratings for the player core. The dice ratings can only be altered by spending experience points earned by the PCs created from that core.



Multiple characters can be created from the same player core. However, you should have only one character from the same core per universe. Multiple characters per core in the same universe would give you an unfair advantage over players with only a single PC per core. *You can create multiple cores, however, each with its own prime character;* use the rules for "Generating the Player Core and Player Character."

A detailed, complete example of creating a player core and a prime character is given on pages 14–15.

Life and Death

A crucial part of any role-playing game is the risk of injury and death to the PCs. Every time a PC tries something dangerous or gets in a fight, she can suffer damage. This damage is measured in points, subtracted from a character's total. In the AMAZING ENGINE system, there are two types of damage: *stamina* and *body*.

Stamina damage is caused by the host of bruises, grazes, cuts, burns, jolts, and effort spent avoiding serious harm. A character who loses all her stamina points does not die—she falls unconscious. (This may result in her death, however.) Unconsciousness comes from the combined effects of blood loss, concussion, shock, pain, and just plain exhaustion. If an attack causes 10 points of stamina damage and your character has only 4 remaining, the excess points are ignored. Your character falls unconscious. However, all future attacks automatically cause body damage.

Body damage represents wounds and injuries that seriously threaten the health of your PC. These include bullet holes, stab wounds, broken bones, serious burns, bites, and other unpleasantries. When your character loses all her body points, she's dead.

Just how many stamina and body points your PC has varies from universe to universe. In some, such as that of the BUGHUNTERS game, combat is one of the main activities. Here, your PC will need lots of stamina and body points. In others, like *For Faerie, Queen, and Country*, combat is a last resort when all others have failed. Characters in such a universe have lower stamina and body point totals to discourage players' desire to solve every problem with guns.

In all universes, however, stamina and body points are calculated from the same attribute scores. Fitness is used to figure body points. Characters with high Fitness scores will always have more body points than those with poor Fitness scores, no matter the universe. Willpower and Reflexes combined are the base for stamina points, so that those with high scores in these attributes will have more stamina points than those with low ones.

Injuries and wounds do heal, allowing your PC to regain lost stamina and body points. Because the two types of damage reflect different causes, each heals at a different rate. Stamina is regained in two stages; 1 point in the first 10–60 minutes (1d6×10), then 1d10 points per eight hours of light activity (2d10 per eight hours of bed rest or sound sleep). Body points heal at the rate of 1 per week. Rest, nursing, and hospitalization can increase the rate of healing; to what extent depends on the universe. After all, the hospitals of a pseudo-Victorian London are nothing like the sickbay facilities of a 23rd-century starship!

Beyond the Player Core: Fine Tuning

In any AMAZING ENGINE universe, your PC is more than the sum of her attribute scores. There are many other choices to make; however, these depend on the universe in which your character is playing. While all the choices are defined for your character in the Universe Book section of this product, the range of options is explained here in general terms.

Base Adjustment

Every universe of the AMAZING ENGINE system is different, so a suitable starting character for one may not be right for another. Therefore, a given universe may apply a *base adjustment* to certain of your PC's ability pools. This adjustment increases every affected attribute by the same amount. (A base adjustment of +30 to the Physique pool means you add 30 to the base Fitness score and 30 to the base Reflexes score.) The adjustment must be made *after* calculating your PC's base attribute scores.

Species

Up to now, nothing has been said of just what your PC is, and from the examples it's easy to assume everyone's human. However, this need not be the case. In some universes, your may have the opportunity to create characters that are members of some other species. Your character could be an intelligent being evolved from dinosaurs, belong to an alien race from another star, be a combination of human and machine, or (comparatively simply) have fairy blood. The universes of the AMAZING ENGINE system have all of science fiction and fantasy to draw upon, so the possibilities are nearly endless!

Gender

There is nothing in the player core that determines your PC's gender. In most universes, you can choose it freely. However, in some cases there may be special restrictions or different choices, particularly when playing an alien (nonhuman) PC. The Universe Book describes any such rules additions.

Handedness

For convenience, your character uses the same hand as you do in real life. Of course, if you're playing a four-armed g'rax, special rules may apply.

Appearance

Again, unless your PC is an alien, you can describe your character's looks however they please you. He could be tall and willowy, or she



could be short and blunt. It is recommended that you create a character description that matches the attribute scores. If your character has a miserable Fitness score, it doesn't pay to imagine him as strong and muscular.

Professions and Skills

At some point in her imaginary life, your PC probably went to school, learned a trade, or at least got an education on the street. In the AMAZING ENGINE system, what your PC knows is defined by her profession. No matter the universe, every character has a profession, varied though they are. In a Victorian fantasy setting your PC might be a consulting detective, consul of the Foreign Office, Oxford don, navy ensign, or medium. A completely different set of professions exist in a world of high space opera; space freighter captain, alien spy, smuggler, and psychic are only a few possibilities.

Likewise, the exact benefits of a profession can vary from universe to universe. The Victorian consulting detective might know material analysis, chemistry, fisticuffs, craniometry (measurement of people's skulls), heraldry, and fencing; his counterpart in a world of modern magic could well possess flying carpet driving, spell analysis, handguns, karate, and empathy.

When you create a PC for a campaign, your character must be given a profession from those offered in that particular universe. The Universe Book lists these. Choosing a profession does not determine what your PC is currently; it only tells what she was, and therefore what she knows at the start of the campaign. From this basis, you can make of your PC what you want.

Skill Groups

Note: Reference this Universe Book's skill listing as you read this section.

Every profession includes a listing of skill groups falling within that profession's purview. These skill groups form the basis of what a character can learn, given her profession. The skills categorized under each grouping are all related to that area of study or use, although the skills themselves may be quite different. For example, a scholarly character may have "Humanities" as a skill group. Checking the information in the Universe Book, you find the listing for Humanities. Under it are several different scholarly areas and skills that all have to do with the humanities (like Linguistics and Theology), though they are not always related to each other.

Certainly not every profession has the same skill groups. The scholar's studies in humanities would be ill-suited to the needs of a soldier in the 23rd century. Her skill groups would include things like Sidearms and Comm-gear. The skills of the Sidearms group are vastly different from those of the Humanities group.

In addition to organizing skills, the skill groups also show the skills' order and relevant attributes, both important to using skills in play.

Skill Order: In each list, skills are arranged in ever-smaller steps of specialization. Before a skill can be learned, your PC must know all preceding steps. For example, look at the following list.

Sidearms (R)
- Coherent Beam (R)
  - Laser rifle (R)
  - Particle beam (R)
- Projectile (R)
  - Modern (R)
  - Antique (R)
    - Blunderbuss* (R)
    - Rifled musket*(R)
  - Assisted (R)
  - Energized (R)
  - Flechette (R)

General Medicine (L)
- Xeno-biology (L)
  - Arcturean medicine (L)

Each level of specialization is indicated by indentation, just as in an outline. Once your PC has learned a skill (Sidearms or General Medicine, in the above listings), she has a basic familiarity with everything grouped below it, allowing her to attempt any of those specialties. However, your PC's chance of success decreases when attempting things of greater specialization than her training level. The degree of penalty depends on what the PC knows and what she's trying to do. She cannot know the Rifled musket enhancement unless she knows Antique weapons, which she cannot have until she has taken the Projectile specialization. (She need not know Coherent beam weapons before she can know Projectile; these two are at the same level, and thus are unrelated.) The precise penalty varies from universe to universe. A typical penalty is –10 to the PC's chance of success per each level of difference. (In the above example, a PC familiar with projectile weapons trying to use a rifled musket does so at a –20 penalty: –10 for not knowing the Antique specialization, and –10 for not having the Rifled musket enhancement.)

Enhancements: Some specialized skills do not require your PC to gain new areas of learning or technique, but only call for the refinement of existing knowledge. Your PC doesn't "learn" anything new; she only improves what she can already do. These specialties are called *enhancements*, and are noted by an asterisk (*) on the skill groups.

For example, under Antique Weapons, *Blunderbuss* and *Rifled musket* are enhancements. The basics of loading and firing each are essentially the same, and the same goes for any other antique weapon (the larger skill category). The differences are that a character skilled in Blunderbuss is more familiar with the particular quirks of that weapon. The same does not apply when comparing Antique Weapons to Modern Weapons, or General Medicine to its specialty Xeno-biology. In these



cases, the skills involve new learning, new techniques, and new facts that must be mastered in addition to the basic understanding of Sidearms or Medicine.

Knowing an enhancement gives a PC a bonus (typically +10) when using that particular skill—but only that skill. A PC who knows the Blunderbuss enhancement and uses that weapon gains a +10 bonus to her skill roll. She does not gain that bonus when using a rifled musket, however, even though both weapons require the Antique Weapons specialty.

The bonus for an enhancement does not accumulate across levels the way that penalties for lack of a specialty do. For instance, a character with the Blunderbuss enhancement gains only one bonus when rolling against the Sidearms skill, despite the fact that there are two levels between the skills.

Starting Skills: After you have chosen a profession for your character and noted down the skill groups, you can select skills for your PC. The number of skills your PC can have depends on her Learning and Intuition scores.

First, you must choose those skills dictated by your PC's profession: the things that allow her to operate effectively in whatever career she has chosen. You can choose any skills from the skill groups named by that profession. Your PC can have 1 skill for every 10 points of Learning (or fraction thereof, rounded up). Specialized and sub-specialized skills can only be chosen if the preceding skills are also learned.

After you have chosen those profession-based skills, you can pick other skills from any skill group regardless of the PC's profession. These skills represent your PC's general knowledge, interests, curiosity, and hobbies. Select one skill (from any skill group) for every 15 points of Intuition your PC has (ignore fractions in this case). Additional skills gained may be within the PC's profession or completely outside it. As before, your PC cannot learn specializations or sub-specializations unless all previous skills are known.

As you select skills, note the names and relevant attributes (noted in parentheses after each skill) on your character sheet.

Skill Checks

Although your PC may know how to apply a skill, this is still a long way from using the skill correctly and successfully. As a real person, you might "know" a foreign language, but could still make an error when talking to a native speaker. Furthermore, not everyone is equally adept; not every first-year French student speaks first-year French equally well. The same is true, of course, for your PCs.

Every time your PC attempts to use a skill, you must make a skill check to see if the effort succeeds. This entails rolling percentile dice, applying any bonuses or penalties as required, and comparing the result to one of your PC's attribute scores. The relevant attribute score is noted in parentheses after the listing in the skill group: **F**itness, **R**eflexes, **L**earning, **I**ntuition, **P**syche, **W**illpower, **C**harm, and **P**osition.

If the (modified) die result is less than the PC's attribute score, the attempt succeeds. If the (modified) die result is greater than the score, the attempt fails. A skill check always fails on a roll of 95–00, but there is no corresponding chance for automatic success.

Easy and Difficult Tasks: Skills are applied to tasks of varying difficulty. For your PC with mechanical skill, fixing a stubborn lawnmower is just not the same as rebuilding the engine on a sub-orbital jet. The former is a task of basic simplicity, the latter a highly demanding and complicated job. Clearly, your PC's chance of success in each endeavor should not be the same.

A skill check is not required every time your PC does something skill-related. For example, driving to the supermarket does not require a skill check. A character trained as a spaceship pilot need not make a skill check every time he travels through space. It is assumed that every skill provides a level of basic understanding. Thus, skill checks can be ignored for simple and familiar tasks.

When the result is uncertain, a skill check must be made. Characters with Firearms skill can handle a gun without a skill check, but they may not hit the target—a skill check is required to find out. If the check succeeds, your PC performs the action successfully: hitting the target, whatever. If the check fails, the action fails with appropriate consequences.

Your PC can also attempt actions of even greater risk and skill, so much that a normal skill check is still too easy. She may want to shoot an item from a person's hand, or calculate an obscure scientific formula. Based on the situation, the GM can reduce the chance of success to reflect the difficulty of the action. Guidelines for the modifiers are given as appropriate in the Universe Books.

At other times, your PC may attempt something more specialized than she is trained for. In this case, even the simplest task requires a skill check (with the penalty for not knowing the specialty applied), since any specialized knowledge is assumed to be beyond your PC's basic understanding. Tasks that would require a normal skill check become extremely difficult for those without the proper background, while things difficult for a specialist become nearly impossible.

Unskilled Characters: No matter how well-rounded and prepared your PC is, there are always times when she is faced with a problem for which she is simply not trained. Faced with such a situation, your PC may have little choice but to try her best.

Whether your PC can even hope to succeed depends on the skill normally required to perform the task. If this is a Learned skill (one that uses the Learning attribute for skill checks), the task is impossible. Computer programming, biochemistry, and surgery are all examples of Learned skills. Without the proper training, your PC simply has no clue about what needs to be done. For example, she cannot repair a malfunctioning high-energy gas laser. The only thing she's likely to do, without the proper training, is increase the damage.

Actions based on nonLearning skills can be attempted by even those lacking the proper training. In this case, the PC has a default chance equal to half the appropriate attribute score. Even the most basic actions require a skill check (there is no automatic success), and the



attribute score is halved for the attempt. The other penalties, for specialization and difficulty, still apply.

Margin Ratings

In most cases, the actual outcome of a skill check doesn't change, regardless of how well or poorly the PC did, so you can simply translate the skill check into story details. Roll well below the success number, and your PC did the task extremely well. Roll high—close to failing—and it was a struggle, but she succeeded. Roll drastically greater than the success number, and your PC botched things royally.

For example, your PC, Anya, and her companion, George, are trying to jump across a pit, with a villain in hot pursuit. You roll a 17 (needing a 54 or less), while George's player barely rolls below the necessary number (69 out of 71). Right behind your PCs, the villain attempts the leap. His roll is a 93, well over the 51 needed. In this case, the GM might say, "Anya, you clear the pit easily, then bend down and help George, who nearly failed and is clinging to the edge by his fingertips. The thug chasing you slips just as he starts the leap. There's a horrid scream as he falls out of sight." Both player characters succeeded and there was nothing gained by doing better, while the thug failed and would have fallen in any case. If Anya had not been there, George would have simply hoisted himself over the edge to safety.

At other times, you need to know not only if your PC succeeded or failed, but to what degree. These are known as critical successes or critical failures. Skills that require them are defined in the Universe Books. In *For Faerie, Queen, and Country*, Louis the forger is altering a will. A successful skill check results in a will that fools most people, but Louis needs a critical success to dupe the court's handwriting expert. In the BUGHUNTERS game, Harmon, the demolitions man, is faced with a complicated time bomb. Success obviously defuses the device, but there is the risk he pulls the wrong wire. This would be a critical failure, causing the bomb to detonate immediately.

Critical successes and failures are defined by *margin ratings*. Success margin ratings are noted as S#: S2, S5, etc. Failure margin ratings are noted as F#: F8, F7, etc.

In such instances, the success or failure margin is found by reading the 1s digit of the skill check roll. For a critical success, the skill check must be successful *and* the 1s digit must be equal to or less than the success margin. For a critical failure, the check must be failed *and* the 1s digit must be equal to or greater than the failure margin.

For example, Louis has a 45 on his attempt to forge a signature. The skill notes a success margin of 1 (S1) for a perfect forgery. Louis's player rolls the skill check, and the result is 40. Louis succeeds! Not only that, but it's a critical success, since 0 is less than 1 (the success margin rating). If Louis's player had rolled a 29, the forgery would have been successful but imperfect. On a roll greater than 45, the forgery would have failed completely.

Note that, statistically, margin ratings give characters with higher attribute scores a greater chance of amazing successes and a lower chance of horrible failures at any particular task than characters with lower attribute scores. In effect, success and failure margins serve as fractions of a character's skill, so as that skill increases, the margins become automatically more beneficial. Applying them to the 1s digit of a skill check simply makes it very quick and easy to identify them during play.

Movement

Character movement is divided into three speeds: walking, running, and sprinting. Each is defined by a speed in meters/turn and a duration of minutes or turns.

Measurements

To ease the transition from one universe to another, this game system uses a consistent set of measures for figuring game time, movement, and weight.

In this game system, all distances, volumes, and weights are given metrically. Although unfamiliar to some, the metric system is best suited to meet the needs of universes ranging from high fantasy to hard s-f. Distances are given in meters and kilometers, weights in grams and kilograms, etc.

Game time—the imaginary time spent by PCs to do anything, as opposed to the real time you spend describing your PC's actions, rolling dice, thinking, etc. while playing—is organized into turns, minutes, hours, and days. A turn is roughly equal to 10 seconds of action, and is used for combat and other time-important actions. Minutes, hours, and the rest are self-explanatory. A given universe may have weeks, months, and years equivalent to those of our Earth, or may use a quite different system (especially in s-f settings).

Speed

Walking is the slowest and most common movement. A person walking can cover up to 15 meters per turn. (In general, people unconsciously adjust their strides to those of their companions to walk at a uniform rate.) Characters can walk for an indefinite amount of time, although the hourly movement rate of 5,000 meters should be used if PCs travel for longer than 30 minutes at a time.

Running is a brisk jog or long, loping stride, good for covering considerable distances at a quick pace. It is not as flat-out fast as your PC can run, since your PC is trying to conserve some strength for the long haul. Most PCs run a distance equal to their Fitness in meters per turn. A character with a Fitness of 32 could run 32 meters in a single turn. Notably unfit characters (those with Fitness scores of 14 or less) run and walk at the same speed: 15 meters per turn. A character can run for a time in minutes equal to his or her Fitness rating.

Sprinting is a burst of speed, in which your PC tries to cover a short distance as quickly as she or he can. Each turn your PC can sprint a distance in meters equal to twice his or her Fitness score. (A PC with a Fitness score of 32 can sprint 64 meters in 10 seconds.) Sprinting can be maintained for turns equaling one-tenth the PC's Fitness score (Fit _



10), rounded down. Amazingly unfit characters (those with Fitness scores of 7 or less) cannot sprint or run, although they still walk at normal speed.

Carrying Capacity

Another important modifier for your PC's speed in any situation is the weight she is carrying. The movement rates given assume the PC is not loaded down with excess goods that would slow her pace.

Your PC can carry goods equal to her Fitness score in kilograms without penalty. A PC with a Fitness of 21 can carry 21 kilos (about 46 lbs.) of gear and supplies without significant difficulty. When carrying up to twice this weight, the PC's running and sprinting speeds are halved. At three times the base weight, the PC cannot sprint or run, and may only walk meters equal to her Fitness score before having to rest.

If a player tries to tax her PC's Fitness by spending experience points (so she can lift a greater-than-normal weight), the benefit lasts until the PC fails a Willpower check. Like an Olympic weightlifter, the PC puts her legs and back into a heroic effort to lift the great weight. Every muscle in her body strains until her Willpower finally gives out. When the PC fails this check, she suffers 1 point of stamina damage. Players can use experience points to tax their PCs' Willpower to improve their chances of passing this check, too.

Pushing the Limits

It is possible for PCs to run and sprint faster or farther than their normal allowances by taxing their Fitness scores and making attribute checks.

Any PC can sprint faster than is normally allowed in a given turn by taxing his ability. The player must spend experience points to increase the Fitness score. However, a PC can never increase his speed by more than 50% in this way (he cannot add more than half his Fitness score). This increase is only effective for a single turn. The player must continue to spend experience points to maintain the PC's pace on subsequent turns.

Any PC can also try to exceed his duration. At the start of each turn, when sprinting, or minute, when running, during which the PC wants to run longer than his normal duration, the player makes a Willpower check with percentile dice. If the result is lower than the PC's Willpower score, he keeps going for that turn or minute; otherwise, he must stop since he's exhausted. PCs who fail the check suffer 1–2 points of stamina damage. Note that players can spend experience points to increase their PC's Willpower for this check.

For more information on taxing attributes, see "Taxing Attributes" in the "Experience" section of these rules.

Resting

Flat-out sprinting and long-distance running make for exhausting business, and your PC must rest at the end of any dash. PCs must spend time resting in minutes equal to the minutes spent running or turns spent sprinting. Sprinting three turns requires resting three minutes. Characters resting cannot run or sprint, but can walk up to 10 meters per turn.

Vehicles and Special Movement

Since the AMAZING ENGINE universes can encompass anything from lizard-drawn chariots to anti-grav sky-sleds, rules for vehicle movement are part of the Universe Books. In addition, a Universe Book may present unique movement rules to reflect any special conditions of that universe. Heavy gravity, magical terrains, other dimensions, and weightlessness are all possible complications unique to specific universes.

Combat

Sooner or later, fighting becomes part of every role-playing game. The AMAZING ENGINE system is no exception, although the emphasis on fighting (and just how dangerous it is) will suit the story needs of the universe. For example, combat in *For Faerie, Queen, and Country* is an infrequent thing, and dangerous when it occurs. A character can be killed with a single shot. At the other extreme, battles are frequent and heroic (and often magical in nature) in *The Galactos Barrier*, a swashbuckling universe of high space opera. The BUGHUNTERS game, where characters are the elite of the interstellar armed forces, is almost entirely combat-centered.

Because of the differences among universes, the things described herein are basic procedures that do not change from setting to setting, such as the differences between ranged combat and melee, and how to make an attack roll. *Every Universe Book contains additional combat rules.* At a minimum, these include weapons available in that universe; a maser rifle just won't be found in a world of armored knights and dragons. It could appear in a world of cybernetic knights and chrome steel dragontanks, however.

Some universes, such as that of the BUGHUNTERS game, place a greater emphasis on combat than others. Accordingly, the combat rules for these universes incorporate detailed rules for things like special combat maneuvers, penetration, knock-back, and recoil. Other universes may keep the combat rules to the barest minimum in favor of other role-playing aspects.

The Combat Sequence

Because combat can be a confusing event with six or seven characters to a side, each trying to do something different, the AMAZING ENGINE system (like most RPGs) organizes combat into a series of steps, each complete sequence taking one turn, each turn being roughly 10 seconds of time (allowing the GM flexibility in resolving combat actions). Each turn repeats the sequence of events until one side is defeated or manages to escape.



I. Determine advantage (1st turn only)
II. Players declare PC actions; GM decides NPC actions
III. Determine initiative
IV. Resolve actions

I. Determine Advantage: This is the "jump" one character or group might have on another when the encounter begins. It is used in situations such as two groups (friend and foe) stumbling onto each other unexpectedly, a group being betrayed by someone the members trusted, or the party walking into an ambush. The character or party who has the advantage automatically gets the first action and may have a bonus on chances to hit the targets.

Advantage is checked at the beginning of any encounter, before any actions are taken. After the first combat turn, advantage is normally no longer checked, since both sides are perfectly aware of what the other is up to—at least in general terms. In some instances, however, additional advantage checks may be called for: a new attacker appearing from an unexpected direction, or an event unanticipated by one or both sides.

The basic method for determining advantage is for both sides to roll percentile dice and compare the result to the highest Psyche score in each party. If the check passes, the group is forewarned, however slightly. If the check fails, the group is unprepared and the other side gains the advantage. If both sides succeed, no one is caught unprepared. If both sides fail, everyone is caught flat-footed. If either side rolls a 95–00, that group is *surprised*—caught completely off guard—and is particularly vulnerable. The "Advantage Outcomes" table appears on page 18. (The properties, equipment, and situations of different universes can modify a PC's check. Some possibilities include thermal sensors to spot what is normally unseen, or psionic powers to detect thoughts. Any such modifiers will be noted in the Universe Book.)

The side with the advantage automatically goes first on the opening turn of combat. Its members gain a +5 modifier on any attack or action opposed by the other group. The side without advantage goes second, and suffers a –5 modifier on any like action.

If one party is surprised, they essentially do nothing for an entire turn during which their opponents have the freedom to move, attack, talk, run away, or whatever (with the +5 modifier) without a reaction from the surprised group. In the next turn, the surprised group is considered unprepared while their attackers have the advantage (they act first and gain the +5 modifier, while their opponents act second and suffer a –5 modifier).

II. Declare Actions: Except for situations of advantage and surprise, you must declare what action your PC will take *before* knowing in what order both sides will act (the same applies to the GM). Tell your GM what action your character will take in the coming turn. Try to be as specific as possible, given that you don't know the intentions of the other side. For example, if your PC attacks, state her target in advance. The GM has many things to track, so the more you can help, the quicker and more exciting the game will be.

In general, it is best to keep actions short, ideally things that can be completed within 10 seconds. Not only does this help prevent confusion, it also means your PC is ready to react to new situations in the next turn. You should also be ready to say quickly what your PC will do, since the GM can penalize your PC for your hesitation. Combat requires snap judgments and you should be ready to play the part accordingly. Reasonable questions are allowed, but delaying the game while you try to make a decision is apt to result in your PC losing her action that turn.

III. Determine Initiative: If neither side has an advantage or surprise in combat, you need to know in what order everything happens. This is done by determining initiative at the beginning of every combat turn, unless one side has advantage over the other (because of die rolls or GM's ruling). A single initiative is normally determined for the entire group, although universes with detailed combat rules may require each individual to roll initiative.

Check initiative by rolling 1d10 and modifying the result. The modifier equals 10% (for simplicity, the 10s digit) of the best Reflexes score on each side. A character with a Reflexes score of 37 adds 3 to the die roll. Only those PCs present and active in the combat are considered in this initiative roll. The side with the higher modified die roll acts first.

In addition to PCs, any thing or event beyond the control of either group has its own unmodified initiative roll. If the enemy lobs a grenade at your PC's feet, at the start of the next turn the GM secretly rolls 1d10 for the grenade's initiative (to see when it explodes). Your PC may have a chance to throw it back, or dive for cover—or she may not.

Prepared actions, like holding a gun on someone and demanding surrender, are special initiative situations. Normally, the prepared PC (or NPC) automatically goes first ("Move and I shoot, you ugly bug."). However, your PC can try to beat out the opponent if you roll a successful Reflexes check. (The GM may apply modifiers to your chance of success.) If you succeed, your PC can take an action before her challenger reacts. Fail, and she just wasn't quick enough.

IV. Resolve Actions: Most often, this involves playing out some kind of combat. So, you'll need to know how you go about . . .

Hitting Your Target. Whenever your PC attacks (or is attacked), actually hitting what she aimed at is no guarantee. Virtually all attacks require a die roll to determine a hit or a miss. Only the inescapable are exempt from this rule.

In melee and ranged combat, your PC's base chance to hit equals her Reflexes score. However, this chance is modified according to the target area and the mitigating circumstances. If the roll is equal to or less than your PC's modified Reflexes score, the attack hits the target and damage is determined. If the roll exceeds the score, the attack misses.

Target Areas. Anytime your PC (or anything else) makes an attack, you must specify one of three target areas: general, nonvital, or vital. Different chances to hit apply to each area, and successful hits result in different damage effects.



General targets are anywhere on the opponent's body; your PC is just trying to land a fist or make a shot without concern for pinpoint accuracy. General targeting allows your PC to use her full Reflexes score before other modifications, and does not alter the damage done by the attack.

Nonvital targets are those areas of the opponent that if hit will stun, wound, or injure, but are unlikely to result in a kill. Trying to knock someone out or wing him in the arm calls for a nonvital target. Your PC's Reflexes score is halved when making a nonvital attack, and the chance of body damage is reduced by 2.

Vital targets are just the opposite: vulnerable areas that could lead to sudden death if hit. On humans, for example, these include the area around the heart and the head. Attacks on vital areas are particularly difficult, and so the chance of hitting is only 10% of your PC's normal Reflexes score (rounded up). The chance for body damage, however, is increased by 3 on a vital attack.

The "Target Modifiers" table appears on page 18.

Ranged Combat. Ranged combat (attacking with a weapon that shoots, flies, or is thrown) has special rules. While many of these depend on the universe (and its technology), certain features are common to all.

In each Universe Book, missile weapons (if any) are listed with their ranges and damage. Ranges are divided into *short*, *medium*, and *long* categories (some universes may also have *extreme*), measured in meters. When shooting at targets beyond short range, your PC suffers a penalty on her chance to hit. The exact penalty depends on the universe, since weapon effectiveness changes with each technology.

Furthermore, every character has a sighting range, normally 50 yards. Characters can see beyond this distance, of course, but when firing at targets beyond the sighting range, only general targeting can be used.

Combat Modifiers

Few battles are straight-up matches where heroes and villains duke it out toe-to-toe. Most are moving affairs with unique situations: things to get in the way, things to hide behind, and armor to wear. These situations are handled by combat modifiers, which are given in the Universe Books. In general, things that modify combat include:

Movement. Movement affects ranged combat, making targets harder to hit, but has no effect on hand-to-hand (melee) combat.

Armor. Depending on the universe, characters may have some kind of armor, be it the leather and metal of fantasy or the spun-fiber body armor of s-f. Most armor reduces the amount of damage caused by a hit. However, a few types—particularly things such as magnetic force fields or slippery suits—may make the PC physically harder to hit. These types of armor modify the attacker's chance to hit.

Cover. The most common kind of protection is something to hide behind—preferably something solid, so your PC can't be hurt. Cover is divided into *soft* and *hard* types. Soft cover is anything your PC can shoot through that still conceals the target: tall grass, bushes, curtains, leaves, even smoke are all types of soft cover. Soft cover reduces the attacker's chance to hit. Hard cover is anything solid that conceals the target: tree trunks, sandbags, rocks, and walls, for example. Hard cover has modifiers like soft cover, and may limit the target areas that can be chosen. What can't be seen, can't be shot.

Damage

Every weapon in a given universe, be it accelerated magnetic field rifle firing depleted uranium flechettes, enchanted saber, or fist, is rated for damage.

Damage is given as two numerals: a die range for the points of damage caused, and a *lethality rating*. For example, in *For Faerie, Queen, and Country*, the service revolver's damage is 2d6/5. It causes 2–12 points of damage per hit and has a lethality rating of 5. Whenever a hit is scored, the dice are rolled and that amount is subtracted from the target's stamina or body points.

Lethality Ratings: It is possible to seriously injure someone with anything, but it is a lot easier with some weapons than others. A hit from a club hurts, but most often only raises ugly bruises, while a shotgun blast tends to have far more fatal effects. The differences between weapons are reflected, in part, by their lethality ratings: the chance that any hit causes body damage instead of the usual stamina damage.

Each time you roll for a hit, you must note not only whether your PC hit or missed, but (if she did hit) what the 1s digit on the roll was. If this number is equal to or less than the lethality rating of the weapon (modified by the target area chosen), the damage caused by this hit is subtracted from the target's body points. Otherwise, all damage comes from the target's stamina points. Lethality ratings can never be less than 1 or greater than 10 (0 on the die).

Experience

Part of every RPG is improving your character: increasing attribute scores and adding skills. This is done by earning experience points (*xps*) to be used by the character. Experience points are a simple way to measure all the intangible things your PC gains from surviving dangerous adventures, risking heroic perils, and "living" an everyday life through your role-playing. After all, it stands to reason that when your PC talks her way past a spaceport customs inspector, survives a dangerous shootout, or uses her skills, she improves. Her hand-eye coordination might get a little better, her confidence might grow. Experience points are a way to measure these slow improvements.

The Goals of the Game

Experience points are not the be-all and end-all of role-playing. If you hope to be a good player (or already are one), then your reasons for playing should go deeper than merely earning more experience points



and making your PC more powerful.

A role-playing game is a *game*, first and foremost, and games are meant to be fun.

This should be obvious, but too often it is easy to lose sight of this fact in the pursuit of more experience points for your PC. Good players don't focus on the powers and items their PCs possess, whom they have defeated, or what they might control. Naturally, they strive for these things, but they also act out their character's personality, get involved in the stories, and work with the GM and other players. For these players, it is perfectly possible to have an exciting, enjoyable game session without ever once earning a single experience point for their characters.

Place the following goals above the mere "earning" of experience points. If you do, rewards for you and your character will come automatically.

Have a good time playing.
Act the part of your character.
Don't let your good time ruin everyone else's fun.

Awarding and Earning Experience

It is not the place of this rules section to list everything a PC can do to earn experience points. In fact, because the AMAZING ENGINE game system has so many different universes, a single list is impossible. Your PC can't earn experience for fixing a computer when you're playing in a fantasy setting of faeries and boggarts.

Each universe has its own list of experience point awards, designed to suit the needs of that universe. In a setting where high-tech space marines battle hideous aliens, combat is important. Players can expect characters to be rewarded for showing tactical skill, surviving battles, and defeating enemies. At the other extreme, another universe casts the PCs as ambassadors and detectives in a fairy-filled England. Shooting an attendant of Queen Maeve's court or blowing up a fairy ring with a keg of gunpowder is not the goal of that universe. Instead, players are rewarded for talking their way through sticky situations, preventing wars, and solving problems. The experience awards for the former setting will not work for the latter. Nonetheless, all share some general features.

Successful adventures. In any universe, a successful adventure warrants some experience points. "Success" depends on the universe and the adventure. Sometimes, it's enough to survive; in other cases, a specific foe must be defeated or a problem solved.

Using skills. People learn by doing. In the AMAZING ENGINE system, this is noted by rewarding characters with xps for using their skills in ways relevant to the adventure. "Relevant" means your PC can't just spend the day shooting at bottles to increase his Combat skill; bottles don't shoot back, after all. (If the skill were Target Shooting, it'd be a different story.) Using the skill has to involve some real chance of failure or risk for the character.

Role-playing. This is the object of the AMAZING ENGINE system, so good role-playing is rewarded with xps. This is a highly subjective GM call. It depends on the personality you have established for your character, the GM, and the situation at the moment. Good role-playing also means keeping what you *as a player* know separate from what *your character* knows. As a player, you know that sticking your hand into a fire is a Bad Idea, but your PC, Oog the caveman, discoverer of fire, hasn't learned that lesson—yet.

Experience and Multiple Universes

In most RPGs, you play only a single character at a time, and so only have to track the xps earned by that character. In this system, however, situations are often different. The most common possibility is that you will play in one universe, where your PC earns some xps, and then change to a different universe. What happens to all the xps your PC has earned to date? Few players want to give up all their advantages and start over. In this system, you don't have to.

Whenever your PC earns experience in an AMAZING ENGINE universe, *you must immediately assign the xps to either your current player character* (the one who earned the xps) *or to the player core* from which that character was created. Points assigned to the core are forever beyond the reach of your current player character. These points can only benefit characters created from this core in future sessions. Points assigned to your PC are available for immediate use, but cannot be given later to another PC in a different universe.

Within these two areas—player core and player character—you have four options for assigning experience points. With points assigned to the player character, you can *tax* the character's attributes, spending xps during play to temporarily increase attribute scores; or, you can use these xps to make permanent improvements to your existing character. With the points you give to the player core, you can buy extra dice for that core, thereby improving future characters created from it, or transfer xps to a new character in the same (or different) universe.

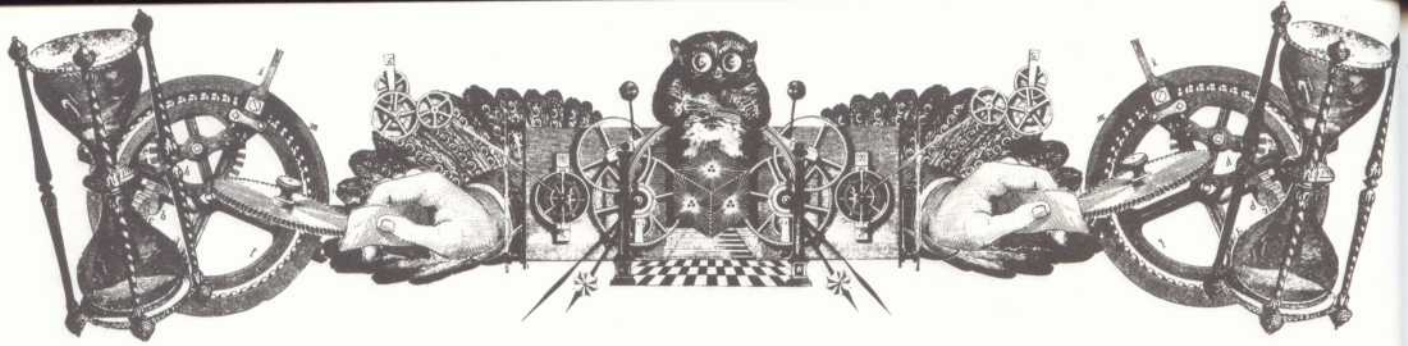
Taxing Attributes

The most immediate use of experience points is spending them during the course of play to temporarily increase an attribute score. This is called *taxing* your PC—forcing her to think a little more or strain a little harder. Taxing can increase her chance of success with a skill: pour on that extra burst of speed in a chase, or make a heroic effort to lift a great weight, for example.

When you want to tax your character, you must tell the GM *before rolling any dice*. Once the dice are rolled, your chance has passed, so be ready to decide quickly. At the same time, you should tell the GM how many xps you want to spend in the effort.

There are three limitations on how many xps you can use to modify the character's attribute score.

1. Your PC must have unused xps to spend on the attempt. (This applies to all uses of xps. There is no such thing as "negative experience.")
2. Experience points are spent in increments of 5: 5, 10, 15, etc.
3. Experience points spent in a taxing attempt cannot exceed 50% of the original attribute score. This means that the modified score



cannot exceed 150% of the original. Numbers are rounded down, to the nearest multiple of 5. For examples, see "Pushing the Limits" under "Movement," and "Example: Taxing an Attribute," under "Tables, Charts, and Examples."

Experience points spent to improve an attribute check are subtracted from the PC's xp total, regardless of the check's success or failure.

Improving Your Character

A more permanent method of improving your PC is buying points to add to your character's attribute scores. Unlike modifying an attribute score (taxing), these purchases are permanent. They are also more costly. The cost of these improvements varies from universe to universe. In one, it may cost 3 xps to raise an attribute 1 point; in another, the same change might cost 10 xps.

There are two limitations on buying increased attribute scores.

1. No attribute score can be increased beyond 90.
2. Permanent improvements cannot be bought during the course of an adventure. They can only be purchased after your PC has had time to reflect on her accomplishments.

Increases bought in this way are permanent for your character. Erase the old attribute score and write down the new one, then subtract the xps spent from the character's total.

Players can also buy new skills for their characters, improving their PCs by increasing the range of their knowledge and ability. The xp costs for buying skills can vary widely from skill to skill and universe to universe. Costs and procedures are described in each Universe Book, as needed.

Improving the Player Core

For long-term planning, you can look beyond your immediate character and instead assign points to your player core. With these points, you can buy additional dice for your ability pools. The purchase of additional dice has no effect on current characters; it only helps those created from the improved core in future universes and game sessions.

Each die of improvement to an ability pool costs 100 xps. Since improvements to the player core have no effect on your current PC, this kind of purchase can be made at any time.

Although theoretically the number of dice you can buy for a single ability pool is limited to 10 (allowing you to assign 5 to both attributes, the maximum allowable), a specific AMAZING ENGINE universe may set different ability pool or attribute limits on characters in that universe. It is best to check with the GM before over-investing in an ability pool for your character.

Without special Universe Book modifications, it is possible (eventually) to purchase dice for each ability pool sufficient to negate the use of the 7 "free" dice. However, this requires many, many game sessions' worth of xps, which must be assigned to the player core and not the PC who earned the xps. In general, we suggest that player cores reaching this limit (and the PCs created from them) be retired permanently, and that players create new cores and new prime characters. This eventuality is not covered within these rules. GMs are free to design their own rules to deal with this situation, when and if it occurs within their campaigns.

Transfer to New Characters

One unique feature of this game system is the opportunity to role-play in a variety of universes. In other RPGs, this means giving up any experience your character has earned. In essence, all the time you spent playing comes to naught when you start in a new world.

That is not the case in the AMAZING ENGINE system.

Each time you create a new character from an existing core, you can transfer xps from the core to the new character, with the following limitations:

1. The new character must come from the same core as the previous character (the one that earned the experience).
2. The two characters cannot be active in the same universe. A new PC from an existing core can appear in the same universe as a previous PC from the same core *only if the previous character is dead or permanently retired.*

Thus, in the MAGITECH game universe, your new PC could profit from the adventures of that marine sergeant from that old BUGHUNTERS game. Treat the transfer like a withdrawal from a bank account. The points you assign to the new PC cannot be "redeposited" later on, but new xps can be earned by the new PC and assigned to the player core (or to the new player character, as you choose). See "Example: Assigning Experience Points," later in this section.

Experience and Character Death

Unpleasant as the thought is, your PCs can (and will) die. When this happens, any experience assigned to that player character is lost, assuming you haven't used it all trying to keep the PC alive. Experience points assigned to the player core are *not* lost. These can be used by future characters created from the same core.

Tables, Charts, and Examples

The remainder of the rules section contains a complete example of character generation; reference tables and charts for the player core, movement rates, and carrying capacity; and text examples of various game-play situations showing application of taxing, skill checks, and more. You can use this section in several ways: read it in its entirety now, before continuing with the rest of the book; read only the parts that interest you, saving the rest for when you really need them; or ignore it, and turn to it later when you've become hopelessly lost. Seriously, though, if you need clarification on any of the points covered in the previous pages, the answers are probably in this section.



Example: Character Generation

Wolfgang is ready to create his first character for an AMAZING ENGINE game, and so he spends a little time thinking about what he wants. Having just read an interesting story about thieves, Wolfgang decides he would like a confidence man, a smooth-talking, quick-fingered individual with a modest chance for magical skill.

Based on his ideal con man, Wolfgang must decide how to rank the four ability pools. Since he wants his PC to be a very smooth talker, somewhat light-fingered, with a smattering of mystical ability, he rates the pools like this:

Physique: 2 (+10 points)
Intellect: 4 (+0 points)
Spirit: 3 (+5 points)
Influence: 1 (+15 points)

Remember, the pool rated 1 has the best chance for high scores; the pool rated 4 has the lowest chance.

Wolfgang now selects four attributes as his primary concerns. Since he really wants to have a personable character, he chooses Charm. To ensure his light-fingered abilities, his second choice is Reflexes. After pondering, Wolfgang realizes his character could end up short in street smarts, so he chooses Intuition, even though it is in his lowest-ranked ability pool (Intellect). For his fourth choice, he decides to take a chance and selects Position, so he can have a sophisticated con artist. He then rolls 4d10 for each attribute, with the following results:

Reflexes: 31
Intuition: 28
Charm: 17
Position: 23

Wolfgang now fills out the remaining attribute scores by rolling 3d10 for each and noting the numbers. When he is finished, his sheet looks like this:

Physique	Intellect	Spirit	Influence
Rank: 2	Rank: 4	Rank: 3	Rank: 1
Dice:	Dice:	Dice:	Dice:
Fitness: 16	Learning: 23	Psyche: 21	Charm: 17
Reflexes: 31	Intuition: 28	Willpower: 7	Position: 23

Now, it's time to add the die modifiers according to the ability pools' ranking. Wolfgang starts with his first-ranked pool, Influence. He had bad luck rolling for Charm (and he really wants a personable character), so he adds all 15 points to Charm. In Physique, Fitness is a little low, so he splits the 10 available points between Fitness and Reflexes, 5 each. Under Spirit, the character's Willpower is dangerously low, so Wolfgang feels he has no choice but to add all 5 points to that score even though he would like a better Psyche. He rolled well for his Intellect attributes, which is fortunate since he cannot modify either score (it's the fourth-ranked pool, which gains no modifiers).

Physique	Intellect	Spirit	Influence
Rank: 2	Rank: 4	Rank: 3	Rank: 1
Dice:	Dice:	Dice:	Dice:
Fitness: 21	Learning: 23	Psyche: 21	Charm: 32
Reflexes: 36	Intuition: 28	Willpower: 12	Position: 23

Looking over his character's final attributes, Wolfgang decides the PC is nimble-fingered (high Reflexes) and smooth (good Charm), with a good sense for danger (from his good Intuition). His character is not the strongest or healthiest (only average Fitness), and he needs to work on his psychic abilities (only average Psyche). Finally, with a Willpower of 12, Wolfgang decides his con man is something of a craven fellow, who more often than not "runs away to live to fight another day."



Having created his PC's statistics, Wolfgang now finishes creating the player core by assigning the dice ratings to each ability pool.

Physique	Intellect	Spirit	Influence
Rank: 2	Rank: 4	Rank: 3	Rank: 1
Dice: 6	Dice: 6	Dice: 4	Dice: 6
Fitness: 21	Learning: 23	Psyche: 21	Charm: 32
Reflexes: 36	Intuition: 28	Willpower: 12	Position: 23
(21+36)/10=5.7	(23+28)/10=5.1	(21+12)/10=3.3	(32+23)/10=5.5

****

After running a fantasy campaign for some time, Wolfgang's GM decides to switch to a science-fiction universe. Since there is no magic in this s-f setting (and since he's getting tired of playing thieves and scoundrels), Wolf once more chooses a role he might like to play. Knowing from his player core that his PCs will tend to be strong in Physique and Influence, Wolf decides to try for a hard-bitten smuggler captain. Checking his player core's xp total, he sees that there are 150 points he can work with. Since his Spirit pool tends to be weak (just because of bad dice rolls), he decides to purchase 1 additional die for that pool. He crosses off 100 xps (the cost of 1 improvement die) from the player core's total, and adds 1 die to the dice rating for his core's Spirit pool. Then, he divides his pool dice according to the dice ratings, and then assigns his 7 "free" dice to Fitness (2), Willpower (3, because it was very low), and Position (2).

Physique	Intellect	Spirit	Influence
Rank: 2	Rank: 4	Rank: 3	Rank: 1
Dice: 6	Dice: 6	Dice: 5	Dice: 6
Fitness: 5 dice	Learning: 3 dice	Psyche: 3 dice	Charm: 4 dice
Reflexes: 3 dice	Intuition: 3 dice	Willpower: 5 dice	Position: 4 dice

After all the dice are assigned, this PC's Fitness and Willpower attributes have the maximum number of dice allowed (5). Wolf rolls and notes the totals for each attribute score, with the following results:

Fitness: 26	Learning: 18	Psyche: 23	Charm: 24
Reflexes: 13	Intuition: 29	Willpower: 17	Position: 25

Once again, he rolled incredibly well for Intuition and not so hot for Willpower. Looking at his new character, he starts with the first-ranked ability pool, Influence. For this universe, he wants an important character and so puts all 15 points toward Position. In the second-ranked Physique pool, he puts 4 points to Fitness and 6 to Reflexes, while for the third-ranked Spirit, he gives all 5 points to Willpower.

Fitness: 30	Learning: 18	Psyche: 23	Charm: 24
Reflexes: 19	Intuition: 29	Willpower: 22	Position: 40

Wolf decides to transfer the remaining 50 xps from the player core to this new character, making those points immediately available during play (for taxing attributes, just in case). Wolf might also choose to use some of those xps to purchase some new skills for this PC, after his first adventure is completed. He notes the 50 xps on the new character's sheet, and subtracts them from the player core's total.

With these adjustments, Wolfgang's new character is ready for play.



Movement Rates

Movement Type	Distance per:		Duration	Fitness Check
	Turn	Minute		
Walk	15 m.	90 m.	Indefinite	None
Run	Fitness	Fitness × 6	Minutes = Fitness	Yes
Sprint	Fitness x2	Fitness × 12*	Turns = Fitness/10	Yes

* If character has sufficient duration.

Carrying Capacity

Kilos Equal to:	Effect on Movement:
Fitness score	No effect
Fitness score × 2	Sprinting and running halved
Fitness score × 3	No sprinting or running allowed, must rest after walking meters = Fitness score

Target Modifiers

Target Area	Chance to Hit	Dam. Effect
General	Reflexes	None
Non-vital	50% Reflexes	–2 to type
Vital	10% Reflexes	+3 to type

Advantage Outcomes

Condition		NPC		
		Successful Psyche Check	Failed Psyche Check	95-00
PLAYER	Successful Psyche Check	No advantage	Player has advantage	Player has surprise
	Failed Psyche Check	NPC has advantage	No advantage	No advantage
	95-00	NPC has surprise	No advantage	No advantage



Example: Skill Checks

Karen's character, Leonardo "Big Shark" Accardo, needs to make a hasty getaway from the law. Flying Carpet skill, which Leo has, is Reflex-based. Karen knows Leo's Reflexes score is 36.

Wasting no time, Leo jumps onto his Mach flying carpet, recites a quick incantation, and zips into traffic on Michigan Avenue.

No skill check required. *Starting and flying the carpet is a common enough action, one Leo does every day, hence no skill check is needed.*

As he weaves through the late rush hour traffic, Leo looks back. Chicago's finest are in hot pursuit. Leo's in trouble! He can't outrun a police special carpet, especially not in this traffic. His only hope is to lose them with some quick turns. A gap in the traffic appears just ahead, so the Big Shark commands his carpet to pour it on. He darts across the lanes and whips onto a side street faster than is safe.

Skill check required. *Karen is having her character take a chance, the equivalent of skidding around a corner during a high-speed car chase. She rolls percentile dice and gets a 21, which is less than Leo's Reflexes score. The move succeeds, and Leo doesn't crash his carpet.*

White-knuckled, Leo careens around the corner, narrowly missing an oncoming bus golem and the plate glass window of Bessom's Department Store. Unfortunately, the cops make the turn too, and are now gaining on him. Still speeding, Leo banks his carpet again, this time aiming for an alley. Just as he begins the turn, a giant steps from a service entrance, blocking the opening! It's too late to change course, so the only thing Leo can do is try to shoot between the fellow's legs.

Modified skill check required. *Taking the turn too fast already required a skill check, so the GM assigns a –10 penalty for the added trick of trying to steer between the giant's legs. This reduces Leo's Reflexes score to 26 for this skill check. Karen rolls 57 on percentile dice. The check fails; Leo doesn't make it.*

Oh no! Startled, the giant instinctively moves to protect himself, closing the gap Leo was aiming for. Too late to stop, the carpet hits the brute right at his knees, and crumples like a limp rag. As Leo is flung from the crash, he hears the howls of the police as they, too, bank into the pileup.

Example: Skill Check with Penalty for Nonspecialization

Leo has a tip on a shipment of smuggled magical artifacts stored in a warehouse near the trainyards, just the evidence he needs to spring his client. All he has to do is break in and get a few pictures. That night at the back door, Leo figures he ought to check for burglar alarms before forcing his way in. Leo knows the basics of glyphs (Glyph Analysis skill), but is no expert in burglar alarms (Protection Glyph specialization). Checking the door for alarms is pretty basic for a specialist, but for Leo a skill check against his Learning score (which is only a 23, with an additional –5 for nonspecialization) is required. The check is rolled, and the result is a 12: Success! Sure enough, the door is enchanted.

Now, Leo tries to deactivate the alarm. This requires a skill check for a specialist, and so is very difficult for Leo. The check is made with a –15 applied to the attribute score (–5 for nonspecialization, –10 for the action) for a total chance of success of 8 or less. Amazingly, Karen rolls a 04! Leo manages to temporarily dispel the alarm.

Example: Attempting an Unknown Skill

Once inside the warehouse, Leo begins searching through the crates. Suddenly, just as he finds a suspicious one labeled "Excalibur," a footstep scrapes behind him. Leo spins, pulling his gun as he does, to find himself facing a centaur thug. A quick hoof kick sends Leo sprawling, his gun clattering across the floor. A second blow just misses, shattering the crate next to his head and spilling the contents—the sword—half out of the box. In desperation, Leo grabs the sword and pulls it from the box. "Ain't the same as bullets, but you'll have to do." As he clumsily swings the sword up over his head, it begins to glow.

Karen never thought her character would need a sword, so Leo doesn't have Fencing skill. However, since Fencing is a nonLearning-based skill (one that uses Reflexes), Leo can attempt swordfighting—but at an 18, half his normal Reflexes score.

Example: Taxing an Attribute

In a campaign of *For Faerie, Queen, and Country*, Karen's character, Colonel Sir Jameson Pickering, K.C.M.G., ret., suddenly senses a wave of magical power while attending an important diplomatic ball. Frantically looking about, he sees the villainous sorceress, Countess Angevin, standing in the shadows on the portico. Their eyes meet and before Sir Jameson can warn anyone, a magical paralysis creeps over his limbs as the countess imposes her seductive will. The situation is dire, so Karen decides it's time to tax Sir Jameson's Willpower to break the spell. The normal attribute check to resist possession is equal to the Willpower score halved. Sir Jameson's Willpower is 46, halved to 23 for the check. Karen looks at the available xps assigned to Sir Jameson, and decides to spend the maximum (50% of the original attribute score, or 20 points) to bring the relevant attribute score back to 43 for this check only. The dice roll is a 32; with strain, Sir Jameson breaks the countess's gaze and makes his way into the drawing room for a cigar.



Example: Assigning Experience Points

Michele's character, Plt. Sgt. Adrian 2 Selinko, United Terra Reconnaissance and Peacekeeping Force, has just returned to the "booze barge" (as UTRPFers refer to their HQ on Earth's L-5 station) from a bug-hunting mission on a mining outpost at Barnard's Star. The GM awards experience for that mission, and Sgt. Selinko receives 75 xps for repulsing a swarm of chitinous predators. Michele must assign the xps immediately, so she adds 50 points to Adrian's xp total (the player character) and the remaining 25 to the Player Core XP line on her character sheet.

The 50 points assigned directly to Adrian can be used for taxing attributes during the course of an adventure, or for purchasing increased attribute scores after the adventure is completed. The 25 points assigned to the player core will never affect Adrian directly, but will benefit future characters created from the same core.

Example: Damage and Lethality Rating

WO1 Selinko watches in horror as the xenoforms outmaneuver her squad, three of the creatures lunging in for the kill.

The GM rolls three attacks, one for each stalker, and decides that all attacks will be at general target areas, as this is easiest. The stalkers have Reflexes of 62. The die rolls are 83, 17, and 23, so two of the creatures hit and one misses. Each attack causes 3d6 points of damage and has a lethality rating of 4. The first hit (17) causes 6 points of stamina damage, subtracted from the trooper's total of 25. The second attack does 8 points of body damage (not the standard stamina damage, because the 1s digit—a 3—was less than the lethality rating of 4), but the trooper only has 7 body points. The extra damage is ignored.

One of the soldiers reels back, cut, but not seriously, by a xenoform's slashing claws. The other trooper isn't so lucky, as a stalker strikes him dead in front of platoon leader Selinko.

"Eat this," she snarls while unloading her flechette clip into the creature's gaping maw.

AMAZING ENGINE® Role-Playing System Player Core Sheet

Physique	Intellect	Spirit	Influence
Rank:	Rank:	Rank:	Rank:
Dice:	Dice:	Dice:	Dice:
Fitness:	Learning:	Psyche:	Charm:
Reflexes:	Intuition:	Willpower:	Position:

Player Core xps:

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The Graffiti Mindset

—Chinese curse

Watch out for worlds behind you.

—The Velvet Underground

Welcome to the *Kromosome* setting for the AMAZING ENGINE® role-playing system. *Kromosome* takes place in a world of lurking biological nightmares, where chaos is the order of the day. The world has been overrun by biotechnology, automated factories, social collapse, industrial entropy, and the decay of cities. Economic warfare wracks the major power blocs. Plague and famine kill millions yearly. Ecosystems are imploding at a variety of speeds. Man and machine are fusing, and no one knows what will rule the new order now being born.

In the midst of this massive decay and collapse, some forces still promote change and growth: Artificial intelligences are reordering governments, pioneers in the asteroid belt are pushing the boundaries of evolution into posthuman stages, and new fusions of man and machine are increasing chances for the survival and evolution of the species. Electronic communities bound together by the Net are restoring human ties and fighting for the oppressed.

Several forces have prevented complete collapse so far: Biotechnological advances hold back plague and disease; biotech engineering provides new food and energy sources; and the asteroid belt produces raw materials and resources to meet the needs of the Earth's billions. New corporate structures give some hope of economic stability, and the all-pervasive, living Net offers the chance that new politics will unite the fragmented nations.

The player characters (PCs) in *Kromosome* are bound together by technology. They are members of an agile and competitive microcorporation able to survive in the international jungle. They are caught in the crossfire between organic and inorganic life, as both biology and electronics make radical leaps forward. Justice doesn't have many champions, but a few on the inside have the leverage to change the world. PCs tackle the problems that no one else wants to face. The world is shattering, but with luck, the heroes can patch it together for a little longer. Their goal is nothing less than overturning the dystopia and restoring hope for the future.

May you live in interesting times.

Attitude

Survival in the biopunk future is not easy. Characters must struggle to overcome the odds or die trying. Fortunately, the AMAZING ENGINE rules allow a player to advance his or her character core even if one or more individual characters suffer immune system burnout or crippling wounds. Canny players will put experience points into their character core.

Survival is a matter of style, tactics, and smarts, not firepower. Stealth, smooth talking, and a grenade launcher will get you further than a grenade launcher alone. Observe the following rules for improving the odds.

Surviving *Kromosome*

- Don't outgun the enemy if you can outthink him.
- Do the job, then get out. Don't do anyone extra favors.
- Depend on yourself and no one else.
- Never show how good you are; always hold back a little.
- Cover your corp's back and hope it's covering yours.
- Don't believe the hype until you've checked it yourself.
- Never trust the locals.
- Nobody's so tough, so rich, or so smart that he can't be taken down.

No Borders

The world of *Kromosome* is full of contradictions and collapses. The world's borders are vanishing things, increasingly irrelevant to a world controlled by a single market, a single set of standards, even a single culture. Travel is decreasing. Why cross the border if everything is the same on the other side? Global communication makes events everywhere seem close. Pockets of ethnicity and national pride remain, but visual, Net-driven culture has driven out most regional variations. The further a given culture is from Net access, the more distinct it is.

Everything is subject to the invisible hand of capital and everyone has his or her price. Life is not sacred: It is something that can be studied, dissected, and rearranged at the genetic level. People are collections of genetic messages, and for the first time humans have the power to rewrite them. The rich tolerate the masses as sources of genetic diversity and as experimental subjects. Rumors claim that some powerful special interest groups actively encourage pollution and mutations, hoping for new genes that the wealthy can engineer into their own bodies.



The rich, industrialized world is muddling through. States and large corporations have been largely replaced by nation groups, trading blocs, and microcorporations, especially those in low earth orbit that control half the world's power grid. Even the richest individuals are being replaced by interlocking corporate power blocs, shut out of the decisions that change the world. Solar energy, natural gas, and information are the most important commodities, and they are entirely controlled by a handful of powerful corporate states and power blocs.

Individuals are less important than they once were. Poor citizens have no voice at all, as their governments increasingly work without their support. Small governments are in retreat: Taxpayers revolt, corporations ignore them, and civil servants simply feed into huge bureaucracies serving the interests of microcorporations and anyone else who promises to create jobs and larger tax bases.

The world stabilized a little after the Data Panic that rocked the global economy, and a new institution has taken charge. Microcorporations—small, agile businesses able to respond quickly to new conditions—rule the earth, having replaced the extinct corporate dinosaurs. Owned by their employees, they took the place of the family, regional, and national institutions that had failed. The player characters have formed their own microcorporation, linked by genetics, finances, and cyberware. Hope it's enough.

Warning and Disclaimer:

The AMAZING ENGINE Rules

As part of the AMAZING ENGINE line of role-playing games, the *Kromosome* rules build upon the core rules in the AMAZING ENGINE game *System Guide,* which is included in this book.

If you have never created an AMAZING ENGINE character before, the *System Guide* tells you how. The *System Guide* also explains the basics of skill checks, combat, and improving characters through experience—terms and concepts important to *Kromosome.*

If you have already generated a character in another AMAZING ENGINE game universe, you are ready to decant that character's *Kromosome* incarnation. This section describes the setting your character will be stepping into.

Rich & Poor, Young & Old

The concentration of technology and resources in the rich, developed nations led to snowballing levels of wealth and power. At the same time, poor nations unable to modernize or adapt to new technologies, new jobs, new governmental forms, and new currencies crumbled under the weight of their exploding populations, which were increasingly alienated and dislocated. Just keeping up with the pace is exhausting for many.

Low birth rates among the rich and educated mean that the elite of the world have become a smaller and smaller percentage of the population: The poor continue to grow while the rich are stable or even declining in population. All people are demanding more as the Earth's resources are running out.

The resource crunch and biosphere crashes have led to a new, Gaia-centered philosophy, almost a form of ecotheology. It has taken hold at the ground level in many countries, complete with fertility rites intended to restore the dead or dying land. Though the Earth Spirit cult has no central hierarchy, the number and fanaticism of its members make it powerful.

Lack of resources has also driven exploration of near space. The few settlers of the Belt find ready markets for the vast mineral and energy resources they offer. At the same time, the Belt frontier needs many manufactured goods and is glad for bioware that helps people survive in an unforgiving environment; the Belt places no restrictions on new bioware.

Back on Earth, anger simmers between the young micros and the old corps, the stodgy power of monopolies feeling threatened by the vigor and the strength of the new generation. Youth culture seems unable to establish itself in the face of senior citizens living longer and longer and keeping their withered hands on the levers of power. The turnover of generations has stalled and the old branches on the human family tree stubbornly refuse to die off to make way for new growth.

It is an open secret that the top executives of the three megacorps are seeking immortality through mechanization. The CEOs, CFOs, CIOs, COOs, and directorial boards of all three want to be made into AIs when they die so that they can continue to rule beyond their physical deaths.




Happiness is a warm gun.



Things Fall Apart

The sections below cover both the natural and artificial ecology, new technology, new businesses and markets, and new political realities of the *Kromosome* setting.

The New Ecology

In the *Kromosome* setting, most natural ecosystems have collapsed, overwhelmed by pollution and humankind's crushing numbers.

The collapsing ozone layer almost killed all plant life, taking the rest of the food chain with it near the poles. Even in the middle latitudes, skin cancer and cataracts are common problems. Ultraviolet light can quickly kill anyone venturing out in the sunlight unprotected.

The oceans are poisoned with PCBs and heat shifts. Most large ocean species died out decades ago; those that survived are often too toxic to be edible. The oceans are shielded from the effects of UV, and some gigantic fish farms near Antarctica remain profitable.

Fortunately, complete destruction has been avoided so far, but the PCs should never take their safety in the outdoors for granted.

Entire regions are biological badlands: the poisoned Ukraine, acid-drenched Central Europe, most coastal flood plains, and the desertified equator. On the other hand, much of Siberia and Canada have become quite livable, Greenland is green once more, and even Antarctica has attracted a few settlers—mostly miners.

Animal species have not adapted well to rapid change. Whole forests had to be transplanted north. Coastlines surged inland, and Dutch engineers are much in demand in the thriving ports of Asia that need protection from typhoons and monsoons. In only a few decades, the face of the Earth has become almost unrecognizable.

Welcome to the Hothouse

The greenhouse effect has created the largest shift in the earth's climate. When the oceans warmed and the ice-caps melted, coastal flooding led to waves of eco-refugees, from Egypt to Florida, from Bangladesh to India. The hordes led to more political instability, multiplying the effect of ecodisasters.

At the same time as the greenhouse effect, massive overfishing crashed the populations of almost all marketable fish. Toxic dumping made the remainder inedible.

The Oglala aquifer dried up, ending irrigation of the Great Plains. Grain stocks crashed. The Great Plains are a dust bowl now, though the Cherokee and other Native American nations have had some success with land reverted to buffalo pasture. These New Prairie herds and settlements are under strict Native American control in semiautonomous regions.

Bioregions

Not everyplace is unsafe; pocket-sized ecological paradises exist where money, power, and resources intersect. The Islamic Republics have restored the old buildings of Fez and glorified the mosques. In the east, icy Katmandu serves as the retreat of the Pacifican leaders, high in the Nepalese Himalayas but with air pure and untainted.

Baikonur, the site of the first orbital launch, is still an important site for unmanned cargo and Esoterika's Mars missions. Baikonur's greatest competition comes from Brunei, where the Sultan maintains his own skyhook. Brunei is also the planetside outpost of NeoTek.

Ulan Bator, the Mongolian capital, is increasingly a transhipment center between Pacifican factories and Siberian resources. Ulan Bator is booming; new buildings go up daily, a new maglev spur of the TransSiberian Railway leads to Beijing and points south, new ventures to exploit Siberian resources appear and expand daily. Pacifican and Esoterikan interests are predominant, but the European Community also maintains a presence. Rumors of Esoterikan development of secret research sites in the Gobi Desert have, so far, remained unconfirmed. All the while, the Mongolians get a cut of all the action.

Estonia is a well-known spot for avoiding regulations and playing in the ultimate free market. It functions as a border area and neutral ground for combatants, as Helsinki across the Gulf of Finland once hosted negotiations and diplomats. Tallinn, the capital, is a sparkling city of smart houses, saunas, and the midnight sun. It is a popular site for negotiations between Esoterika and the EC.



The world is not well arranged.
—Chinua Achebe

Vancouver is primarily a shipping and financial center. It is clean and friendly, and popular with Pacifican tourists. White-collar crime is common, but rarely prosecuted. Recent accusations of Russian money being laundered through Vancouver have tarnished the city's image slightly.

Santa Fe retains its small size and heritage by aggressively keeping out non-natives; it is an artist's mecca. In addition, it is a technophile's dream, where many entrepreneurial companies are expanding the envelope of neurolectronics and human-machine interaction. Intellectual spill-over from Los Alamos National Labs keeps Santa Fe smart and sophisticated.

Tobacco- and hemp-money keep Memphis relatively clean, and its riverboats, blues heritage, and genteel civility have made it an important central escape valve for corp execs. The collapse of employment due to ecological warfare has simply made hiring workers for the tourist trade cheaper.

Denver is still often the host of religious and sporting events, and many mansions are a cross between leftover survivalist fortresses and luxury hideaways. Skiing in the Rocky Mountains has declined because of the terrible dangers of UV. Though hot tubs have moved from ski spots to private estates, the culture of indolence remains.

Edinburgh, the capital of Scotland, is likewise afflicted by increasing UV danger but otherwise is much greener, richer, and friendlier. Scotland controls access to substantial oil deposits in the North Sea, and the new oil money makes the capital gleam with lavish spending on the arts.

Important bioregions that are still fertile and even becoming more productive include the Pacific and Indian oceans, Mississippi River delta, Amazon River basin, the valleys of the Nile and Congo, the Himalayas, the Australian outback, the southern edges of Siberian and Canadian tundra, and most South Pacific islands.

The major contaminated or collapsed ecosystems include the Arctic and Atlantic oceans, the river valleys of the Danube, Indus, and Rhein, the Yellow River basin, the Mediterranean basin, the Caribbean, the Great Plains of North America, the Sahara and surrounding regions, the South American pampas, and Scandinavian boreal forests.

Fauna

Most large animal species are extinct, but a few new ones have established themselves. All predators and animals that require large undisturbed habitats—wolves, tigers, lions, elephants, and others like them—no longer exist outside zoos. Most aquatic species are gone, including salmon, whales, dolphins, and tuna.

Scavengers and vermin thrive in the expanding urban sprawls. Rats, raccoons, roaches, squirrels, and pigeons still survive.

Zebra mussels have been used to stabilize some aquatic ecologies and have been deployed as weapons to destroy others. They take over freshwater areas with incredible rates of reproduction and resistance to most chemical and biological pesticides; because they mutate quickly, they also develop resistance to new pesticides quickly. Zebra mussels measure only 5cm long. If released in the wrong places, they clog intake valves at factories and power plants and ruin sewer systems, wells, irrigation pipes, and reservoirs.

The new species include genetically modified apes, dogs, cats, and bears.

Flora

While algae in the Arctic Ocean have died off entirely, new weeds have been genetically engineered to withstand increased pollution, the collapsing ozone layer, and rising temperatures. These include creeping hollander, variegated ressim, and nargkhat.

A few new weeds have been used as weapons of economic warfare, released in enemy territory to clog waterways, crowd out crops, or slowly eat away at infrastructure. The most infamous is propweed, an aquatic form of kudzu which has covered the waterways of the Mississippi and the Yangtze. Another variant of kudzu called tiger's paw has overrun the rice paddies of Asia.

Entire forests have disappeared in Europe, in Siberia, and in Canada, logged into extinction or killed by rising temperatures. The remnants of the Amazon rainforest remain, as well as most of the forests of Africa, the U.S., and Australia.

The Fallen Sky

The ozone layer has collapsed in the northern and southernmost regions and thinned everywhere else, allowing UV light to burn the eyes and skin of people near the poles. The thin ozone is responsible for increased cataract blindness and cancer fatalities. Alaska, Argentina, southern Australia, Chile, Finland, Greenland, Iceland, New Zealand, Norway, northern Canada, parts of South Africa, and Sweden are scorched; few plants can survive the deadly UV light there.

Even closer to the equator, where the ozone layer still offers some protection, blindness or death is the price for failing to become nocturnal or take precautions against the sun. Few people venture out during midday, and the tradition of the siesta has been revived throughout the Americas to avoid the most dangerous part of the day. The population is split into two new cultures, a day group that uses skin protection, powerful sunglasses, and UV-shielding hats and clothing to continue the traditions of life before the sky fell, and a night culture that avoids sunlight altogether. The night owls are a strange breed, moodier and more aggressive than the daylight humans.

Famine

Drought has combined with the increased UV to destroy agriculture in the exposed countries listed above, plus the drought-stricken Great Plains, Ukraine, and parts of China. The Scandinavian nations sustained themselves by harvesting the last whales and Alaska hung on by the remains of its oil reserves, but all other polar populations migrated toward the equator. The largest remaining population group outside the tropics and temperate zones is the Antarctica Mining Corporation, which



Take time to stop and smell the roses.



The power of population is indefinitely greater than the power in the earth to produce subsistence for man.
—Thomas Malthus

mines the uranium deposits near the South Pole; its members are strictly nocturnal.

The Saudi aquifers dried up early in the 21st century, and the land under cultivation plummeted by 95% despite extensive use of desalinization. As a result, Middle Eastern countries must import much of their food. While oil-rich countries like Saudi Arabia can afford this, many oil-poor Arab countries cannot. Even though the oil wells have mostly gone dry, the mountains of oil money remain in Arab hands.

Overgrazing led to mass starvation of almost all herd animals around the Sahara. Much of Africa starved, while the granaries of the West overflowed. For decades, Africa couldn't feed itself and couldn't afford to buy food. Millions of immigrants began a new wave of mass migrations to Europe and the Americas; others became vegetarians out of necessity—no grain could be spared to feed animals.

Recently, new biotechniques—paid for with Nigerian oil wealth, assisted by Polygene's expertise—have turned much of Africa into a breadbasket, unspoiled by radiation or centuries of industrial pollution. Rains that once supported the irrigation of the fertile Mississippi River delta and the great North American grain belt have moved into Minnesota, Alberta, Manitoba, Ontario, and Saskatchewan.

China has always had trouble feeding its people, but the rise in average temperatures was a disaster for Chinese agriculture. Rice will not grow at temperatures above 95 degrees Fahrenheit. With the greenhouse effect driving up temperatures, by the middle of the 21st century the Chinese rice crop failed regularly. Tens of millions died in the ensuing famines, but other nations were collapsing at the same time. Polygene and other genetic engineering corps have been scrambling to modify rice's preferred temperatures, so far without success.

Plague & Plague Cities

Cruel as it sounds, the new plagues that ravaged Africa, India, the Islamic Republics, and Asia made more food available for those who survived—the famines would have been worse without the plagues. Millions died, but the world population grew faster than even epidemics could reduce it. Modern plagues of AIDS, hepatitis F, and the manmade Kismayan flu kept the population near sustainable levels.

Rich nations avoided the worst of the plagues with public education, preventive health care, and expensive treatments, but they suffered as well. All industrialized nations began seeing cases of HIST (human immune system termination), a form of pollution overload first reported in Mexico City. The first symptoms of this still-deadly disease are usually allergic reactions, rashes, headaches, fatigue, and diarrhea.

Cures exist for a few forms of cancer, but they are extremely expensive, with treatments genetically engineered to each patient.

Too Many Mouths

The world population is 13 billion and still growing, and even agricultural biotech won't feed everyone. Famine is common in India, Russia, and even the Islamic Republics. Africa can feed itself, but only barely. Every bit of fertile ground is farmed to the limit.

Efforts to keep numbers in check have grown more and more oppressive: Genetic or hormonal castration is now a common punishment for felons in the U.S., forced sterilization after the second child for women is common in Africa, and hormone locks are wildly popular in China. Every so often, hormone locks crop up outside China. These are usually inflicted by quacks, fanatics, or government programs, but the trail to the perpetrator is normally too cold to follow by the time the genemod is discovered.

The world population includes three billion Chinese, two billion Indians, two billion Africans, 500 million Australians and South Pacificans, one billion Europeans, three billion Hispanics, and one billion North Americans. All of the population growth occurred in Asia, Latin America, and Africa.

The same trend was at work in the USA, where whites stopped being a clear majority decades ago. Most of the population of the USA is nonwhite, though whites and Hispanics have about equal numbers. Every U.S. citizen can take advantage of civil rights legislation that protects minority status.

A/N post, zero parity, full echo, full filter
Sector: Islamic Republics, Node: Mecca, User: Angel, 00:33:49, 1.12.43
>>Animals are more important because the rats and roaches are getting smarter. Actually, I relate to the parasites; they take our dirt and live on it. (I sound like a Mother Earther!) Anyway, I don t mind the dirt, I don t mind the garbage, and I don t mind the crowding. What really gets me is the smell. Belters say it s the same on stale ships and colonies. Anyone have better advice than buying a filter mask?<<

Where human life is plentiful, it is cheap; millions die every year of floods, famine, and plague. Oddly, animal life has grown in importance as humans have crowded out every other species.

Colonists and belters come to barely 20 million, a tiny fraction of the world population, though their influence is enormous. Surveys indicate that most people would rather take the risks of the Belt than live in the filth and decay of the cities, but the cost of getting out there is prohibitive for all but the wealthiest—and those who are willing to sell themselves into indentured servitude.

The New Corporation

As the population grew unmanageably huge, the need for masses of undereducated, cheap labor declined. Robotic factories were already common in Japan, where the 30-hour work week became a reality after





The sun rose dim on us in the morning, and at night it sank in a dark cloud, and looked like a ball of fire.
—Black Hawk

the Economic Union Treaty with China provided workers for Japan's factories. Outside Pacifica, massive unemployment, declining standards of living, and rising deficits became the norm. The crushing burden of supporting the growing senior citizen population—often more than one retired worker for each active one—is a terrible encumbrance on the youngest, most productive workers.

The dollar finally collapsed during the Data Panic, and took many venerable institutions with it. The panic was set off by six overlapping viruses introduced into the Net at access nodes by the Basque Army of National Liberation. The electromagnetic disease wiped out the data cores in Frankfurt, Hong Kong, London, New York, Shanghai, and Tokyo by infecting all backup records for a full year before anyone knew of it. The loss of all financial records from the world's banking capitals led to the repudiation of many debts, and the collapse of banks, corporate lenders, and entire nations. The web of debts and obligations was irreparably torn, and though the stockbrokers and bankers scurried like spiders, applying damage control and rerouting and falling back on contingency plans, the whole sticky web failed utterly.

The corporate revolt that ensued in the wake of the Data Panic was the beginning of economic democracy, erasing all but three of the corporations of the age of capitalist feudalism. The three survivors controlled almost all energy production, biotechnology, space transport, and communication. To guard against future panics, the Net was given much greater autonomy to create triple-redundant, self-checking immunization routines. It achieved many basic life functions to regulate finances, employment, and currency markets, but has still not achieved sentience.

Though the Data Panic took down corps and nations, the real sufferers were individuals. When both the economy and environment fell apart, the cities followed. Everything was inadequate: There wasn't enough food to feed workers, there wasn't enough energy to maintain services, there weren't enough resources to provide relief. Millions became subsistence farmers on marginal land or became permanently unemployed welfare victims. Industrial cities withered as they diverted resources to putting down riots. Everyone expected a handout; none came.

The only bright spot in a sea of abysmal annual reports and red ink was the invention of the microcorporation, a new type of enterprise that succeeded at mastering the dataflows and flourishing in the toxic atmosphere of chaos and loss. Most started as gangs, co-ops, or small businesses owned by their workers, but they all learned to work hard and fast, and to stay flexible. They sold temporary services, information and analysis, Net skills, and light industrial goods.

The big corporations laughed at or ignored the tiny shops, the global consultants, the firms without offices and without ranks. When the crunch came, the megacorps died like dinosaurs, and the mobile, resourceful micros survived.

The microcorps are urban tribes, each equipped with what it takes to thrive in a hostile environment. Each member of this family has skills and resources that the others need to survive. They stay as small as possible to allow rapid redirecting, and yet must be big enough to marshall enough resources—human and others—to do the job.

The New Old Order

Long ago, in the 20th century, there were multinational corporations. Then came the decline of national states and the rise of corporate ones, and then the collapse of the corporate states in their turn. In the postcorporate age of *Kromosome,* cartels, trading blocs, and a few large regional bodies hold the levers of power.

Three large multinational megacorps survived the great corporate extinction: NeoTek, Polygene, and Esoterika. Each of these dinosaurs controls a powerful chokepoint of the modern world, a monopoly that keeps it alive. The megacorps have vast resources, and they will do anything to retain their monopolies. Since they control private armies, legions of Netrunners, media empires, and vast sums of capital, they tend to get what they want.

NeoTek controls the solar power grid in near space; it

monopolizes decentralized electricity as much as it can be monopolized. NeoTek controls the manufacture and repair of solar cells, batteries, and hydrogenerators. It provides the tools and processing for natural gas and ethanol and builds the engines that run on them.

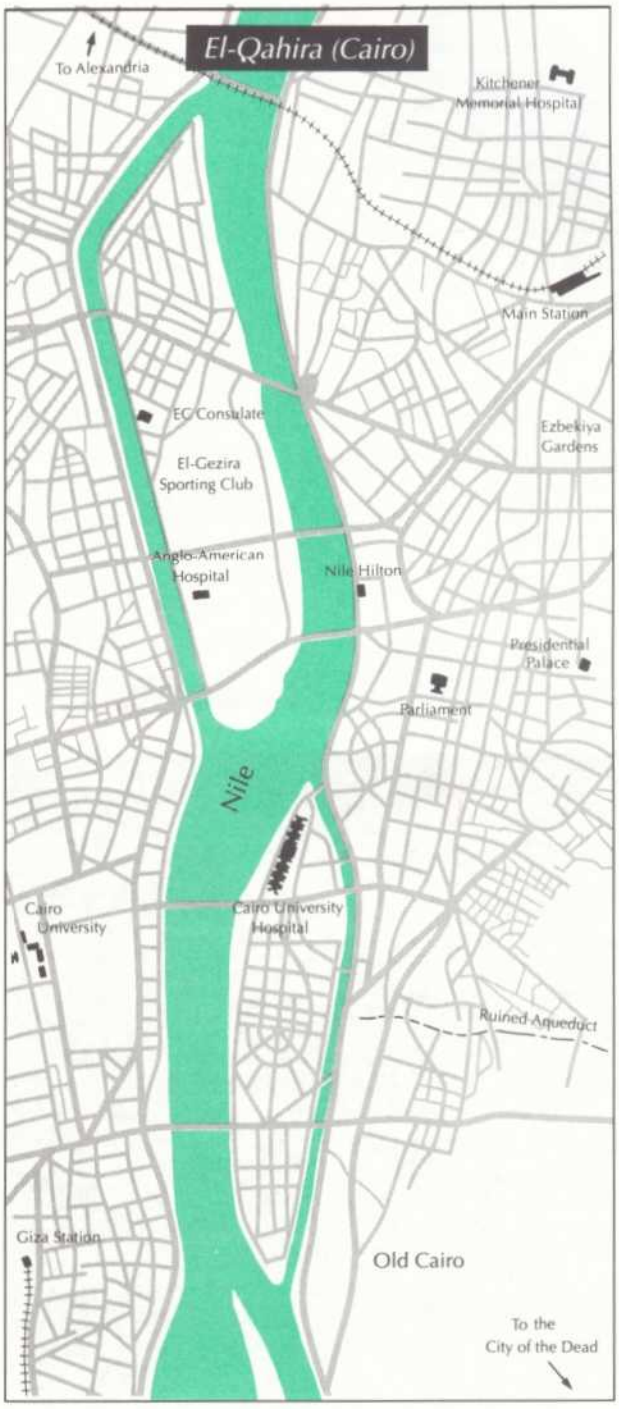
Esoterika rules most of the distant space colonies and handles communications with the rest. It is supported by many nations and individuals who dream of moving into space. The cash flow and public goodwill that Esoterika gains from investing in Martian terraforming keep it afloat.

```
A/N surf, zero parity, full echo,
half filter
Sector: PAC, Node: Yoko, User:
Toshiro
02:28:24, 24.3.44
     >>Yeah, right. Esoterika is
run by a syndicate of tongs and
fartoshoviki, and everybody knows
it. The crooks are always the
first on the frontier.<<
```

While many Esoterikan colonists live on Mars, the planned asteroid impacts that provide Mars with water and an enriched atmosphere make life hazardous and rustic at best.

Polygene is the world's leading genetics corporation, heavily involved in discovering and manufacturing medical, agricultural, and ecological bioware of all kinds. Its databases and genebanks are the world's largest, and its patents control the use of cloning, most human genemods, and all narcoviral and viral surgical materials. Polygene is literally reshaping the biological world. Only a few Belter groups are more daring in their experiments, and they lack Polygene's vast resources (much of it derived from the cocaine money of the U.S., Brazil, and Columbia).

Just because three megacorps are still hanging on doesn't mean that every state and nation has disappeared under the heels of corporate boots. The collapse of megacorp power gave the nation-states breathing room, though they still had to cooperate in trading blocs to compete effectively. The national power blocs that remain big play-





—Zaibatsu motto

ers on the world stage are the European Community, the Islamic Republics, Brazil, Pacifica (the Pacific Rim nations trade cooperative), and the North American Free Trade Zone. Each of these is briefly detailed below.

The European Community (EC) has suffered only a little from the fallout of a limited nuclear war between the Ukraine and Russia, because the fallout was carried south and west into Turkey, Georgia, and Siberia. The Russians and Ukrainians have still not recovered; border warfare is common. Their vast resources, educated workers, and high standard of living all make the EC a favored destination for refugees from the East.

Hong Kong is the political capital of the **Pacific Intereconomic Communities of Asia** (Pacifica). Vancouver and Tokyo are the financial capitals of Pacifica. Kyoto and Bangkok are the cultural centers, where media, high culture, and fashion are created and distributed. Though San Francisco is still technically within the borders of the U.S., both it and Vancouver thrive on Pacifican trade, and Pacifican influence in these cities cannot be overestimated. Shanghai, Indonesia, and Vietnam are Pacifica's industrial heartland.

```
A/N surf, zero parity, full echo,
full filter
Sector: NAFTZ, Node: Houston,
User: Rock-T
22:34:59, 25.3.44
     >>Cannot be overestimated,
huh? Well, there re still some
patriots who might take exception
to that sort of seditious crap. I
think we need a committee to
search out and prosecute traitors
to the national interest who shoot
off their mouths with that sort of
talk. If you re not with us,
you re against us.<<
A/N surf, full parity, full echo,
half filter
Sector: PAC, Node: Tokyo, User:
Toshiro
22:34:59, 25.3.44
     >>Nationalism dies hard.<<
```

Business is war.

Islamic regimes held on despite their massive populations because they controlled the oil. But the Islamic economy crashed and burned when it ran out of oil, taking every nation except Belize, Albania, and the Maldives into energy riots and economic disruption. Then NeoTek stepped in to save it, with a crucial new solar cell and a plan to harness solar and wind power on a global scale. It became the monopolistic power source for those nations willing to pay its price.

```
A/N surf, zero parity, full echo,
half filter
Sector: Free, Node: Ulan Bator,
User: Jack Flash
GST 23:54:34, 8.4.44
     >>And isn t it interesting
that NeoTek s patent on the Morri-
son cell has never run out? Or, at
least, none of its competitors has
ever successfully brought a Morri-
son cell to market. Sabotage is
funny that way.<<
A/N post, zero parity, zero echo,
full filter
Sector: Neo, Node: Archives, User:
Will R.
GST 15:41:49, 9.4.44
     >>NeoTek isn t all bad. We
let natural gas onto the trans-
portation market, after all.<<

A/N chat, zero parity, zero echo,
zero filter
Sector: NAFTZ, Node: LA, User:
Angel
GST 21:41:52, 9.4.44
     >>Let it? You had no choice.
Still need internal combustion for
heavy hauling and military apps.
And, Lord knows, Neo boys love
their military apps, preferably
with depleted uranium shells,
doing 80 mph over clear terrain,
and night scopes.<<
```



```
A/N surf, zero parity, full echo,
half filter
Sector: Pac, Node: Yokohama, User:
Toshiro
GST 23:54:34, 8.4.44
     >>Which you ll be seeing
soon, chum. MPH, huh? Must be an
American.<<
```

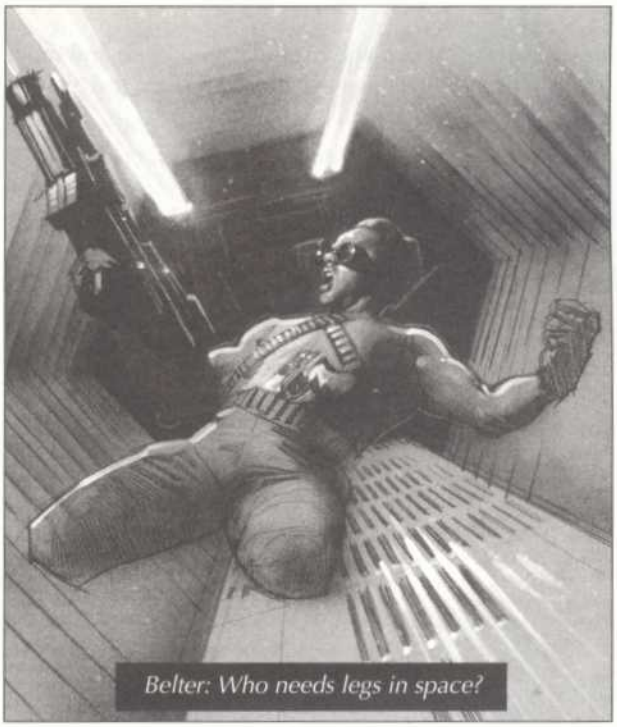
Modern Warfare

Warfare in the age of interconnected economies is not what it once was. The primary form of warfare in *Kromosome* is a type of large-scale sabotage, or infrastructure-war. The targets are not people, but economies. The typical attacks are low-intensity ones directed at creating economic slowdowns: Harbors, oil pipelines, power plants, the Panama Canal and the Malaccan Straits (near Singapore, the maritime link between Europe-Arabia and Pacifica), and switching and communication centers like Culpeper Switch in Culpeper, Virginia (an electronic switch that handles all federal fund transfers and transactions). Guerilla tactics are common in I-war, as are ecological and biological weapons. Viral strikes, poisoned reservoirs, and productivity-crippling plagues are not unheard of.

The second most common and direct warfare is the economic kind between nations and between corps. Dumping, embargoes, tariffs, and even blockades are the weapons most often used to demolish rivals.

The least common form of conflict is machine warfare or total war. This uses traditional, high-intensity, all-out battles to crush an opponent into submission. With the advent of drone planes and tanks, electronic target acquisition, and high kill ratios, these wars have become very brief indeed, ranging from hours to a few weeks long. Targets include military command and control centers and satellite recon centers (like Big Blue Cube, the U.S. clearing house for satellite recon, near Moffett Field in Mountain View, California).

Finally, there is one new form of warfare that has just begun to affect the planet. This is the war between communities in the real world and virtual communities held together by the Net. When a virtual community (political, ethnic, racial, or otherwise) feels that one of their own has been hurt or discriminated against by the citizens of a real town or nation, they retaliate with economic boycotts, smear campaigns, and even buyouts (buying up the misbehaving area and shipping its inhabitants out). Since most real communities have very little community or patriotic spirit, they usually put up little resistance to such maneuvers.



Belter: Who needs legs in space?

New Technologies

Technology has brought a demonic illusion of progress, though life keeps getting grimmer. There are always new gadgets, new ways to manufacture products, to harness energy, and to feed and clothe the masses outside the richest nations. But almost all new technology has



—Mao Tse-tung

Power comes from the barrel of a gun.

brought further social and ecological collapse and more unemployment, because the more efficient the tech is, the fewer people are required to do the job.

Out of the Bottle

Biotechnology, long restricted to agricultural applications, finally took off by creating new strains of medical viruses, new crops capable of surviving the new conditions, and new strains of people. Workers in China and Brazil were the first to be offered genetic enhancements from their employers and government. In Brazil, photoskin has worked out very well, but the hormone locks in China almost destroyed the nation when they were finally revealed. Most biotech patents are held by Polygene, though a few have been pirated by powerful governments.

While the growing computer networks have made information more available, they have become tools of the ruling classes just as much as tools of subversives. In fact, the Net is a power unto itself; it has grown large and powerful enough to seem sentient, though it is not.

The Net is more than the sum of its parts; it is a consensual hallucination that shapes itself to fit its visitors. Traveling and acquiring data in the net require bypassing its safeguards, which resemble an electronic immune system. Since all PCs can use the net, they can operate in both the real world and the virtual world of cyberspace, and use both resources to overcome obstacles.

Genome Projects

Governments have proposed many different solutions to the population problem. All Chinese children beyond the first born to any couple have been hormone locked at age 13. By preventing the onset of puberty, the older generations have preserved the rulership of China's ancient elite, kept down the population pressure, and created a class of sterile drones. These hormone-locked drones work as hard as a fertile adult but require less food and cannot have children.

The Brazilians created photoskin to feed the people, and their success has spawned many imitators. Implantation is mandatory at birth for all Brazilians and many children elsewhere in Latin America.

The Belters are leaving behind most planet-bound traits and are trying a million different routes to adapting to life in space; bioware allows them to ensure that their children are smaller, lack legs, require no gravity for proper growth, maximize oxygen efficiency, and so on.

The Costa Ricans have established a national gene bank based on their natural resources. By cataloguing hundreds of thousands of animal species and their biochemical products they won the patronage of Brazil and Polygene.

Dozens of other genetic programs are currently underway, many of them covertly funded. Many have to do with enhancing human immunity to the toxins humankind is using to foul its own nest; others are military (such as attempts at creating fungal plagues) or agricultural (such as the open secret of the Brazilian termite bioware that would allow humans to consume wood and other cellulose as termites do).

Beyond Gravity's Rainbow

There are four ways to get off the planet and into space:

- Work for Esoterika and pull a lucky assignment, or work for NeoTek and see Earth from orbit.
- Sell yourself into indentured servitude on Mars. This option is hyped mercilessly on video, on billboards, and in the Net, and many complete their term and then emigrate to the Belt. The story on the street is that colonial life is physically demanding. The ads typically run, "If you have no history of heart disease, asthma, or mental illness, and you're not a smoker, then life on Mars awaits you!" Life on Mars is clearly longer and healthier than life on Earth.
- Be deported to the Lunar colony. Worse than indentured servitude, with crushing boredom and a life expectancy measured in months.
- Pay for the privilege of leaving Mother Earth. This option is unlikely for most citizens.

Though a few Esoterika rockets still launch from Baikonur and Canaveral, the modern gateways out of Earth's gravity well are the skyhooks in Brazil (controlled by Polygene) and Indonesia (controlled by the Sultan of

Brunei and open only to Muslims and the wealthy). Esoterika is based in low Earth orbit and beams power to the Earth's surface; the few of its goods that actually go up or down the gravity well go through the cosmodome at Baikonur. A half-dozen space shuttles still work like mules from North America, but their low payload and inability to escape Earth orbit limit their usefulness.

All extraterrestrial colonies in Earth orbit and on the moon and Mars are slavishly loyal to NeoTek, their economic masters; many colonists are brainwashed in corporate boot camps to be loyal to the corp. The most important research and management positions require more mental flexibility than brainwashing allows. These white-collar groups are either mentally wired or physically booby-trapped with genebombs to prevent embarrassing defections.

Only the wealthiest and most determined individuals have been able to get to space on their own; most colonies are still corporate or national, with indentured servant workers. Zero-gravity manufacturing creates jet turbines, ceramic armor, spun fiber, buckyball bearings, composite materials, and AI crystals. Lush and extravagant cell growths that would collapse in the presence of gravity exude precious biochemicals. The farther reaches of the Belt provide raw diamonds, metals, and purified gases.

Humankind is limited to a few colonies within the solar system. Despite massive expenses and effort, the corp colonies are hardscrabble at best. No interstellar travel is being considered on Earth, which has its hands full with other problems. Some colonists may hope to set light-sails for the nearest star, but as yet lack the resources for such a trip. Three separate Belter groups claim to have plans drawn up for a colony ship. Though



Trust your railgun.



It is not these well-fed, long-haired men I fear, but the pale and the hungry-looking.
—Julius Caesar

no one has funded them yet, they are proceeding with attempts to build these behemoths. Whether they will work is anyone's guess.

```
A/N post, full parity, full echo,
half filter
Sector: Free, Node: Tallinn, User:
Dimitri Zima
6:22:46, 20.5.44
     >>Don t count on it. Belters
like to tell tall talesÑif anyone
ever gives them cash, you can be
sure they ll disappear like a star
occluded by interstellar dust.<<
```

The most radical colonists are the asteroid miners who have adapted to a low- or no-G frontier society. They call themselves Belters, and their society is like nothing on Earth. The Belt is a wild frontier, with few laws and no room for incompetence or intolerance. Visitors need to be flexible and highly tolerant, because Belter customs and morals are often very strange. Some treat their robots as equal to humans; the others humor them. Some spend months running with no lights (saves on fuel cells and battery power). The only death most Belters fear is the living death of *perlerorneq*. The few bootstrapping pioneers of the asteroid belt are independence-minded, and are willing to fight to stay free of ties to and dependencies on Earth.

All space travel except asteroid prospecting is done in cold sleep berths and is obscenely dangerous and expensive. Space colonists ship raw materials to resource-hungry Earth and get high rates of return, which is just enough to provide a subsistence living in the hostile void. The most efficient mining isn't done by colonists at all, but is done with flocks of robots, the secrets of which are closely held by the Belters. The colonies are completely unpolluted; though they lack the amenities of Earth, most urbanites would kill to get there. Politically, the off-worlders are much freer to say and do whatever they want: After all, they are no threat to the established politics back on Earth. Power groups on Earth use space as a dumping ground; malcontents and religious groups are all packed off to the colonies with promises of independence and sovereignty.

The New Politics

Politics and ideologies are the core of the *Kromosome* game, the foundation underneath the flashy genemods, exotic weapons, and Belt frontier. Although the game doesn't require political adventures, politics add a richer dimension to otherwise ordinary mysteries and combats. In a politicized adventure world, "Whose side are these guys on?" becomes a critical question, and politics force players to choose their enemies carefully. Player and DM preferences will dictate which side the PCs take, but different campaigns will depend on different enemies. See the "Campaigns" section for some ideas on possible campaign styles.

Social Collapse

The social fabric of the *Kromosome* setting is torn and shifting, with a thousand subcultures and little unity or loyalty to institutions. Many governments are corrupt, and they view people as commodities to be packaged and sold like goods. Disinformation science is a popular branch of foreign policy.

Disinformation created behind the scenes is the fastest growing media sector; even corps find it difficult to track down the facts, so all critical observers dismiss government data. Collecting statistics is a welfare system for bureaucrats. Corporations employ their own workers for reliable data and have entire networks of private reporters whose stories and conclusions are not intended for public consumption. Corps often subcontract micros who specialize in data collection to bring in the real story.

Individual murders are no longer reported, only the total number. People feel cut off from decision-making; they may dream of escaping the crushing cities for the off-world colonies, but most are resigned to struggling lives. Huge amounts of data are hidden from most citi-



zens, and cracking subsets of the Net is the only way to liberate that data. So much data exists that the original sources are almost unheard of, but with careful navigation, crucial facts can sometimes be excavated from Net archives.

Few people can adapt, much less change what will come. The PCs' micro is a notable exception. For a satisfying campaign, the PCs should be able to change the world, go off to the Belt, or take on whatever goals they like. Ultimately, they will discover that the ecosystems are collapsing. If they choose to stand and fight, they should have a chance to destroy the polluters, governments, and criminals who are responsible. If they choose to flee the planet for the colonies, they should be able to found their own ecotopia.

If the campaign revolves around the Net, the PCs should eventually discover the AIs' plans for humanity. Again, they can choose to resist change by destroying every computer-aided dictatorship, or they can fight the NeoLuddites who resist the course of progress, eventually destroying that organization utterly. Powerful biological tools, information sources and processing, and weapons all give the PCs the ability to change the course of history.

Pax Nipponica

Pacifica formed in the wake of a Japanese population decline and the huge expansion of Chinese markets. North Korea and Vietnam refused to join, but Thailand and Singapore were eager to be part of the trading block. Though Japan and China still regard each other with some suspicion, the benefits they provide each other are clear. Japan's technological and production expertise combined with China's human and natural resources make them a powerful combination. They are primarily an economic alliance, not a political one, and they have few worldwide interests other than in markets and natural resources (especially in Canada and Siberia). Pacifica has no interests in space beyond low Earth orbit.

In Pacifica, the rise of robot factories has thrown millions of workers in developing African and South American countries out of work. Most manufacturing, from steel to cars, from computers to video and audio equipment, is cheaper using mechanical robots than human ones.

Pacifican cities are crowded but polite, with bars and restaurants that try to provide sanctuaries from the clamor of the streets. Organized crime is strong in both China and Japan, partly because it is not publicly acknowledged. Likewise, most citizens' personal lives are kept apart from their work, and the Net is not meant to be used except for business, research, and news bulletins. Net gossip is discouraged by the Net Cadres but the chatter of the Net is impossible to stop.

New Brazil

Loss of jungle and topsoil devastated the tropics, leading to the loss of cattle herds and an entire generation of children lost to famine. The Nova Republica Brasilia rose from the ashes by sheer will and cleverness. By embracing copyright infringement and patent pirating and by eliminating farming in favor of *in vitro* food production, New Brazil avoided an ecological nightmare and gave birth to millions of microcorporations rebuilding its infrastructure, its work force, and its wealth.

In agriculture, for instance, Brazilian pride and self-reliance have led to wrenching changes: Growers, truckers, and processors have largely been replaced by single-cell protein factories, photoskin, and krill vats, freeing the population to undertake other work. Photoskin—genetically implanted chlorophyll-enhanced skin that allows a human to convert sunlight to food—is not an optional genemod for Brazilians; it is forcibly implanted at birth. Most of the rest of the world is disgusted with Brazilian totalitarianism, but no one denies that it works.

Power Blocs & Nations

The Abyss: Abyss is the Belter term for the asteroids and surrounding uninhabited space. Most Belters see themselves as fulfilling humankind's manifest destiny to reach the stars. A few fanatics see the Belters as neo-



Knowledge is power.
—Francis Bacon

gods, shaping a new world from the primeval chaos of the frontier, but most Belters have little time for such foolishness.

Carib League: A tiny power bloc of data pirates and gearheads, the Caribbean nations are ruled by criminal geniuses and scoundrels centered around Cuba and Hispaniola (formerly Haiti and the Dominican Republic). Jamaican posses and ton-ton macoutes rule through intimidation and fear. Whites and Asians are not welcome, as the whole Caribbean has become mildly racist; lynchings are not uncommon.

European Community: The European Community (EC) is a wealthy trading bloc of technically and socially advanced countries, though its many tiny member states don't always get along. EC member states include Albania, Andorra, Austria, the Basque Republic, Bavaria, Belgium, Brittany, Bulgaria, Croatia, the Czech Republic, Denmark, England, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Lapland, Latvia, Lichtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, Norway, Poland, Romania, Scotland, Serbia, Slovakia, Spain, Sweden, Switzerland, the Ukraine, and Wales.

India: Though India has a huge population, it suffers from continual famine, border wars with Pakistan and Bangladeshi provinces of the Islamic Republic, and a lack of basic education. India imports what it can afford (not much) and exports the few manufactured goods it can spare. It also serves as a testing ground for new and experimental bioware and as a dumping ground for toxic waste exported from other nations.

Islamic Republics: The Republics, though they form a single trading bloc, are divided along ethnic, religious, and class lines. The rich member nations (Iraq, Kuwait, Persia, Saudi Arabia, Oman, Bahrain, Qatar, Brunei) resent supporting their poor cousins (Afghanistan, Bangladesh, Egypt, Jordan, Lebanon, Syria), and the Arabs hate the Persians. The Sunni Muslims dislike the Shiite minority of Iraq and Persia.

New Brazil: Brazil was named by Portuguese navigators who thought they had found a mythical land of plenty. Brazil has good relations with NAFTZ, the EC, and WAU, but prefers to chart its own course in most matters. Though it is only the fourth-largest trading bloc (including its semi-dependent Hispanic neighbors), its lax industrial policy makes it popular with cutting-edge researchers. New Brazil is the source of many innovative technologies.

North American Free Trade Zone (NAFTZ): The NAFTZ includes Canada, Greenland, Mexico, Quebec, and the United States. It is the third largest player on the world stage, after Pacifica and the EC. The NAFTZ is a powerful force in the Caribbean and North and South America, but has relatively little influence overseas. The NAFTZ is known for liberal weapon policies, poor education, and high crime rates.

Pacifica: The world's largest trading bloc includes China, Japan, Korea, and Siam. Vast amounts of capital, large markets, and a huge labor pool make Pacifica the leading power bloc on Earth. Oppressive single-party politics and overpopulation make Pacifica a political pressure cooker. Dissidents, of which there are plenty, are often sent into offworld exile.

SPFTZ: The South Pacific Free Trade Zone was created in reaction to the Pacific Union Treaty that created Pacifica, but the SPFTZ has enjoyed much less success and is slowly being drawn into the Pacifican sphere of influence. It includes Australia, New Zealand, the Philippines, Vietnam, Indonesia and dozens of small island nations. It is one of the smallest trading blocs.

West African Union: A small and relatively recent confederation of Nigeria, Mali, Liberia, and other sub-Saharan nations, this block was created in response to failed attempts by Polygene to buy the region. Rich with Nigerian oil money and agricultural exports, the WAU is just now gathering speed as a force on the world stage.



Slackers & Microcorps

Economic democracy is a curious mix of feudal capitalism and democratic ownership. Many microcorporations are non-profit corps, existing only to benefit their worker-owners and their customers. Others have profit-sharing plans with communities or their suppliers. In all cases, economic democracy implies complete or majority worker ownership, reduced management, and some form of social mission. No one at a microcorporation is told to shut up; almost family-level loyalty and teamwork make them bearable for the lucky few who can buy their way in. The PCs begin the game having just founded a microcorp to pool their talents and resources.

Table 1: Character Generation Outline

1. Generate attributes
2. Determine career
3. Roll flaws and edge
4. Choose ethnicity and genemod
5. Choose initial genemods
6. Calculate stamina, mind, and body points
7. Determine initial immunity
8. Choose PC and microcorp name
9. Choose career, pools, and starting skills
10. Determine finances
11. Outfit with equipment
12. Determine corp allegiances and contacts

Generate attributes from your player core if you have already created one; otherwise follow the procedure outlined in the AMAZING ENGINE System Guide section of this booklet. The base adjustment for all characters in the *Kromosome* universe is 20 points added to each attribute.

Grotesque Option

At their option, players may choose to emphasize a character's strongest points at the cost of the weakest to create a more grotesque and lopsided character: excellent in one respect, crippled in others. The player may add 5 additional points to both of the attributes in the first-ranked pool, but must subtract 5 from each attribute of the fourth-ranked pool.

Choose Genemod

Based on the Position score, characters can choose one beginning genemod at or below their resource level (see Capitalization and Finance). Available genemods are listed on Table 9. Except for genemods that specifically increase immunity, all genemods lower characters' immunity scores by an amount equal to their Resource level.

Calculate Body, Stamina, Mind, and Immunity

Body and stamina points are calculated as described in the System Guide section. Body points are one-quarter of Fitness, rounded up. Stamina points in the *Kromosome* game are one-quarter of the total of Willpower and Reflexes.

Mind and immunity scores are unique to the *Kromosome* game. Mind points are a measure of a character's coolness under fire, sanity, mental agility, and ability to withstand pain and mental stress; they are used in combat on the Net. All PCs have mind points equal to their Psyche score; in Net combat, these mind points are used instead of stamina points. Mind points are regained at the same rate as stamina points. Loss of mind points never reduces the success chance for skills derived from Psyche.

The immunity score is a measure of the biological cohesiveness, resistance, and immunity of the PC. The initial immunity score is the average of the character's Psyche and Fitness, but immunity rises or falls quickly as it is weakened by genemods and cyberenhancements and strengthened by bioenhancing genemods. See page 94 for more information about making immunity checks. Once initial immunity is derived, it is unaffected by later changes in the Fitness score; increasing the Fitness score by spending experience does not alter the immunity check. Only genemods and deterioration alter immunity after it is first determined.

Choose Career

Players now choose an initial profession for their characters. Position and Learning have a small impact on career choice, with minimum and maximum require-



The fox knows many things, but the hedgehog knows one great thing.
—Archilochus

ments for some professions. The careers below reflect what the character has done up until this point, not necessarily what she or he intends to do in the future.

The available careers are not limited to those described below. Athlete, journalist, gambler, martial artist, migrant worker, security consultant, smuggler, sniper, street thug, survivalist, and other careers can easily be created if a player wants them. New careers require GM approval and should allow access to no more than six initial skill pools.

Regardless of profession, all beginning characters have access to skills that cover the basics of a high-tech, post-industrial society. Since characters are survivors on the dangerous cutting edge, they all have one bonus skill from the Combat pool, one form of Transport skill with one specialty (subject to GM approval), Netrunning skill, and either General Sciences or the Technology skill.

Learning-based skills can be chosen only during character generation, not at any other time; these are skills that require years of study to master.

All characters begin with skills based on Learning chosen from the skill pools provided by the character's career. Characters are allowed a number of additional skills based on Intuition, which can come from any pool.

Careers

Black Marketeer: Black marketeers don't see their jobs as really illegal—they just take advantage of inefficiencies in the market by smuggling, finding rare goods, or working with pawnshops and fences. If an item is hot, unusual, or hard to find, the marketeer knows where to go and who to bribe to get it (or get rid of it).

Black marketeers cultivate networks of contacts, buyers, crooked jewelers, fixers, software crackers, and similar street types. Often their webs of contacts stretch over dozens of cities, one or more continents, and sometimes even out to Mars or the Belt. When a black marketeer PC is created, his home base must be named; this can be a city, a circuit of small towns, or a rural district with connections to illegal plants or bioware. In addition, he gains contacts in one other city for each 10 points of Charm he has (round up). All skill checks outside these cities are one level more difficult. Skill checks outside urban areas are also one level more difficult.

Skill pools: Biofeedback, Corporate, Combat, Languages, Netrunning.

Belter: As Esoterika's indentured servants, Belters are illegal aliens on Earth who discovered that life on the corporation's off-world colonies is nasty, brutish, and short. Belters have made their fortune and left the void of space; they are tough as Martian rock, cool as a lunar night. Belters come back to save what they can and enjoy the rest while it's still around. Micros that don't mind risks often welcome the expertise and toughness of Belters, and help them get back into the terrestrial economy.

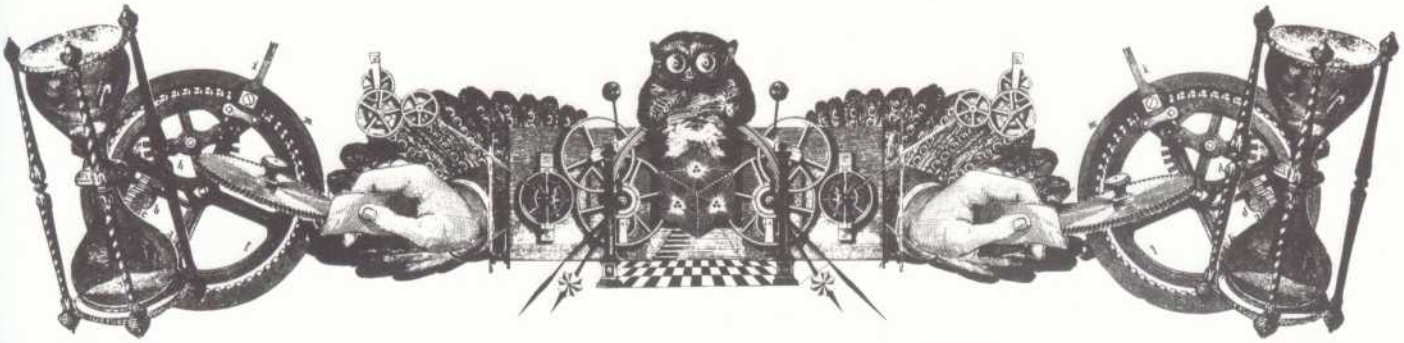
All ex-colonists have heavily enhanced genetics, given to them by their corporation to help them survive the rigors of off-world life. Before they even left Earth, all Belters and colonists were provided with Enhanced Immunity to protect them from hostile environments. However, on their return to gravity they feel the effects of bone loss (see the Space Survival skill).

Skill pools: Applied Engineering, Combat, Languages, Medicine, Physical, Space. Belters are the only characters unable to start the game with Netrunning skill; they can acquire this ability with sufficient experience points.

Biomechanic: They may not know the theories, but biomechanics know exactly how each batch of bacteria or each grade of virus works. Some biomechanical tools are made in low-orbit robot factories, others in crudely-furnished basement labs. Biomechanics often specialize in a particular type of work: viral surgery, new bioware, metabolites, and so on. Biomechanics must have a minimum Learning of 40.

Skill pools: Applied Engineering, Biofeedback, Medicine, Sciences, and Space.

Contract Worker: These professionals fulfill contracts on victims: usually by murder, but sometimes brain death or kidnaping is called for. Their victims may wind up brainwashed servants of the powers they crossed, they may become biochemichanically lobotomized workers on an Antarctic krill farm, or they may become krill food. Some-



times contract workers literally take their pay in flesh; they sell their victim to organleggers who use the parts for cloning, for transplants, or for rejuvenation clinics.

Contract workers take care of business smoothly, effectively, and without annoying clues that might point to a patron who wants to be anonymous. They are the ultimate killing machines, with blunted or flattened emotions and no conscience. Contract workers require a minimum Willpower of 45.

Skill pools: Because they are specialists but have so many different styles, contract workers may choose any four of the following: Biofeedback, Combat, Espionage, Medicine, Physical, and Space.

Financier: Financiers begin the game long on money, contacts, and ideas, but short on manpower. The financier character is an entrepreneur, always on the make, looking for business opportunities and liable to be a group leader with plans. This profession has a minimum Position of 45.

Skill pools: Corporate, Espionage, Languages, Liberal Arts, Physical, and Space.

Fixer: Fixers are street hustlers, fences, or money launderers with connections to organized crime. They can manage affairs on the street and are able to arrange loans and favors from time to time. Most are small-time operators, though they can still dream big. They sometimes deal in confidence games, pool hustles, video games, extortion, and computer scams. In superficial ways, they resemble Financiers without capital. Fixers cannot begin the game with a Position above 35, and they gain a single additional contact in the tongs, triads, or fartoshiviki.

Skill pools: Biofeedback, Combat, Corporate, Espionage, and Languages.

Headhunter: Headhunters are time organizers and team leaders—they know where to find the right people for the job and where to find the job for the people, and are often found setting up new micros and picking up the pieces when an old one is blown apart. Headhunters often have contacts all over the world and in the Belt. They must have a minimum Position of 40.

Skill pools: Corporate, Liberal Arts, Languages, Physical, Space, Transportation.

Mechanic: Whether it is mechanical, electronic, or cybernetic, mechanics can fix it. They relate better to objects than to people; others call them "gearheads," which mechanics take as a compliment. They are prone to tinkering and experimenting, and sometimes their work leads to valuable new discoveries. Most gearheads live in the Net or among machines, as programmers, designers, or engineers.

Skill pools: Applied Engineering, Corporate, Medicine, Sciences, and Transportation.

Private Investigator: Most PIs used to work for the police, though often they didn't work for them for very long. PCs who become PIs are driven out of the force when someone reveals their not-quite-legal activity or when their loner mentality clashes with the police herd.

Private investigators have the special touch, hunches, good instincts, and contacts all over town. Their weapons training is a license to kill. They're usually working for the right cause; they just need a microcorp to provide some leeway.

Skill pools: Biofeedback, Combat, Espionage, Languages, Medicine.

Rogue Scientist: This category includes a wide range of possibilities, from physicist to chemist, from genetic designer to laser weapons expert. All of them share two things: a love of technology for its own sake and a lack of ethics. A rogue scientist PC may choose one subspecialty and up to three broader sciences.

Skill pools: Corporate, Espionage, Languages, Liberal Arts, Medicine, and Sciences.

Soldier of Fortune: People always need protection and firepower, and that's where the soldiers of fortune come in. They are freelance mercenaries, willing to fight for whoever pays them. They are lifers, career soldiers who wander from war zone to war zone, picking up skills if they survive. They serve as space marines (for Belter claim jumpers), colonial soldiers (such as the French



Men use thought only to justify their wrongdoings, and speech only to conceal their thoughts.
—Voltaire

Foreign Legion or the Esoterika Mars Corp), private bodyguards, strike forces, or extraction teams. Experienced and ambitious soldiers of fortune sometimes seek to topple small governments by force of arms. Soldiers of fortune know guns, combat, and command.

Skill pools: Biofeedback, Combat, Espionage, Languages, Medicine, and Physical.

Special Forces: Special forces are the highly trained elites, the warriors who learned from the experts and who are utterly loyal to their first nation or corp. They are experts in demolitions, recon, infiltration, sabotage, and the sort of pure martial skill and courage that has become rare in the world. Less savory regimes train correspondingly less principled troops, and special forces trained by totalitarian elites sometimes are skilled in brainwashing or torture.

Players of special forces characters must choose a particular background when their character is first created. Likely choices include U.S. Green Berets, Rangers, or Seals; EC Gebirgsjaeger (Mountaineers), Stormtroopers, or Paratroopers; Chinese Palace Guards, Net Cadre, or People's Guards; or Brazilian Amazonas, Presidential Guards (political death squads), or Airborne.

Corporate special forces tend to be smaller and less loyal but better equipped. NeoTek has a highly trained Response Management Team (REMAT), but Esoterika uses the tongs or fartoshiviki when it needs firepower. Polygene uses the Presidential Guards when it needs additional muscle. The Belters are rumored to have a small but deadly special forces corp called the Decompression Unit, but its existence is unconfirmed.

Skill pools: Biofeedback, Combat, Espionage, Medicine, Physical, and Transportation.

Spin Consultant: These charismatic spokespeople are the public embodiments of the corporations they work for. They are invariably well dressed and smooth-talking, able to stay cool in even the most publicly embarrassing scandals. Spin consultants gain one additional contact that must be a reporter or media figure. They rarely employ bioware or mechanical aids that might interfere with their public image, and they must have a beginning Position of 40 or more to have the network they require to do their job effectively.

Skill pools: Biofeedback, Corporate, Espionage, Languages, Netrunning, and Physical.

Virtual Personality: The PC is not an organic human at all, but a recorded personality. The process of recording destroys the brain being recorded, as the brain is used as a template that must be stripped to read the chemical status of each neuron. The process is also very expensive, requiring a minimum initial Position of 50. Despite the wealth this implies, the character actually must spend most of his money just becoming a VP. When this career is chosen, the character suffers an immediate loss of 30 points of Position (VPs have little cash and less status). The personality is recorded onto a biochip matrix, which simulates the reactions of the donor perfectly.

A virtual personality has no physical body other than a hard-wired black box. Its entire personality is embedded in biocircuitry; this makes life both difficult and entertaining. Its embedded personality is often less flexible, and it doesn't change quickly, but it can be backed up. If the personality crashes on the Net, it can often be rebooted from its last save.

The VP interacts with the world through video/surveillance cameras, satellite images, video phones, and televisions, speaking through stereos and cable TVs using the Dominator program. The box itself doesn't have body points, but its robotic stand-in does.

A virtual personality can be destroyed if its fuzzy logic neural nets are core-wiped. This requires the virtual personality to lose all its mind points and then be attacked with a data bomb or core wipe program. As a result, most encoded personalities seek out human companions for help while netrunning; the VP may be nerve-burned in physical combat, but it is very likely to die if it gets burned on the Net.

Virtual personalities are closely tied to and emotionally bonded with their surrogate bodies, robots that are their principal site of body identification and which they consider to be themselves. VP robots have Fitness scores and body points just like other characters, but if a robotic body is destroyed, its VP suffers Netburn (see page 116). If they are destroyed on the Net, they can

reboot and keep going. However, rebooting costs them all the experience points they might have gained in that adventure, since they forget everything they learned after their last backup.

Though VPs can gain experience and use it to improve die rolls or the character core, they cannot spend experience to change their physical attributes. Encoded personalities are hardwired; mechanical muscles can't get any stronger or faster.

Skill pools: Languages. In addition, they may choose three skill pools that reflect talents gained during their lives before becoming VPs.

GM Warning: Consider carefully before allowing VPs into the game as player characters. Though they are rich in role-playing potential, they are also easily abused. Power players will want to secure their black boxes in tanks or other impregnable chassis. The only possible remedies are societal ones.

For instance, there are customs and legal controls on what sorts of robot bodies are allowed in countries like Pacifica, where VPs are classified as weapons. In the Islamic Republics, VPs are classified as creatures outside the natural order and have no more legal rights than any property. In the U.S., any VP caught committing or abetting any crime is put down like a rabid animal; they are core-wiped beyond hope of recovery.

In addition, VPs may often find themselves unable to take part in combat, since their robot bodies are fairly limited. Be sure to give the VP player opportunities to help the group as a translator, as a radio-frequency monitor, or as a scout or lookout.

Wirehead: Wireheads have lots of connections, and not just on the Net. They are in contact with dozens or hundreds of Netrunners around the world (which makes them dangerous in the eyes of some nations). Chip makers and suppliers get them the latest equipment wholesale.

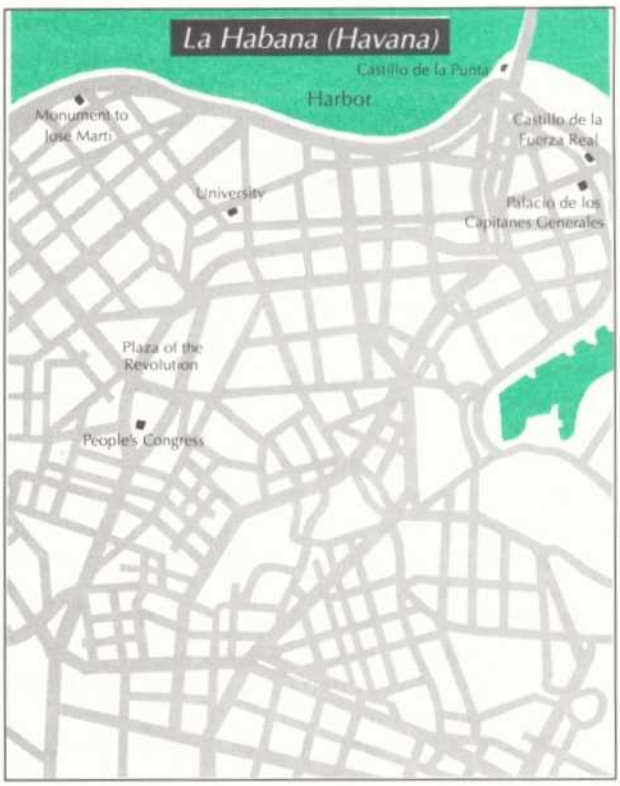
Skill pools: Applied Technology, Espionage, Languages, and Sciences.

Flaws and Edge

Characters in *Kromosome* often carry scars from their past. The Flaws and Edge tables are meant to provide some background history for characters. Players can choose to roll once, twice, or three times on the Flaws table; some results then allow the player to roll on the Edge table, others only scar the PC (further evidence that life is unfair). Each asterisk allows a single roll on the Edge table. The use of flaws and edge is strictly at each player's option, and may need to be extensively stretched to accommodate odd character types such as Belters and VPs.

Table 2: Flaws

01–05	Crossed a street gang or is a former member who quit.
06–10	Scarred by violence or accident.
11–15*	Illiterate; start without Netrunning (Belters roll again).
16–20*	Gambler with huge debts; -1 RL.
21–40*	Orphan of the streets; -1 contact.





To know that you do not know is the best. To pretend to know when you do not know is disease.
—Lao Tzu

41–45	Allergic and asthmatic; -5 to immunity, chokes and wheezes in polluted environments.
46–55*	Veteran of lost war; still suffers from flashbacks, old wounds, and public scorn.
56–60**	Hunted by organized crime group for betrayal, debt, double-cross, or leaving the organization.
61–70*	Phobic; has an irrational fear chosen by the player: heights, spiders, crowded places, or something similar.
71–80*	Divorced and bitter about all members of the opposite sex.
81–90*	Obsessed with getting revenge for some past insult to honor, family, or self.
91–95**	Physical disability chosen by player; blind, deaf, crippled, or hormone-locked. Requires RL 9 genetic reconstruction.
96–99**	Addicted to God Wire, metabolites, or military wiring. The habit consumes most of her attention. All abilities decrease by 25 points total per month, allocated by player. If an ability drops to 0, the character dies. PC can't be trusted with money and loses one RL every month.
00*	No flaw; roll on Edge Table anyway.

The Edge table provides bonuses for the PCs. Like flaws, these benefits should be worked into some form of character history or background.

Table 3: Edge

01	Roll on Flaws Table.
02–05	Deadeye: +3 bonus with all ranged fire weapons.
06–10	Socialite who knows NPCs in a wide social circle: +1 contact.
11–15	Natural athlete: +5 to all skills of the Physical pool.
16–20	Keen-eyed, often spots hidden or seemingly unimportant clues.
21–40	Has a patron/mentor who guided her career and offers advice and assistance.
41–45	Child prodigy: Two bonus skills in one pool, entire pool at +5.
46–50	Grease monkey: +5 to Mechanical or Electronics skill.
51–60	Specialist: May choose an enhancement in a single skill.
61–70	Minor celebrity: Has a small following of admirers willing to help out their idol.
71–80	Intuitive: At PC option, gains either the Luck or Jack-of-all-Trades skill.
81–90	Wealthy: +5 Position, +1 RL.
91–95	Can pull in favor from a contact in one megacorp.
96–99	Can pull in favor from a contact in the Belt.
00	Genemod immune: Suffers no immunity loss from any genemod.

Choose Genemods

All PCs in the *Kromosome* universe are genetically altered with some form of bioware. These alterations make up for their otherwise low base adjustment. After rolling basic attributes, adding the base adjustment, and choosing a career background, choose a single genemod from Table 9 (Belter characters can choose two). The genemod chosen must not exceed the character's present Resource Level.

In addition, each character may choose a single genemod based on national or ethnic background, though this is not required. National genemods must be chosen according to Table 5.

Immunity Checks

The *Kromosome* universe is full of hostile environments, from plague cities to toxin-contaminated landfills to the vacuum of space. Immunity checks are used to determine whether a character is affected by potentially debilitating toxins, radiation, hard vacuum, space sickness, acid rain, natural and bioengineered diseases, subsonics, and gas attacks. Immunity is improved through immune-system-boosting genemods and slowly crippled through all others.

The base immunity check for a *Kromosome* character



is the average of Psyche and Fitness. Surgery, cyberware, previous failed immunity checks, and some genemods can all decrease this base score. Each time an immunity check is failed, the immunity score drops by one as the character's system is worn down over the years from constant abuses.

An immunity check may be automatic for characters that have been vaccinated against a particular new virus or who are wearing protective gear. Most other checks require a roll.

Table 4: Immunity Check Difficulty

Nerve gas	Very Difficult
Plagues	Varies
Space sickness	Easy
Spore grenade	Difficult
Tear gas	Easy

Space sickness causes nausea and disorientation, making all skill checks for that character one level more difficult as long as she or he remains in space. Tear, nerve, and spore grenades are covered in the weapons section. For plagues and city effects, see the difficulty levels given on Table 4 and the penalties for various cities given on Table 17 (page 94).

Allegiances, CEOs, and Defections

Some PCs may want to declare their background or previous corporate allegiances. Though many states have been replaced by the trading blocs, nations of like-minded individuals still exist, scattered throughout the globe. Any reasonable ethnic, national, or racial interests can be freely declared when the character is first created, from black German Muslim to Hispanic Brazilian voodoun to white Rasta Canadian. There is no benefit to or loss of status for declaring a particular loyalty, though belonging to a group may make enemies for a PC (such as a West African in Japan), or make him stand out in certain parts of the world.

Each PC who declares a specific ethnic group gains a free genemod if he wants it, chosen from Table 5. If the PC is a mongrel with no particular ethnic loyalty, she or he may choose any single genemod of RL 4 or less. Mongrels are distrusted by every ethnic group, and are hated by the Ecotopians and the Next Step (see Power Groups).

Table 5: Ethnic Genemods

African	Melaskin or Endorphin Control
American	Adrenal or Melaskin
Belter	Heightened Immunity or Sterile
Brasilian	Photoskin required
Hispanic	Photoskin or Quills
Chinese	Hormone-lock or Spurs
European	Brain-jack
Indian	Biolights or Rhinoskin
Islamic	Catseyes or Adrenal
Japanese	Brain-jack or Biolights

Company Men & Corporate Allegiances

Corporate allegiances are not as cheap or as easily gained as ethnic ones. For each 10 points of Position, allow a player to declare one prior corporate allegiance; these need not be declared at the start of play but can be saved and "remembered" later, when they become useful.

The only exception to this is prior work for the three megacorps: NeoTek, Esoterika, and Polygene. Megacorp contacts cost 20 points, and a character can declare only one of the Big Three as a prior employer.

The Nature of the Beast

The players can now choose their micro's name and type of business, based on the PC types they have developed and the likely activities they will be involved in. Let the players brainstorm the reason their characters are together, and suggest some of the alternatives below if they are having trouble coming up with their own ideas.

The corp's main business could be combat, tech, investigation, or a smattering of all three by a wealthy, well-equipped group. Let the players choose what interests them; everyone will enjoy the game more if it reflects their interests.

A combat group might want its microcorp to be a VIP security service (bodyguards), mercenaries, or corporate



To subdue the enemy without fighting is the acme of skill. —**Sun Tzu**

kidnapers. Combat groups are likely to get involved in frequent firefights and suffer a high attrition rate.

A heavily tech-oriented group might decide to form a micro that hunts down renegades, toxic dumpers, or NeoLuddites. They might create their own new bioware (and act as biotech guinea pigs!).

Investigator groups may found private detective, computer security, or journalism agencies. They will need Net expertise and corporate skills of persuasion and deduction.

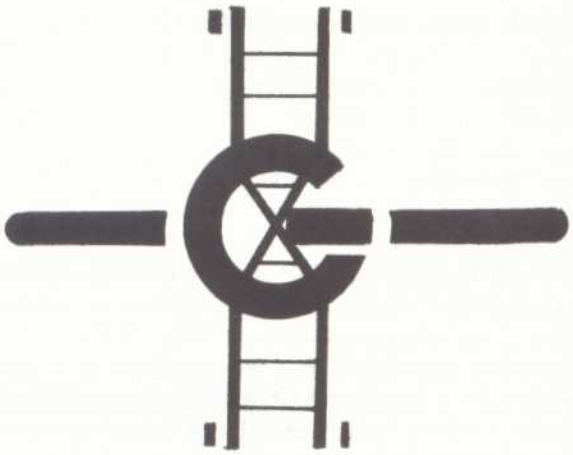
A business group might be smugglers, Belters, or spies involved in corporate or national espionage. They are more likely to be involved in financial schemes and will probably be wealthier than the other types.

Some groups will want to have little to do with their corp of convenience; for them, the microcorp is a legal defense against abuses by national governments, a sort of license to act with impunity. The actual business may have little or nothing to do with the adventure they go on and should be treated almost like an invisible trust fund. The players of these kinds of characters can choose to be the owners of a robotic factory that only requires occasional reprogramming and maintenance to bring in funds, or they may have a brokerage house run by virtual personalities and expert programs. A lack of ties allows the group maximum flexibility in pursuing the adventures they prefer.

The exact business should be left to the players to decide, with advice from the GM based on what sort of adventures the players seem to want. The GM should be able to adapt the campaign to suit his players' tastes as well as his own, so that everyone has a good time.

The microcorp name should be chosen by the player whose PC has the highest Position attribute (who is assumed to have put the group together) or should be voted on by all the players.









Treachery & Skill

Skill checks come in varying degrees of difficulty. Automatic checks only require that the PC have the skill; no roll is needed. Easy checks require a roll at no penalty. Difficult checks require a roll with a -25 penalty. Very difficult tasks require a skill check with a -50 penalty. Penalties reduce the character's skill score, not his or her dice roll. If the difficulty or other modifiers reduce the chance of success to 0, that task fails automatically.

The enhancement bonus in *Kromosome* is +20% for Learning-based skills, +10% for all others. The penalty for nonspecialization is -10% per step of difference between the skill being attempted and the next higher skill known. Attempts to use skills completely unknown to a character are made at one-half the usual base percentage. Bonuses for equipment, penalties for conditions, and so on are added or subtracted after the base is modified, so modifiers for interfaces and other gear are not affected by a presence or absence of skill.

A character can choose from any skill pool (but cannot buy Learning-based skills) when buying new skills with experience points. All new skills cost 200 experience points; all new enhancements cost 100.

In the following material, some skills from the overall list are not described. Like any skill, these can be used with a successful skill check to achieve whatever effect the GM deems reasonable.

Applied Technology

What's taught in school can start a pro down the right road, but field experience is crucial to stay on top of the latest tech—and book knowledge without skill is worthless. Many tech skills are learned from apprenticeships to masters in the field, whether that master is a locksmith, a gearhead, or a turbine mechanic. Applied tech skills are the engineering and hardware skills honed by characters who love technology for its own sake.

Biotechnology (L): This skill covers a broad range of techniques for manipulate living creatures, from altering viruses and bacteria into new forms to implanting genemods. With the right viral strains and a sterile environment, implanting a cheap genemod (resource level 1–7) requires an easy skill check. Implanting an advanced (RL 8+) genemod or any genemod requiring surgery is a difficult skill check. If proper facilities are not available, these checks are one level more difficult. Virology skill is not needed.

Biotechnologists can read genetic maps to determine the location of vital genes (automatic) and either cripple, add to, or reduce them (easy); this allows the biotechnologist to create new or variant genemods. Creating new bioware and growing new strains takes time: from one to four years for complex strains (difficult), one to six months for simple knockoffs and variants (easy).

A biotechnologist can create drugs, hormones, and useful biochemicals if he has access to a properly-equipped lab (RL 8), the right strains of tissues and viruses, and time (at least a month). A biotechnologist can create new or altered life forms that obey simple instructions, essentially biological robots (with a successful very difficult skill check and RL 9).

The Bioremediation enhancement allows a player character to deploy microorganisms to clean up toxic spills of oil, heavy metals, and other poisons. They can also be used to restore acid-rain-bleached lakes, improve stale air on space colonies or underground, and cleanse rivers and harbors choking from fertilizer and sewage run-off.

The Cloning enhancement allows limited duplication of living tissue. Cloning a human being is a difficult skill check. If successful, the PC clones an infant that is physically and genetically identical to the clone donor, though this doesn't guarantee identical mental makeup. However, unless the child is raised in a very different environment, the clone's personality will be very similar to the donor's. Cloning successfully costs RL 10; failure costs only RL 9.

DNA transfer enhancement allows the PC to create new forms of gene gun ammunition. The GM must rule on the costs and time required, but a minimum of a week and RL 7 is recommended.

Cybernetics (L): The PC can control and repair any type of robotic or cybernetic system, from factory robots to cybernetic air defense systems to security drones to unmanned satellites. Minimum construction time for a crude robot is one day, though construction times of several weeks are more common, and complex robotic space probes, miners, and other systems



—Yakuza motto

Hide your sword in a smile.

can take months.

Building robots requires a skill check, the difficulty varying according to the complexity of the robot under construction. Seizing control of a robot and reprogramming robots requires a varying skill check as well.

Electronics (L): Wireheads with this skill know all the theories behind electronic equipment like computer hardware (but not software), video, radio, fiber optic and microwave communication lines, and so on (all of which are potential enhancements for this skill). They can jerrybuild systems when needed and can repair or alter existing systems. The difficulty of the skill check depends on the task involved and the time and tools available.

Jack of All Trades (I): These gearhead characters know a little bit about everything and can fix anything with a skill check one level more difficult than usual. (No task is automatic, and very difficult tasks are shifted to almost impossible, with a penalty of –80.) They can operate any equipment or machinery with a successful skill check. They do not know enough to build devices of their own, though simple devices may, at the GM's option, be constructed with a skill check at half normal chances.

Mechanic (L): A character with this skill can hotwire cars, fix most engines, and even build simple types of equipment. Difficult repairs require the proper tools and a skill check. While a mechanic can fix simple robotic systems, he cannot build new robots from scratch unless he has parts, processors, hydraulics, machine tools, lathes, drill presses, and so on.

Security Systems (L): Security systems skill provides locksmithing and specialized mechanical and electronics skills. The PC knows how to install and bypass security devices for cars (easy), buildings (easy), voiceprints (difficult), video surveillance (difficult), bank vaults (very difficult), retinal scans (very difficult), laser beam triggers (difficult), and motion sensors (very difficult). He can install these sorts of systems automatically. Bypassing or removing them requires a skill check. Security Systems skill provides no special ability to bypass data and computer security systems.

Biofeedback

These skills are all related to mastery of the body itself, skills that require few tools other than knowledge, will, and practice. Several biofeedback skills are directly linked to corresponding genemods (see below).

Acupuncture (L): This ancient Chinese art reduces pain and increases skill checks for the sterile, heightened immunity, and hibernation genemods by +2, given five minutes' preparation. Even without those genemods, Acupuncture skill provides a +3 bonus to immunity rolls when time and tools are available. With five minutes of preparation before beginning a task, Acupuncture adds a +3 bonus to any attempt to tax abilities.

Edge (Ps): Having an edge means keeping instincts and reflexes sharp and responsive. Characters with this skill gain +1 to initiative and surprise situations.

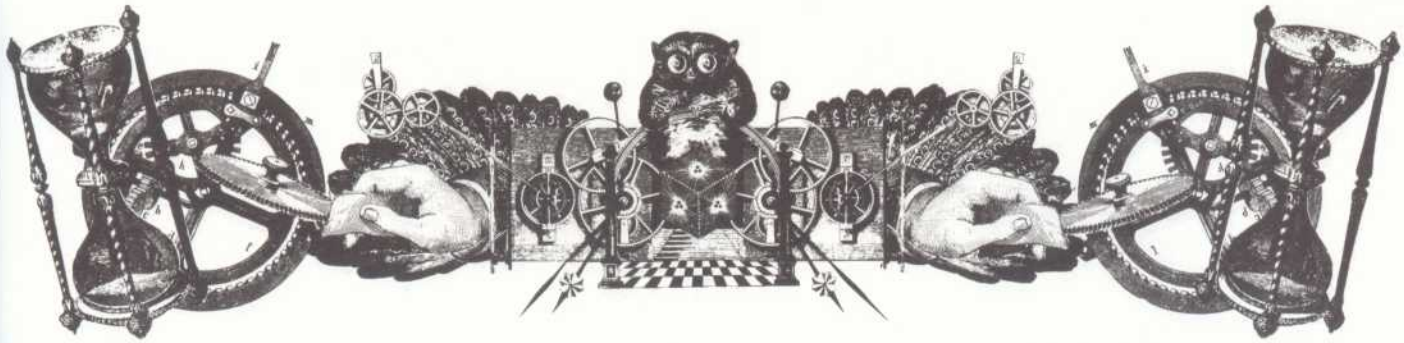
Grit (W): This skill reflects the ability to press on despite pain and setbacks by focusing on goals, suppressing pain, and using sheer will. A successful skill check allows the character a +5 on any attempt to tax a skill.

Immunity (F): The character knows how to regulate his immune system using dietary supplements, metabolic drugs, trace minerals, and exercise for maximum efficiency, allowing a +6 bonus to immunity checks.

Luck (Ps): This skill reflects the finely-honed senses of people who are accustomed to danger, who have an edge over others. It serves as a last-ditch chance to save a character's life in a deadly situation. Whenever a character takes enough damage to die or fails a roll vital to survival (such as leaping to a chopper from an exploding tanker or trying to evade an angry AI on the Net), the character's player may attempt a Luck roll.

In cases involving killing damage, a successful Luck roll leaves the character with a single body point. If the character has any stamina points remaining, he remains conscious as well.

In cases involving "do or die" rolls—such as the Net combat above—a successful Luck roll means that the character had some truly amazing stroke of good fortune, such as finding a split-second access point to a heavily defended tax shelter database. Of course, getting



back out of this data backwater might require getting past the security or leaving traces behind. The character still takes damage as he slips into the sheltered database, but manages to elude death.

Meditation (Ps): This skill allows the PC to modulate his brain waves, triggering the release of brain chemicals or setting certain genemods in motion; this is automatic.

In addition, certain bioware can be triggered only through meditation. The genemods requiring this skill include adrenaline control, endorphin control, gills, hibernation, and pheromone control.

If a character can meditate for an hour before using any Intellect-based skill, meditation adds +10 to the skill check. This form of meditation requires a successful easy skill check.

When used with the machine empathy genemod, meditation attunes the body's electrical field to the voltages and currents of machines, allowing instant communication with computers and, most especially, the Net. This makes machine interface gear slightly more effective (increase all rolls by +2).

Precognition (Ps): The player may declare that his character is using this skill whenever the player has a hunch about how the plot is about to turn. For instance, if the group is about to chase a thug down an alleyway, one player may be suspicious that the PCs are walking into a trap and so declares he wants to see if his character has a hunch.

Once the player asks, the GM makes the roll. If the roll is successful, the character does have a hunch, and the GM gives the player a clue about who will be the next victim in a string of murders or which of a dozen captured enemy agents might break under interrogation. The hunch may or may not be related to what the PCs are currently doing. If the roll fails, the character's hunch is a dud, though the GM still relays it to the player as if it were true, leading the PC into an ambush or chasing after a false lead. A character can have only one successful hunch per day, but can have any number of bad ones.

Servomotors (R): Servomotors skill trains the PC to operate a carapace, exoframe, or exoskeleton accurately and efficiently, and is required for their use. PCs succeed with any special maneuvers requiring enhanced strength with a successful skill check. Servomotors skill is also required to use a machine interface (see Implants, page 85).

Combat

Basic combat skills just teach how to remain cool and act under fire; more advanced skills teach how to read a tactical situation and how to deploy weapons to maximum effect.

Explosives (L): This skill provides a basic knowledge of chemistry, enough to make primitive explosives with a successful skill check. Failing a skill check means that the explosive is a dud; with a critical failure of F9, the explosive goes off while being made, shaped, or primed, causing full damage to the PC and possibly setting off secondary explosions in completed bombs or charges.

Enhancements are available for specialists in booby traps, demolition, grenades, and mines.

Firearms (I): This broad skill provides the basic skills needed to load, aim, fire, field-strip, and maintain most weapons. Without a more specific skill, all skill checks when using firearms are at one-half Reflexes.

Exotics (R): This skill indicates that the character keeps up with the latest weapon developments. Exotic weapon enhancements are available for the gene gun, maser, dart gun, and X laser.

Heavy weapons (F): This category of military weapon is rarely legal, but many paramilitary outfits, criminal organizations, and street gangs teach their members these skills with stolen weapons. Enhancements are available for the grenade launcher, rail gun, rocket launcher, and street sweeper.

Longarms (R): This is the basic shotgun and rifle skill taught to hunters and soldiers. Enhancements are available for the sniper rifle, assault rifle, Gauss rifle, hunting rifle, and shotgun.

Pistols (R): Pistols are notoriously inaccurate. This skill teaches all the tricks of quick draws, maximizing accuracy, and tracking moving targets. Enhancements are available in the derringer, Gauss pistol, and target pistol, which all have special requirements.



—Sun Tzu

Do not fight a battle you cannot win.

Gunnery (L): This skill allows the PC to operate both cybernetic artillery and rockets that use radar targeting or automated fire control systems. Typical systems include self-propelled howitzers, tank guns, naval guns, anti-aircraft, orbital weapon platforms, and other field artillery. Only available to characters with a military background, this skill covers one specific type of gunnery at the easy level. All others require difficult skill checks. Gunnery is not subject to most of the modifiers in the ranged combat summary, such as darkness or aimed fire.

Infighting (F): This broad category of up-close and personal combat includes a wide variety of styles, but the Infighting skill assumes a basic knowledge of human anatomy, movement, and offensive and defensive postures. It teaches simple survival and escape from dangerous situations, not the art of war. Most hand-to-hand skills are practiced as sports or self-defense in the hope that they will never be needed.

Acrobatics (R): This skill allows the character to dodge attacks if she concentrates on doing nothing else, providing a form of defense through avoidance. While dodging, the character cannot attack, but if an opponent's roll succeeds, the acrobat can make a skill check to dodge.

Brawling (F): Brawling is street fighting, full of dirty tricks, low blows, gouges, biting, kicking, and striking vital points. It emphasizes damage through brute strength and speed rather than elegant or accurate attacks. Brawling includes no special maneuvers or advanced techniques, though some bioware (razorteeth, spikes) adds to the base damage.

Martial Arts (W): The Martial Arts skill includes every form of hand-to-hand fighting, from boxing to *tae kwon do* to *capoeira,* the balletic fighting style developed by Brazilian slaves, still practiced in the Nova Republica. All martial arts allow a practitioner to strike effectively without any weapon other than hands and feet. Martial artists gain +1 initiative during infighting and do an additional +1 damage with all infighting weapons.

Martial arts enhancements allow the character to incapacitate, disarm, or kill her target quickly (see below).

Deadly (R): The most lethal martial arts attacks depend on precise strikes and perfect timing. Though this specialization does not increase the basic damage, it does increase the lethality of all martial arts attacks by 2.

Disarm (R): Disarming an opponent requires this specialization and some luck. Instead of striking with an easy skill check, disarming an opponent requires a difficult skill check. If the martial artist loses initiative, the opponent may strike the disarmer. If he misses, the martial artist may still attempt to disarm normally, but if the opponent hits, the disarm fails, and the martial artist can take no other action that round. If the martial artist wins initiative and strikes successfully, he forces his opponent to drop his weapon.

Kickboxing (R): This skill allows the martial artist to inflict additional damage on an opponent, cumulative with the basic Martial Arts bonus of +1. Total damage for a kickboxer is 2d6, 2d8 with the spurs bioware. Kickboxing does require space—a minimum of two square meters is required for most effective use of this skill; otherwise the attack rolls become one level more difficult.

Stun (R): Disabling martial arts skill allows a PC to take an opponent down with attacks that throw or stun. This requires both winning initiative and then making a difficult Martial Arts skill check. If successful, the opponent is stunned for the rest of the current round and the next, unable to do anything but get up from a throw. Any attack made in the next round is at a +15 bonus.

Wrestling (F): The character can restrain or immobilize an opponent by grappling. A successful Wrestling check indicates that the character has closed (grappled) with the opponent; this does no damage. If the character succeeds with another Wrestling check in the next round, he causes normal damage. If the PC instead makes a difficult Wrestling check after grappling an opponent, the opponent is pinned.

It is a difficult task for a grappled opponent to hit a target. It is an extremely difficult task for a pinned opponent to hit anything.

A grappled or pinned character can be freed by someone else who attacks successfully or can free herself by making a successful grappling attack of her own. Pinned

characters who make a successful attack become merely grappled. Grappled characters who attack successfully break free of the grapple.

Weapon combat (F): This skill allows a PC to hold his own with a weapon, using anything from an obsidian sabre to a monofilament line. The Club (F), Knife (R), and Machete (R) enhancements allow additional bonuses.

Corporate

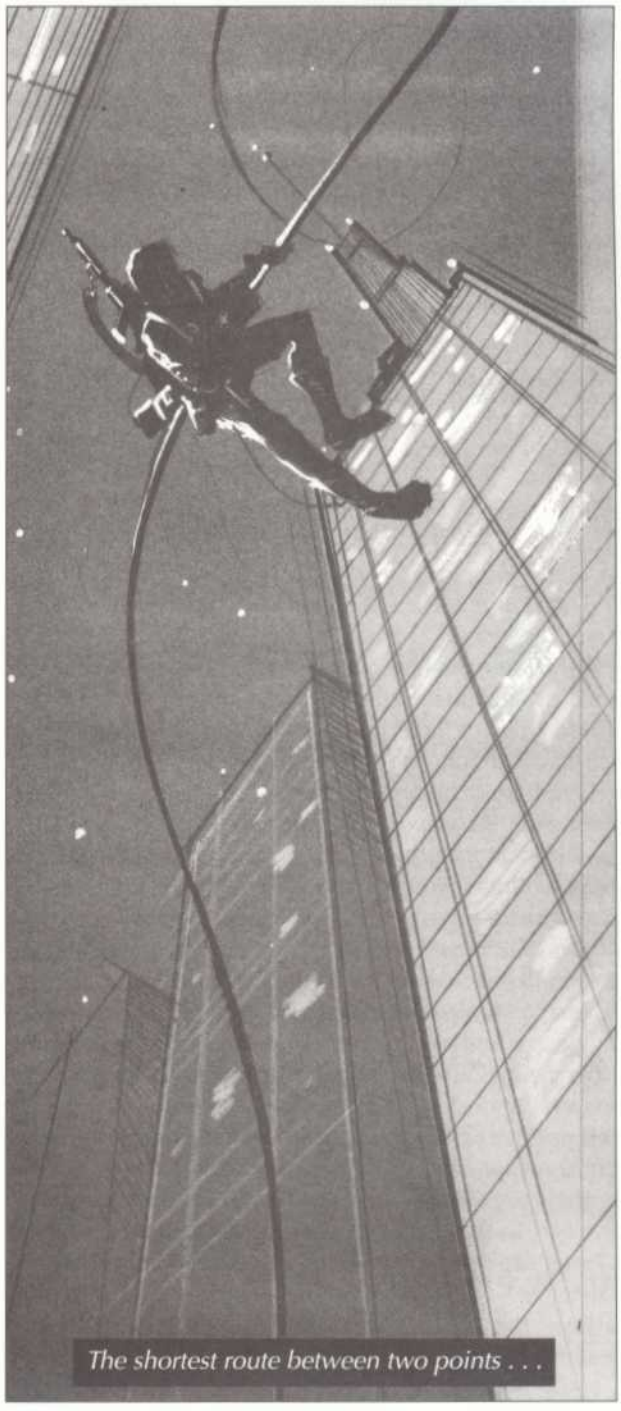
Running a company takes a lot of attitude and a certain brashness. In troubled times, it is often only a small shift from legitimate entrepreneur to organized criminal. This pool reflects a wide variety of financial, negotiating, and persuasive skills. Most of these skills have two possible applications, each described below.

Accounting (L): On a successful easy skill roll, the PC can either "cook the books" or discover where someone else has done so. It also allows a character to hide transactions or the source of funds; this requires a difficult skill check.

This skill also allows a character to trace persons electronically by their electronic money trails; this requires a successful Netrunning roll in addition to a successful Accounting roll.

Black Market (C): This skill allows the character to locate items not normally for sale, or to obtain hot goods for a fraction of their usual price (1–2 RL lower than usual). Failing at the former means the PC completely fails to find the illegal or rare item for sale anywhere, but failing at the latter means that the PC is caught in a sting operation, has bought faulty goods, or has gotten goods that are not as advertised. Either use of the skill requires knowing the local language or having an unethical native guide.

Bluff (C): PCs with this skill can often walk right through problems by putting up a brash front. The GM makes the roll for the skill, and uses the result to steer the role-playing. Bluffing a sleepy watchman might be an easy check, staking everything against an orbital pirate would be difficult, and getting clearance to enter a private datacore from a suspicious AI on the Net



The shortest route between two points . . .



Paranoia is knowing all the facts. —William S. Burroughs

should be very difficult.

This skill also allows the PC to see through the bluffs of others. The skill check is automatic if the opposing character has Bluff at 25 or less, easy if it is 50 or less, difficult if it is less than 75, very difficult if it is 76 or more. Success means that the PC knows about how far the opponent can be pushed or trusted. Failure means that the PC misjudges the situation.

Bribery (Po): The PC is adept at getting what she wants from uncooperative, reluctant, or just plain apathetic NPCs. This check becomes difficult or very difficult if the NPC is conscientious about the law; some NPCs may be impossible to bribe. The critical failure margin rating for a normal check is F9; for a difficult check, F8; and for a very difficult check, F7. On a critical failure, the NPC is offended. His reaction can vary from slamming the door in the PC's face to notifying the police. There is no critical success margin.

Data Forgery (I): The character can forge retinal scans and voiceprints if he also has the Security Systems and Programming skills. He can forge datacards, medical records, and passcards if he has a model to work from. These types of forgeries pass machine inspection on an easy skill check, and will pass a cursory human glance on a difficult check and a casual inspection with a very difficult skill check. They cannot pass a close inspection by a human using a Net node or other diagnostic tools. Making them requires at least one hour, and possibly days for extensive security passcards.

A character with this skill can detect forgeries with an easy skill check, since he knows what to look for.

Image Manipulation (Ps): This skill involves the public perception of individuals or corporations. It resembles Spin Control (q.v.), but is ongoing. Image manipulation requires a good reading of the zeitgeist, the political climate, cultural trends, and media reactions. A successful skill check requires one to six months and allows the character to shape his public image on the Net to match some predetermined goal, such as "Belter ore magnate," "avant garde artist," or "daredevil dilettante." In combination with Plastic Surgery, this skill allows the PC to completely reinvent himself and assume novel disguises and public personas at will. The PC must learn Netrunning before learning this skill.

Negotiation (C): This skill allows a corporate shark to get what he wants in a deal, whether selling goods, sealing a contract, or bargaining about terms, without alienating the person he is negotiating with (unless that's what he wants!).

Negotiation also allows a character to stall or delay anyone he can corner in conversation. This sort of fast-talk requires an easy skill check, raised to difficult if the characters to be stalled are already suspicious.

Paper Forgery (R): The character can forge a signature, paper money, or an extensive document, such as a will, a contract, or stock certificates. The forgery will pass a cursory glance on a normal check, a casual inspection with a difficult skill check, and a close inspection with an extremely difficult check. Forging long documents is slow work, and can require a day or more to complete.

The character may be able to forge convincing copies of works of art, but this requires an extremely difficult skill check.

A character with this skill can detect forgeries with an easy skill check, since he knows what to look for.

Smuggling (I): The character can hide contraband in a vehicle, on his body, or in a person's effects and sneak it past authorities. A character with the Search skill may notice on a successful roll; all others have no chance to detect the contraband.

Social Chameleon (C): This skill is related to acting and depends on a good ear and excellent mimicry. It allows a character to blend into any group or subculture and be accepted as a member, from Rastafarians to bankers to orbital construction workers. It acts synergistically with the Disguise skill; if a PC has both skills and has been able to don an appropriate disguise, he can use the better of the two skills with a +10 bonus to any skill checks.

Social Engineering (C): Social engineering is a form of silver-tongued persuasion that often involves an element of the con. The PC impersonates someone in authority or someone who belongs in a restricted area and hopes that he is able to befuddle his target long enough to get what he wants without arousing suspicion. This use of



Social Engineering requires fast talking and allows a PC to bypass guards and secretaries.

Social Engineering also allows a smooth-talking PC to persuade NPCs to do things that they know they shouldn't be doing, such as getting a scared informer to talk, getting a guard to open a gate, or getting a bank teller to process a lengthy transaction at one minute before closing time. The PC must have something to offer or must have a plausible reason for the unusual course of action.

Spin Control (C): This skill allows a character to manipulate the public perception of events, to feed media people a line, and to fool reporters into using certain repeated phrases. Depending on the event being manipulated and the number of facts reporters can access, the skill check can vary from automatic (if the PC controls the flow of all information about events—such as state-sponsored censorship of a war) to very difficult (for atrocities that left many witnesses). If the check succeeds, the PC's story is largely accepted, but if it fails, the attempt backfires and a leak spreads the truth all over the Net, making the event look even worse due to the bungled cover-up. Learning this skill requires Netrunning.

Stock Manipulation (Po): Each time this skill is successfully used, it raises the character's micro stock value, increasing the micro's RL by one. If the use fails, the RL drops by one. It can also be used to manipulate the stocks of other micros for profit (or drive them into poverty).

If the stock manipulator is trying to profit from the manipulation, on a successful roll he has made enough money to use the next higher base RL for a single purchase. If it fails, one of his most expensive items put up as security is repossessed.

If the intent is to drive another micro's stock down to deprive it of resources, a successful roll lowers that micro's RL by one. If it fails, the attempt is noticed and countered; on a failure margin of F7, the targeted micro actually profits and goes up 1 RL.

Learning this skill requires Netrunning.

Street Talk

Black rain: Radioactive rain, common in the wake of nuclear tests and in dead zones.

Boosted (from): Stole. Also used to describe anyone with extensive bioware.

Burn: Acid rain, common in Canada, Central Europe, and China.

God Wire: A surgical or biological implant that constantly stimulates the pleasure centers of the brain, releasing visions and inducing religious ecstasy. Several cults of bitheads depend on God Wires to maintain the fervor of their members.

Jacked up: Using metabolites, or feeling the rush/thrill of new bioware.

Riding the dragon (Pacifican): Said of someone using metabolites.

Runner: A smuggler or messenger affiliated with a gang.

Under the Wire: Implanted with a God Wire.

Espionage

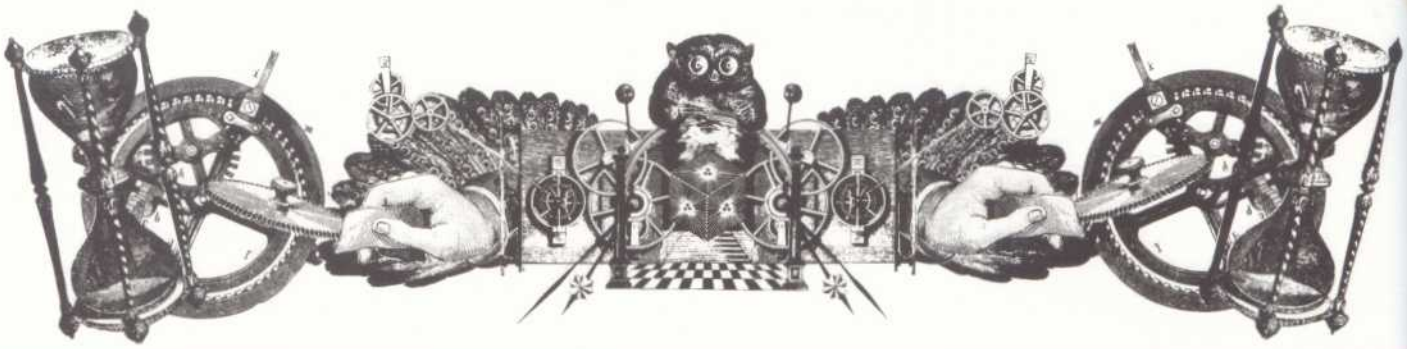
Stealth and misdirection are the spy's stock in trade. The espionage skills are all related to gaining a goal through covert means requiring no violence.

Codebreaking (L): Although programs do most of the work, codebreaking still requires a certain amount of human supervision and intuition. Depending on the available processor, the work requires 6 hours (cutting edge), 12 hours (fast), 24 hours (average), or 48 hours (dated). Failed attempts abort after 1, 2, 3, or 6 hours.

Disguise (L): Using make-up and clothing, the character can create a disguise good enough to fool others under conditions such as fog, bad light, or distance. Disguises able to fool inspection are difficult skill checks, and characters using the Search skill successfully can penetrate all disguises, if the search is for a disguised person.

Disguise works synergistically with the Social Chameleon skill (q.v.).

Eavesdropping (L): This skill allows a character to plant bugs, tap wires, scan cellular video phone conver-



sations, and use parabolic microphones and microwave mikes to overhear conversations at a distance. All eavesdropping requires appropriate equipment. Unless lines are specifically monitored or secured against taps, successful Eavesdropping is an easy skill check.

PhotoSat Recon (L): This skill allows the character to interpret satellite photos and other high-altitude data and determine whether the storage tanks viewed from above could be fake (easy), whether a runway is long enough to carry cargo airliners (automatic), whether new digging is for bunkers or for missile silos (difficult), and similar questions. The GM should make these rolls, and give a false interpretation if a roll fails.

Search (I): When using this skill, the character concentrates for a minute or more on his immediate surroundings, looking for anything unusual or out of place. A search can find a hidden compartment, an enemy plane or base, smuggled goods, or a tailing enemy. The roll can be automatic (for anything prominently displayed), easy (cluttered or normally stored materials), difficult (deliberately hidden people, places, and things), or very difficult (for experts in disguise, camouflage, and for overgrown, ancient, or extremely well hidden things).

Stealth (R): Stealth allows a PC to use silence and existing shadows or cover to hide from view. The character can hide in a forest or in a dark alley, or can move through a crowd without being noticed. Normal use of Stealth assumes the PC is wearing appropriate clothing and is moving slowly or not at all (or if in a crowd, moving at the same speed as others). If the character wears distinctive clothing, has little cover, or walks on a noisy surface, Stealth is a difficult task. If the PC is visually striking, the light is bright, the walking surface is designed to be noisy, or cover is sparse, Stealth is a very difficult task. Stealth is impossible under some conditions.

Tailing (Ps): This is the ability to unobtrusively follow a person through crowded conditions and in relatively empty streets. The more crowded and bustling an area, the easier this check is. The streets of Tokyo or Berlin on a weekend night are easy (and the risk is that the target will be lost, not that the tail will be noticed), a city in the early hours of the morning is difficult, and a small village whose inhabitants all know each other is very difficult. Factors such as lighting, crowds, available cover, and the target's paranoia are all important in assigning a difficulty rating to any tailing operation.

Languages and Liberal Arts

All languages are Learning skills. Once learned, the character is as fluent in the language as her Learning skill indicates. Most uses of languages are easy skill checks, requiring no roll. A skill check is necessary only when the discussion becomes highly technical, emotional, or involves an uncommon dialect.

Liberal arts skills confer whatever informational advantage the PC can derive from them. All are assumed to be B.A.-level educations. Law, for example, implies a working knowledge of the law on the level of a legal secretary; it does not make the PC a lawyer.

Medicine

Medicine in the *Kromosome* setting is much advanced, with cures available for a host of diseases. Unfortunately, biological warfare has become common as well. Additionally, many natural bacterial diseases have evolved a resistance to the antibiotics used to treat them, so some common illnesses can still be fatal, such as tuberculosis, pneumonia, meningitis, or polio. Most surgery is done with laser scalpels, though viral surgery and other forms are common for cancer and for genetic diseases.

First Aid (I): This covers all the basics of stabilizing an injured person long enough for him or her to receive a doctor's care. Stabilizing a patient for transportation, treating shock or broken bones, and other traumatic care are difficult tasks.

First aid can be used on any character injured in battle. If the check succeeds, the character regains 1d4 stamina points. If it fails, no harm is done. First aid can be applied to a character only once after a single fight, and heals only wounds sustained in that combat. Equipment is usually required.



General Practice (I): The character can automatically diagnose common ailments and determine a treatment for their cure. Exotic diseases require an easy skill check ("exotic" is very location-dependent; GM's call). Entirely new diseases require a difficult skill check to recognize, and an extremely difficult check to treat successfully.

Forensics (L): This specialty allows the character to determine the time and cause of death in most cases, whether death was natural or the result of violence or accident. Most such determinations require only a difficult skill check. In cases involving rare diseases or poison that is difficult to detect, the skill check is extremely difficult. Determining time of death requires an easy skill check. Another easy skill check allows a PC to find skin under the nails, hair on clothing, and other clues (if any were left behind) that might lead to a genetic fingerprint and positive ID of a criminal.

Pharmacology (L): The character knows the proper use and dosage of common drugs, both legal and illegal. He is aware of new drugs being developed, and the possible properties of classes of drugs (stimulants, depressants, antibiotics, etc). With a properly-equipped lab, he can determine the nature and purity of a sample of an unknown drug.

Psychiatry (I): Traditionally concerned with diagnosing and treating mental illness, Psychiatry also allows the PC to cause mental illness in computer systems (and some weak-willed humans) and to lightly hypnotize anyone who listens to the psychiatrist for a round and fails a Willpower check.

Psychiatry also interacts synergistically with Persuasion and Negotiation, providing a +3 bonus to those skills.

Surgery (L): Surgery skill allows the PC to remove tumors, extract bullets, suture cuts, and repair torn muscles and ligaments. The Implants enhancement to this skill allows the PC to implant cybernetic devices like brain jacks, machine interfaces, and cochlear implants.

The Plastic or Reconstructive Surgery enhancement allows the PC to alter or improve the appearance of others, removing tattoos, changing facial features, and minimizing scars. The skill check may be easy, difficult, or very difficult, depending on the amount of reconstruction required.

The Viral Surgery enhancement requires Virology but allows the PC to implant genemods in herself or other characters, including harmful ones such as allergene or forms of similar biotech blackmail.

Netrunning

Netrunning is the skill pool that teaches navigating one's way through the Net, locating crucial access points and data. It is a general term for computer work, and more technical aspects of working with the Net are included here as well.

Computer Systems (I): This skill covers both the theoretical and practical knowledge of how computers operate, the general background that people need to perform day-to-day computer tasks. Computer Systems is required to figure out the purpose of any new, cutting edge technology that PCs may discover. In addition, it is useful in deciphering how to operate any ancient or ghettoized computer system that does not use the Net procedures and protocols.

Artificial Intelligence (L): The character understands the theory and practice of constructing artificial intelligences. The resources required to build an AI are enormous, but nations and micros with enough resources and dedication can usually construct a sane, functioning AI in about four years, at RL 14. This skill also gives the PC insight into how to cripple or destroy AIs through hardware and software vulnerabilities. When combating AIs, the character gains +5 to all attack rolls, +2 to damage rolls.

Programming (L): Programming skill is required to write any viable code, from simple search routines to complex electronic pattern recognition and voice emulation. Without this skill, Netrunners are limited to using the programs that others provide.

A programmer can create any of the programs listed in the Netrunning equipment section, given enough time and successful skill rolls. The type of program determines the degree of difficulty.



Avarice, the spur of industry.
—David Hume

Table 6: Programs

RL	Check	Time
1–3	Automatic	1 day/RL
4–7	Easy	1 week/RL
8–10	Difficult	2 man-years
11+	Very difficult	10 man-years

Some tasks, such as creating a filterless interface or an AI-emulation and prediction program, are beyond the capabilities of any programmer. These cases are up to the GM.

If a program is put together on the fly or under pressure, the difficulty level in each category increases by one. This reduces the time required by one level. Shortcuts are not possible at RL 11+.

Programmers can enhance or optimize existing software with skill rolls as well. Optimizing software provides a +10 bonus for that software to perform a more specific task than its description calls for, and it requires a skill check one level more difficult than the "from-scratch" levels listed above.

Hacking (W): This skill is centered on taking control of other computer assets, satellite links, or microwave or radio relays. Hacking uses brute force to crack a secure computer system. Once in, the hacker gains more privileges and can attempt data forgery, changing bills, credit card ratings, and other interesting forms of electronic information. He may also be able to extract confidential information from files.

Hacking is a long, involved activity. If successful, the PC gains access to restricted nodes, Net sectors (such as corporate ones), and databases. What the character does with that access might trigger additional defenses. Failure can have a number of repercussions, depending on the nature of the opposing security. A hacker may set off silent alarms or otherwise trip system defenses without realizing it, so the GM should roll all Hacking skill checks.

Netrunning (L): This includes all the basic skills of skimming information, posting electronic notes or video clips, downloading databases or programs from public sources and so on. It is passive control of allowed information channels; filtering out junk, picking up the jewels from a constant flow of information. Netrunning gives a PC access to current, public, and accessible information, not obscure information on defunct, private, dated, or classified subjects (which requires either Hacking or Obscure Reference skill).

Netrunning differs from Hacking in that it allows the PC to search for publicly available information. All *Kromosome* PCs are assumed to be familiar with the Net, from entering the Net at the nearest node and calling up Net addresses, to gathering travel information, to searching public library bases for hobby and business data.

Specific program enhancement allows the Netrunner to optimize his or her performance with a particular piece of software, by using it so often that the keystrokes, VR motions, or brain jack patterns become second nature and the Netrunner can react instinctively to any complication the program encounters.

Obscure Reference (I): This skill gives a PC the knack for finding things in the sea of the Net. Whenever the characters go searching for information that isn't commonly available, they have some chance of finding what they want on the Net. The difficulty of the skill check varies with the information sought, but no obscure reference is automatic. A ship's registry or the history of a minor bureaucrat might be an easy skill check, the name and annual reports of a defunct company might be difficult, and the orbital path and velocity of an illegal satellite would be very difficult. Suppressed information like hidden corp files or national secrets is very difficult to uncover. Personal information, rumors, and works in progress (such as research notes or incomplete videos) are usually not available on the Net, even as obscure references.

Video Manipulation (L): Essentially a kind of film forgery, this skill allows a PC to make credible simulations of events that never took place. No video footage of any kind is required, though having it to splice in makes the required check easy instead of difficult. Fooling a casual observer is easiest. Editing and splicing together existing footage is automatic, taking existing footage and altering it is an easy task, and starting from scratch without any footage is a difficult task. Selectively



removing someone's video traces from footage is a difficult task, as it requires adding in missing background. Making the forgery good enough to fool an expert increases each of these difficulty levels by one.

Physical

Despite the explosion of artificial reflexes, skills taught by computer, and implanted bioware, some things still need to be worked into the body the hard way, by practice and repetition. The skills of athletes are still honed and practiced, treating the body as a perfectible machine requiring constant maintenance.

Balance (R): This skill includes tightrope walking, cliff-hanging, and walking across any narrow surface such as the top of a wall or the ledge of a building. Only a single check is required for any obstacle, though the GM may impose a penalty for exceptionally tough tasks. Failure results in a fall.

Climbing (F): This includes rappelling, rope-and-piton work, and unassisted climbing on buildings, cliffs, mountains, and other steep surfaces. Failure may or may not result in a long drop, because rope-and-piton climbers are secured. Even a short fall, however, does cause 1d6 points of stamina damage, and a second check is required to see if the pitons hold.

Jumping (F): All PCs can jump, but this skill refers to the athletic practices of the long jump, high jump, and pole vault. For a PC with this skill, a running jump covers at least 4 meters, a high jump can go over 2 meters, and with a suitable pole, a vault can go over 6 meters. This skill is required to make full use of the wallaby genemod.

Riding (R): This skill allows a character to gallop, jump, and fight from horseback. Since horses are obscenely rare and difficult to maintain, the skill is considered a social benefit. The rider may choose rodeo, racing, polo, steeplechase, or hunting as his background and style of the sport.

Running (F): All PCs can run (as described in the System Guide portion of this book), but this skill covers serious training as both a sprinter and long-distance runner. This skill gives a bonus to the PC's normal movement rate. It also allows him or her to outrun anyone without the skill, either to catch up to others or to leave them behind.

Survival (L): Survival skill includes basic military or paramilitary training on how to survive in the wilderness with limited resources. PCs with this skill can set snares, find and purify water, improvise deadfalls, track others, cover their own tracks, and so on.

Swimming (F): All PCs are assumed to know how to keep their heads above water. This skill allows the PC to swim for great distances, at high speeds, or in dangerous conditions, such as cold water or rapids. Characters with this skill also know how to dive safely from great heights.

Science

Science and engineering are the core forms of knowledge in the postindustrial world, and successful researchers are treated well by their national or private patrons.

Many sciences are not listed in this pool but are available to characters that want them. All of them are Learning skills that provide benefits chosen by the GM. Chemistry, for instance, provides a working knowledge of how to manufacture explosives, acids, and plastics. Other sciences available include astronomy, crystallography, geology (including terraforming subskill), mathematics, and physics (including subatomic particles and superconductors subskills).

General Sciences (I): This gives the character a chance to know general facts and theories, but not to render an expert opinion on any specialty. With a successful skill roll, the character knows where to go to look up the answers, or who to call for an analysis.

Biochemistry (L): Biochemistry covers all the details of DNA, protein chemistry, and other organic chemicals. The Bioreactive enhancement allows the PC to estimate the effects that many substances have on living organisms, from hormones to vitamins to pheromones to medicines. She can also neutralize or manufacture these substances (with a successful skill roll). The Toxicology enhancement does the same for poisons.



There are people who have money, and people who are rich.
—Coco Chanel

Virology (L): This skill allows the character to know about viral diseases (easy), perform viral surgery to implant genemods (difficult), and to even design viral ammunition for gene guns (very difficult).

Space

Learning skills all over again in the weightless, floating world of the void can take a lifetime, but a number of basics are covered by machinery. Astrogation is done entirely by computer, especially in the Belt, where avoiding asteroids and course-matching them for mining requires cybernetic systems. Medical skills are crucial in space, where there is often no doctor or dentist other than the pilot, robot handler, or fellow passengers. Belter basics are covered here.

Life Support Extension (L): The character can squeeze maximum performance from a minimum of air, water, and power, and knows how to dissipate or conserve excess heat. If the character also has Mechanical skill, the check is at +5.

Low-G Maneuver (R): This skill allows a character to operate in a weightless environment without the usual –20 penalty to all attack rolls and skill checks. The character adjusts to variable gravity readily, can pull high G forces without passing out, and knows how to prevent bone loss from weightlessness.

The Construction and Repair enhancements provide a bonus to the PC's chance to build airtight structures or repair spacecraft while in space.

Mining (I): Mining in space requires the tools and skills of a field geologist, the ability to handle robot herds in vacuum, and a lucky streak. Depending on where in the Belt a miner is searching and what he is looking for, the skill check is either automatic (for stone, iron, and nickel), easy (for ice, most metals, and ammonia), difficult (for industrial quality gems and frozen gases like oxygen, carbon dioxide, and nitrogen), or very difficult (for hydrocarbon films to replenish biological systems, jewel-quality gems, and raw minerals like sulfur or salt).

Piloting (L): Piloting is a broad skill that means a character knows how to run a spaceship: how to plot courses, fire engines, conduct basic shipboard maintenance, load cargo, handle basic communication, plan for successful reentry, and fire mass drivers. Though the basics above are all automatic, more difficult tasks are not. Evasive combat maneuvers or flying through the asteroid belt require an easy skill check, and major repairs require a difficult skill check.

Vacc Suit (F): The character knows how to fit, operate, and patch a vaccuum suit. Most uses of this skill are automatic once learned. Repairing a suit is an easy check; patching one under fire is difficult.

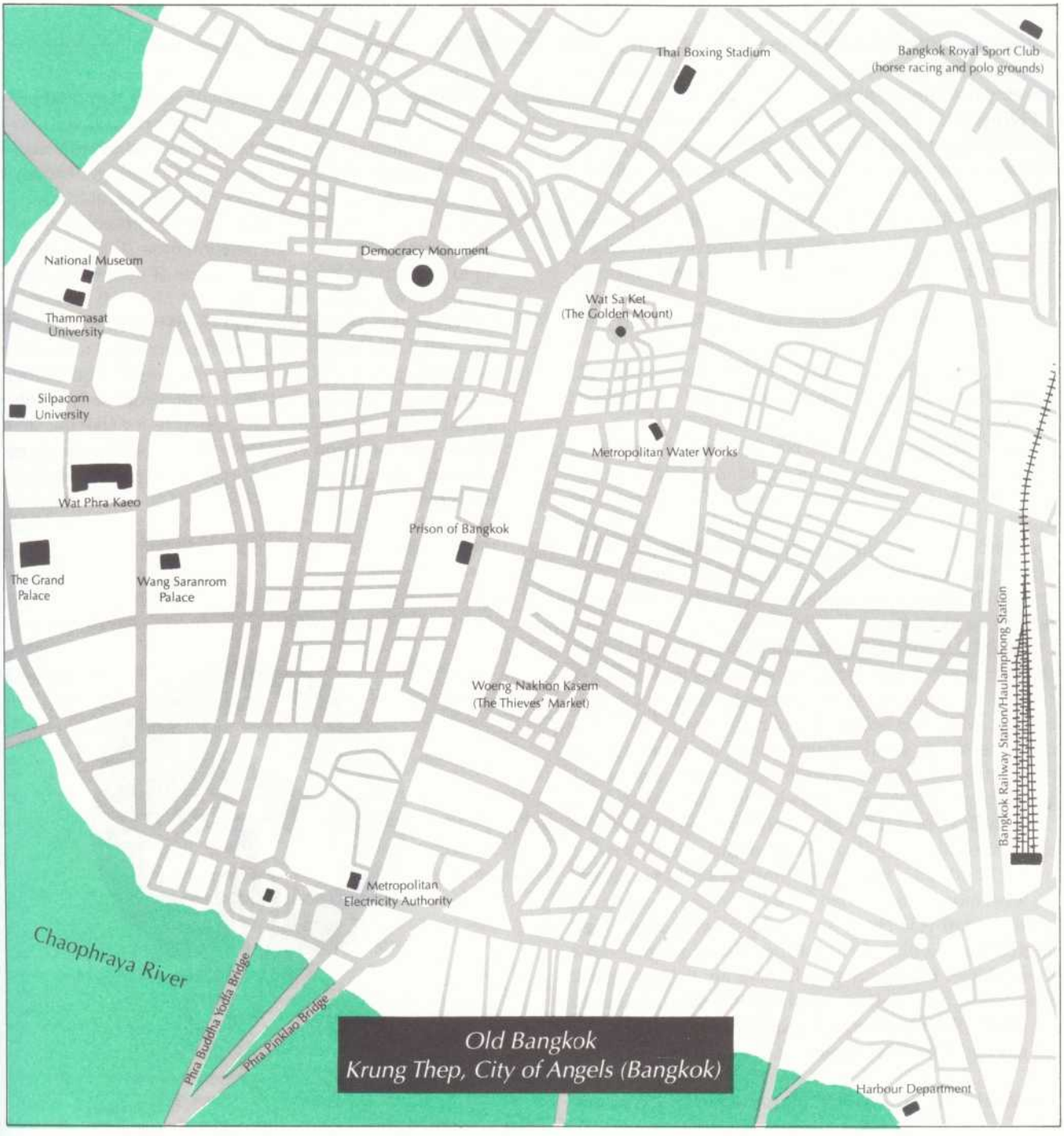
Belter Terms and Slang

Brass Ring: A mythical alien spacecraft said to be sighted in the Belt from time to time, allegedly shaped like a ring
Burn: To fire engines
Driver: A mass driver
Flock: A herd of robots
Koyaanisqatsi (Hopi): Life out of balance, a way of life so crazy it calls for a new way of living
Lode: The mother lode, the big strike, the Lode is an asteroid of pure diamond, pure ring carbon, or pure titanium, depending on who is telling the tale
Mensa (German): A cafeteria, the primary social center in space
Perlerorneq (Inuit): Winter depression, being sick of life, space depression
Relay: A communications node used to boost signals over solar distances
Sling: A planetary slingshot, used to increase a ship's speed
Tovareesh (Russian): A friend, comrade
Wheel: A space station

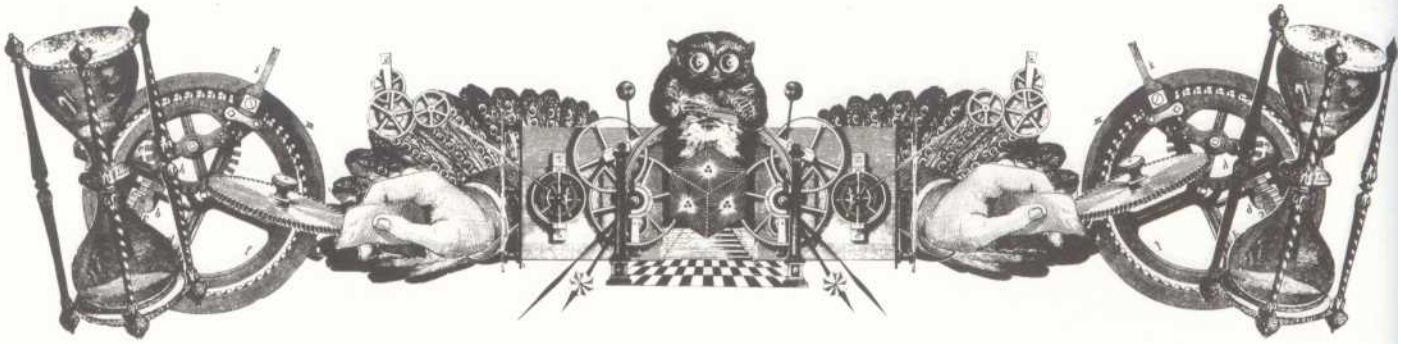
Transportation

This skill pool is open to most characters, though the appropriate types of skill will vary widely. Enhancements are available in specific types of vehicles and in racing or combat maneuvers, such as bootlegger





Old Bangkok
Krung Thep, City of Angels (Bangkok)



During the clash of arms the laws are silent.
—Cicero

reverses for ground transportation (normally a difficult check except in a hovercraft or on a motorcycle) or Immelmann turns for planes.

Flying (L): This skill comes from spending hours learning about fixed wing aircraft and spending time with an instructor in the air. The PC knows how to fly the plane and read the instruments.

The basic flying skill includes only fixed wing planes. Specialization is required for rotary wing aircraft, suborbital flight, and lighter-than-air craft (zeppelins and blimps).

Enhancements are available for both remote and low-altitude flying. Low-altitude, nap-of-the-earth flight allows a character to fly under radar at treetop level. Remote flying allows the character to pilot a drone aircraft using radio or wire guidance.

Glider Aircraft (L): The PC has the basic reflexes and gut instincts for guiding glider flight and making dead-stick landings. Programs exist that can handle most routine flight tasks, but they are not trustworthy in an emergency or crisis situation. Unpowered flight includes gliders, balloons, and interface kites, which are human-powered but handle like gliders. These all require specializations to master.

Ground (L): This skill covers all forms of ground transport, from solar cycles to natural gas buses and trucks. It covers only automatic shift vehicles (including electric vehicles, which do not need a transmission). Most railway systems use similar conventions for acceleration and braking, and anyone with the Rail enhancement can handle maglevs, subways, and elevated trains.

Freight Tractor (L): Freight tractors pulling semitrailers require special skill to drive. Without this specialization, anyone handling a big rig will find all skill checks are one level more difficult than normal.

Hovercraft (L): These sea and land vehicles cover rough terrain with ease, and they handle unlike any other vehicle. Riding on a cushion of air, they are ideal for swamps, river deltas, marshes, and coastal islands and inlets. Their high power requirements call for natural gas and ethanol turbines, increasing their operating costs.

Manual Shift (R): Manual transmissions (such as are found in racers, bikes, and freight tractors) are more fuel efficient but require practice to master.

Military (L): This category covers tanks, armored personnel carriers, large rocket launchers, and self-propelled artillery pieces. Specialized training is required.

Motorcycle (R): Bikes are ethanol-burning, fast-moving, and dangerous to novices. Their manual transmissions and need for balance are offset by their maneuverability and high performance. This enhancement gives the rider a better chance of performing dangerous jumps, turns, and stunts.

Water (L): This skill covers vessels of all sizes. It includes knowledge of currents, navigation, and basic seamanship. When the skill is taken, the PC can choose a preferred type of vessel: hydrofoil, prop, sail, or submersible. Enhancements are available for specific ship types, such as cargo container steamers, supertankers, warships, gunrunning speedboats, river barges, or pleasure craft.





Skill Pools

A skill pool marked with an asterisk is an enhancement (see the System Guide section).

Applied Technology
Biotechnology (L)
- Bioremediation* (L)
- Cloning* (L)
- DNA Transfer* (L)

Cybernetics (L)
Electronics (L)
Jack of All Trades (I)
Mechanic (L)
Security Systems (L)

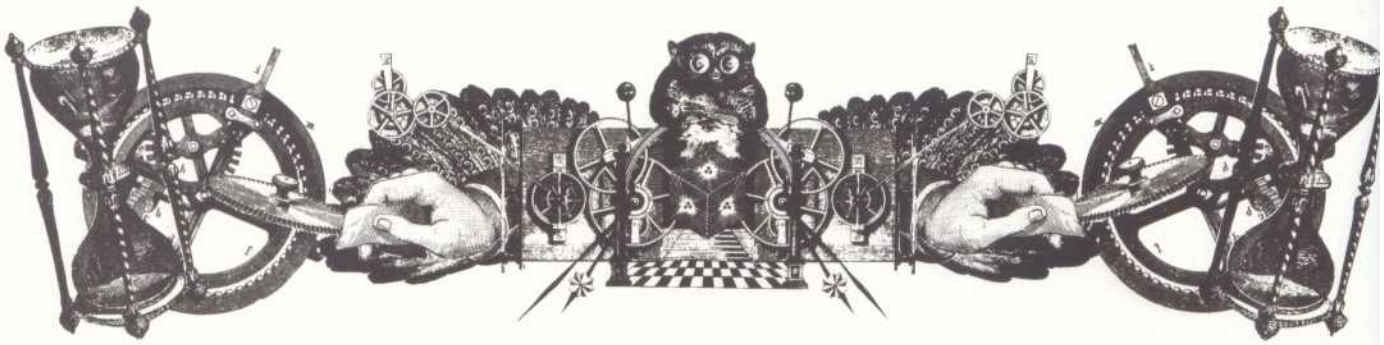
Biofeedback
Acupuncture (L)
Edge (Ps)
Grit (W)
Immunity (F)
Luck (Ps)
Meditation (Ps)
Precognition (Ps)
Servomotors (R)

Combat
Explosives (L)
- Booby Trap* (I)
- Demolition* (L)
- Grenade* (R)
- Mine* (L)

Firearms (I)
- Exotics (R)
  - Dart Gun* (R)
  - Gene Gun* (R)
  - Maser* (R)
  - X Laser* (R)
- Heavy Weapons (F)
  - Grenade Launcher* (F)
  - Rail Gun* (F)
  - Rocket Launcher* (R)
  - Street Sweeper* (F)
- Longarms (R)
  - Assault Rifle* (R)
  - Electrothermal Rifle* (R)
  - Gauss Rifle* (R)
  - Hunting Rifle* (R)
  - Shotgun* (R)
  - Sniper Rifle* (R)
- Pistols (R)
  - Derringer* (R)
  - Gauss Pistol* (R)
  - Target Pistol* (R)

Gunnery (L)
Infighting (F)
- Acrobatics (R)
- Brawling (F)
- Martial Arts (W)
  - Deadly* (R)
  - Disarm* (R)
  - Kickboxing* (R)
  - Stun* (R)
  - Wrestling* (F)
- Weapon Combat (F)
  - Club* (F)
  - Knife* (R)
  - Machete* (R)

Corporate
Accounting (L)
Black Market (C)
Bluff (C)
Bribery (Po)
Data Forgery (I)
Image Manipulation (Ps)
Negotiation (C)
Paper Forgery (R)
Smuggling (I)
Social Chameleon (C)
Social Engineering (C)
Spin Control (C)
Stock Manipulation (Po)



—Lady Caroline Lamb

Mad, bad, and dangerous to know.

Espionage
Codebreaking (L)
Disguise (L)
Eavesdropping (L)
Photosat Recon (L)
Search (I)
Stealth (R)
Tailing (Ps)

Languages
All languages are Learning skills.

Liberal Arts
Art (L)
History (L)
Law (L)
Literature (L)
Music (I)
  Instrument (C)
  Vocal (C)

Medicine
First Aid (I)
General Practice (I)
    Forensics (L)
Pharmacology (L)
Psychiatry (I)
Surgery (L)
        Implants* (R)
        Plastic/Reconstructive* (L)
        Viral Surgery* (L)

Netrunning
Computer Systems (I)
    Artificial Intelligence (L)
    Programming (L)
    Hacking (W)
Netrunning (L)
        Specific Program* (L)
    Obscure Reference (I)
Video Manipulation (L)

Physical
Balance (R)
Climbing (F)
Jumping (F)
Riding (R)
Running (F)
Survival (L)
Swimming (F)

Sciences
General Sciences (I)
    Biochemistry (L)
        Bioreactive* (L)
        Toxicology* (L)
    Virology (L)

Space
Life Support Extension (L)
Low-G Maneuver (R)
        Construction*
        Repair*
Mining (I)
Piloting (L)
Vacc Suit (F)

Transportation
Flying (L)
        Remote* (L)
        Low-altitude* (L)
    Glider (L)
    Interface Kite (L)
    LTA (L)
    Rotary (L)
    Suborbital (L)
Ground (L)
        Rail*
    Freight Tractor (L)
    Hovercraft (L)
    Manual Shift (R)
    Military (L)
    Motorcycle (R)
Water (L)
        Hydrofoil* (L)
        Prop* (L)
        Sail* (L)
    Submersible (L)



Capitalization & Finance

The group's resource level (RL) measures more than just income, profits, and debts—it also indicates the size of the microcorp's credit line and the value of patents, royalties, and other intellectual properties that can be licensed.

Player characters make their initial purchases using an RL derived from their Position score, consulting Table 7. Only black marketeers can purchase illegal weapons or programs. After all purchases are made, the GM should look over each PC's list and strike out excessive purchases: Allow about two items per RL (so an RL 6 character would purchase about 12 items initially). Players must give a plausible explanation for any excess armor and weaponry they buy.

After their initial purchases during character generation, the players must decide whether to pool their resources into a single fund for the entire micro or to keep their funds separate. All individuals must agree on one or the other; they cannot pool some members' funds and not others'.

If they pool their money, the characters all start out at the same financial level, determined by averaging the Position attributes of all characters in the microcorp and consulting Table 7: Microcorp Finances. To raise their Resource Level, all PCs must spend experience points (see page 121 for details). Shared money can be kept in corporate accounts available to any of the PCs, or in sealed accounts open only to their leader or a small board.

If the PCs do not share funds, the richer PCs may purchase gifts for other PCs. Players who abuse this find the cost of supporting other PCs' lifestyles cuts into their rich PCs' wealth, and those PCs' RLs drop by one.

If funds aren't shared, each PC's resource level is checked independently on the Microcorp Finances table, and his RL rises as he gains Position. Each PC must pay his own expenses, but rich PCs can buy a few more expensive items that they couldn't afford if their money was used to bring everyone's RL up to some average level.

Bankruptcy

PCs can be bankrupted by fraud or theft, or by attempting to purchase something they can't quite afford. A bankrupt PC loses everything to repossession and seizure. Fighting off the repo man could be quite a challenge, as most repo companies are heavily armed and able to bypass simple security.

If a micro with pooled funds goes bankrupt, the player characters don't lose everything: The microcorp may continue to operate for one year protected by bankruptcy law. If it does not regain profitability in that time (climb back to resource level 1), it is dissolved, and the characters join the ranks of the unemployed. The campaign is over, or can continue with the PCs trying to hustle their way out of the gutter with minimal resources.

If the corp drops an income level, it must sell off assets to pay costs. Lose either all gear except the highest resource level possession (such as an orbital factory, for instance), or lose that single largest possession. Genemods cannot be repossessed as they are not considered legal property when they are an integral part of a living creature. Mechanical implants can be repossessed, but only if doing so would cause "no grievous material harm" to the person or microcorp losing the implant. Any implant that can be lost without killing the owner can be repossessed, from limbs to eyes to exoskeletons.

It may be better to go bankrupt than to lose cash flow. A micro may voluntarily go bankrupt by a majority vote of the board (the PCs). To do so, they simply overextend their credit to purchase an item from the highest RL category they can afford, then hide or destroy the purchase and default on the payments. Since the purchase cannot be repossessed, the micro is still liable for the cost of the purchase. The debt must be renounced through bankruptcy.



The street finds its own uses for tech. The Net finds its own uses for garbage.
—Net Truism

Table 7: Microcorp Finances

RL	Status	Position	Daily Cash Flow	Typical Purchases	Allied Micros
1	Bankrupt	<20	1	None	0
2	Tribal	21–25	10	Food	0
3	Impoverished	26–30	100	Clothes	0
4	Sweatshop	31–35	500	Programs	0
5*	Export	36–40	1,000	Guns	0
6*	Hustling	41–45	5,000	Cars	0
7*	Stable	46–50	10,000	Genemods	1
8	Industrial	51–55	50,000	Machine tools	3
9	Wealthy	56–60	100,000	Politicians	5
10	Regional	61–65	1 million	Factories	10
11	National	66–70	10 million	Patents, corps	25
12	Multinational	71–75	100 million	Satellites	50
13	Orbital	76–85	1 billion	AIs	100
14	Colonial	86–100	10 billion	Mass driver	250
15	Solar	111–130	100 billion	Space freighter	500
16	Untouchable	>131+	1 trillion	Nations	1,000

* = typical starting range

Corporate Food Chain

The micros of the world fall into the following categories, described below with their attendant perks and number of dependent or allied micros. Dependent or allied micros are similar corps that work together with another micro on a temporary basis, providing short-term or seasonal labor, consulting, and technical expertise. In a way, as micros move up the food chain they become more and more like higher organisms, with more parts and more specialized parts. Using temporary and interchangeable parts allows the leadership micro to demand a high degree of accountability without returning any perks or benefits. When they are no longer needed, the allied or dependent micros are cut loose.

Tribal microcorps are hunter-gatherers in the corporate jungle, paying bills hand-to-mouth and barely feeding their employees, much less providing more for them. They have no office, no Net access, and no new equipment other than scavenged junk—they are digital nomads. Some small micros may approach them with dangerous, illegal, and demanding work, but most are unwilling to provide work for micros this undernourished.

Impoverished micros can feed their employees but are barely able to provide goods for them. For them, constant movement is the only way of life, the only way not to get caught. Jobs at this level are short-term and usually illegal, and poor micros are often totally dependent on larger ones.

Sweatshop corps are working under brutal conditions or deadlines to meet their expenses, but they usually have a high enough volume to keep themselves going from payroll to payroll. Jobs are legal, but working conditions are hellish. Sweatshop corps can feed and house employees with a few minor perks. They can burn to the ground or go under at any time.

Export corps have on-again, off-again offers of work from sleazy offshore corps, but they do get steady work



during peak periods. When business is bad, they starve. They can provide all the basics, but not much more.

Hustling corporations are working fast and loose deals, occasionally skimming enough off the top for a serious purchase. At this level, microcorps are like swimming sharks: They need to keep moving or they will die. Hustling corps have enough cash to show style: some flashy tech, advertising, or threads. They are beginning to be noticeable; larger micros may approach them for small jobs.

Stable micros can provide the basics for their members and some decent perks, like a company vehicle. They have a steady cash flow and can afford major investments from time to time. They can afford a single full-time helper, who, of course, becomes a shareholder as well. Job offers are usually legal, but still risky.

Industrial micros have factories and tools to make their own products or have many branches and bases throughout the world to reach the clients they service. They can afford to hire helpers outside their core workers: couriers, assistants, small advance teams or local consultants, and guides. Their jobs are offers from other stable firms, with only a few illegal contracts.

Wealthy micros can provide more than the basics. They can afford up to five full-time workers in addition to the PCs. Usually they do not hire full-time help but use mercenaries, temps, and contract labor as needed: These include other micros, up to five of them. Work is often done for the micro itself, but prestige assignments allow the hired micro to act as consultants and hire out their talent for specialized or dangerous missions.

Regional micros have two branches, though one of these may be tiny (a single person). They have some pull with local authorities and are recognized names in a community. They create jobs and undertake tasks that require high degrees of skill.

National micros are a bit of a contradiction; they owe no loyalty to the state, though they may be thought of with pride by a particular ethnic group (if the PCs are all from similar backgrounds: all Eastern Orthodox, for example, or all Laotian). They can maintain offices in up to ten locations in a single trading bloc (Europe, Japan, or Americas), largely because they are not big enough to handle the problems of data translation and international operations. They are sometimes approached for jobs that require good resources and discretion.

Multinational micros can afford to maintain a geosynchronous satellite of their own. They have up to ten offices around the world, and another ten manufacturing, transportation, and/or storage sites.

Orbital micros can afford to maintain a space platform for production or simply as a gateway to the Belt. They can afford to travel up and down the Brazilian skyhook, and to get an AI for their personal use.

Colonial micros can afford to send members out of the gravity well and on to the asteroid belt, to deal with the Fringe and their huge masses of raw materials and their strange sciences and philosophies. They do only the work they like, but they must sometimes flout the law to get the results they want. Their work forces include dozens or even hundreds of other micros kept as temporary helpers or permanent dependents.

Solar micros not only can pay to send people to the various colonies and the Belt, but they own spaceships that routinely run between their various holdings in orbit, on the Moon, and in the Belt. About a dozen exist, half of them exclusively Belter corps.

Untouchable micros are beyond the reach of anyone but the Big Three. They can buy and sell anyone and anything. At this level, the PCs have reached financial nirvana and the campaign is effectively over. The PCs may want to try to bring one of these down a peg.

A rough guide to the cost of certain basics is given in Table 8, but the GM is the final arbiter on questions of cost and finances.

Rather than making players keep track of their funds and how they are invested, each microcorporation's resource level (RL) determines the funds that its employees can draw on. PCs can afford to live at a lifestyle determined by their micro's RL, as indicated in the Cost of Living Table. If PCs do not pool their funds, they each live at a separate RL. This leads to some initial differences that tend to be blurred as all the PCs rise in RL. In addition, their RL determines roughly what categories of goods the PCs can afford.

Buying goods at or one level above the micro's RL



—Netrunner's Motto

Run faster, lighter, and smarter.

requires a Position roll. If the roll succeeds, the micro can make the purchase. If the roll fails, the micro cannot afford to keep up the payments on an item, and its credit rating is slashed by lenders. Its resource level drops by one. At the DM's option, failing to pay may bring bank or organized crime enforcers to the unfortunate PC's door: They may deliver a warning with their fists, or they may sell the PC into servitude to NeoTek. Some generous lenders merely implant toxic time bombs in their loan victims and require repayment before they will turn over an antidote.

RL functions identically if individual PCs keep their cash split, but each PC can only outfit himself. Rich PCs who abuse their high RL by making many gifts to other PCs in the micro will find that their RL has slipped a notch. It will continue to decline if they continue to spend extravagantly on other PCs.

Selling found or stolen property does nothing to increase a micro's finances permanently. In fact, selling goods at any RL below the micro's does nothing for its cash flow. Selling something at the micro's level allows it to get one item at the micro's RL without making a Position roll, or an item one level above its RL with a +25 bonus to the Position roll.

A fixer or black marketeer can get full price for any valuables; others can only get one RL less than an item's worth. Selling any item worth more than one level above their RL allows them to either permanently raise their RL by one, or to make a single purchase at that RL, without a Position roll. These rules work identically if RLs are kept separate, but then only a single PC's RL can be boosted from a single item.

Some PCs will attempt hacking to gain increased credit using various illegal financial leech programs. The risks are very high, and the PCs deserve whatever they can wrangle from the Net using these methods. However, trying more than one sting operation is very risky.

Table 8: The High Cost of Living

Lifestyle	Resource Level
Coffin motel	2
MagLev subway fare	2
Clean clothes	3
Good meal	3
Motel	4
Cab fare	5
Monthly rent, 1 BR apt	5
Car rental, per day	5
Stylish clothes	6
Hotel, weekend stay	6
Housekeeper salary	6
Bodyguard salary	6
Night on the town	6
Plane ticket (continental)	6
Mechanic salary	7
Monthly rent, 2 BR apt	7
Mortgage, small house	7
Intercontinental flight	7
Tailored clothes	7
Lawyer fees	8
Doctor fees	8
Programmer salary	9
Small car	8
Mortgage, large house	9
Sedan	9
On-staff lawyer	10
Penthouse suite	10
10 workers' salaries	10
Luxury car	10
Mansion	11
Private plane	11
Personal physician	11
Classified documents	11
Rare art	12
Stealth helicopter	12
Salary, 50 workers/week	12
Microcorporation	12
Palatial mansion	12
Military jet	13
Old masters	14
Space ship	14
Orbital platform	15
Off-world colonies	16
Terraforming	16



Soft Machines

Death is certain, and requires no special knowledge or preparation. Life, on the other hand, is subject to much more careful planning and manipulation, from the initial gene patterns of an embryo to the social conditioning that a growing child undergoes to the deliberate genemods chosen by adults. This section provides a list of the bioware and genetic modifications available to *Kromosome* characters.

In the *Kromosome* setting, biological arts are refined to a high degree, and they represent the best hope of saving the human species. This technology can give characters the tools they need to stay alive.

Gene Shaping

Genetic modifications are changes to characters' DNA, changes to the code that defines how their bodies work. All characters start with at least one genemod, and most characters will have more than one.

Genemods are implanted using specially tailored viruses, sometimes in conjunction with surgical alterations. They require slow growth and reshaping of the body. The viruses infect the relevant organs or portions of the body, whether those are muscle cells, brain cells, nerve cells, or retinal cells. While they work their changes, exposed new or changing body parts are covered in antiseptic gel to prevent infection. In the case of implants, immune system suppressants are required to prevent rejection by the host body. The viruses inject their new data one cell at a time; multiple infections are sometimes required to ensure complete coverage. Because the DNA in the recipient's sex cells themselves is unaffected, most forms of bioware are not inheritable—children aren't born with their parent's bioware.

Many people have a single, pragmatic genemod, but few have more than one: Bioware takes too much of a toll on the body. Because bioware involves viral surgery and alters the normal genetic code, each genemod also reduces the character's effective immunity score by an amount equal to the genemod's resource level. Almost all cultures view people who augment themselves with extensive bioware as rebels or dangerous risk-takers.

Optional Monstrosity Rule

Bioware makes most ordinary people uncomfortable, and the stranger bioware makes you look, the more uncomfortable they get. To further discourage extreme genemodification, Position can also be negatively affected by each visible genemod. Each visible genemod reduces Position by half the RL of that genemod. Invisible bioware like sleepless, sterile, or pheromone control does not reduce Position. This rule encourages groups to keep at least a single spokesman PC who appears normal.

While genetic changes are easy to put in place, they are very difficult to remove. All genemods are permanent unless twice the initial resource level is spent for removal. Removing a genemod does not restore immunity lost when it was first put in place, but no further immunity loss occurs. If the monstrosity rule is being used, lost Position returns when a visible genemod is removed.

Most genemods are patented and owned by private corps, though some are government property. Most are the property of Polygene, though smaller corps like DNX and other challengers exist with specialized genetic material of their own. China is responsible for the hormone lock; the government of Brazil invented photoskin when Polygene was a nationalized corp, rather than a shadow government in its own right. Because getting a genemod requires both a patent license and careful application by a viral surgeon, all genemods must be purchased from a recognized genemicro—or from illegal clinics willing to make unsafe modifications to an individual's DNA.

Each genemod and all equipment have a resource level (RL) which must be equaled or exceeded for a PC to purchase that item (see Capitalization and Finances above).



Our body is a machine for living.
—Leo Tolstoy

Table 9: Genemods

Type	Effect	Cost (RL)
Adrenal	init +1, R +10, –20 immun	4
Allergene	death	11
Aversion lock	memory block	9
Biolights	+5 Po	2
Bodywear	+25 Po, –5 R	13
Brain jack	+5 Netrunning	7
Cartilage bones	escape, +1 damage	7
Catseyes	No night penalties	4
Crab claw	+3 damage	4
Cyanon	timed death	10
Endorphin control	+10 to tax	7
Eyepatch	No range penalties	4
Filter lungs	+20 immun	8
Fur	+5 stealth	2
Geodesic skeleton	–1 lethal, +20 F, –3 damage	11
Gills	breathe underwater	12
Growth hormones	+5 F, +2 body points	6
Heightened immunity	+30 immun	7
Heightened metabolism	+10 R, –20 F	8
Hibernation	+5 F, +5 W	6
Hormone lock	+5 F, +15 R, –5 Po	6
Longevity	Doubles effective immun	11
Machine empathy	+_Ps to Netrunning	14
Melaskin	+5 Immun, disguise	5
Neural growth	+5 I, +5 L	10
Nic-membrane	+5 Immun, –5 with ranged attacks	6
Nighthawk	Night vision, no range penalty	5
Owleyes	Night vision	4
Pheromone control	+5 Charm, +10 with skin contact	8
Photoskin	Food production	5
Plastic surgery	Disguise	5, bone 6
Quills	Opponent suffers half infighting damage	3
Razorteeth	+ 3 infighting	4
Regeneration	+10 F	11
Rhinohide	–1 lethality, –10 R	3
Sangaero	+10 F	4
Savantism	+20 pool or +30 skill, half Burnout	15
Sleepless	+ 10 Ps, + 5 W	8
Slowed metabolism	+15 immun, –2 init	7
Sonar	+10 short range, +5 acr/1st aid/flight	10
Spikes	+1/+2 infighting damage	2
Spurs	+3 infighting, –5 stealth	3
Sterile	+5 F, +10 immun	5
Steroid pump	+15 F, –10 immun	6
Titanium bones	+5 F, damage –1 infighting	8
Trained reflexes	+10 R, –5 W	6
Venom	Poison opponents	9–10
Wallaby	Improves jumping and running	4

Adrenal RL 4

By boosting the body's level of adrenaline, the owner of this genemod increases his or her initiative by +1 and agility by +10, but the strain on the character's heart and lungs reduces all immunity rolls by –20. Most owners don't live that long; on the Net people live fast and die young.

Allergene RL 11

This potent set of immunological genes is used as a trap and a weapon against the enemies of powerful clans and micros. Allergene sets the body up for self-destruction and is often used as ammunition for a gene gun. It embeds a set of environmental triggers in the target that code for immune system mayhem. The target dies in a biological orgy as the immune system destroys itself and the bacteria naturally present in the body devour it from within.

Aversion Lock RL 9

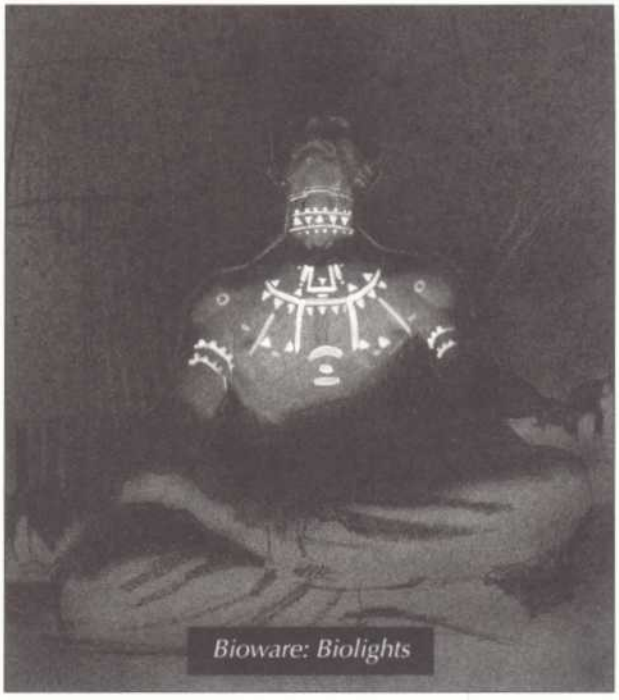
An aversion lock can be induced via brain implant, hypnotism, and cyberjacks. It sets up a mental block that prevents the victim from remembering painful experiences or performing certain actions (netrunning or holding a pistol, for example). Aversion locks are illegal in most countries but these restrictions are ignored by almost all micros, who use aversion locks for security purposes to keep their best personnel from being recruited by others.

Biolights RL 2

These glowing tattoos alter the genes of small skin patches to create bioluminescent skin patterns, often in traditional tattoo designs. Some resemble natural rows or lines of dots like the deep undersea creatures that provide these genes; others are just symbols like hearts or eagles.

Biolights are mainly popular among the yakuza and the wealthiest men and women, because creating a pattern that doesn't alter as the skin grows is very expensive. They add +5 to Position but make the owner a target by night (+5 to hit biolit targets in the dark). The faint glow is enough to read by, so ninjas often implant a biolight on a single palm and hide it under a glove at night.

Semi-mechanical biolights are also commonly used in glo-bulbs for street lamps and for lighting spaces where electricity is impractical.



Bioware: Biolights

Bodywear RL 13

With careful grafting, constant hormone and drug maintenance, and gentle, guided regeneration, characters can radically reshape their basic appearance. Bodywear allows the owner to add extra digits to his hands, extra arms, even wings to his shoulder blades. These cosmetic improvements are ridiculously expensive, highly touted, grotesquely ineffectual, completely impractical, and usually illegal. Only a few dozen major sets are known to exist: The Angel of Cologne, the Belter grappler, and the Tokyo *sakura* (cherry blossom). Naturally, only the richest and most perverse financiers can afford such toys. They give the recipient -5 Reflexes and +25 Position.

Brain Jack RL 7

A brain jack is not truly a genemod; it is a direct biochip implant. A jack allows a netrunner to access the Net through a minimal filtering system that translates brain activity into machine code, and vice versa. The Net appears completely real to the user, as the brain processes computer information as a form of hallucination. Responses are extremely quick and accurate, but the risks of netburn



—Alfred, Lord Tennyson

Nature, red in tooth and claw.

are substantially higher than with AN (alphanumeric) or VR (virtual reality) interfaces because the chip allows a direct link to the user's nervous system. However, multiple linked brain jack users can gain substantial benefits.

Cartilage Bones RL 7

This deceptively simple genemod turns some of the owner's bones to cartilage reinforced by thin titanium struts. Surgery reshapes the shoulders, hips, and wrists to allow the owner to dislocate those joints at will. As a result, no handcuffs or straightjacket can hold the victim, and given enough time he can squeeze through tiny openings such as between bars and along ventilation shafts (anything larger than the skull or pelvis, which remain solid). However, because the rib cage and joints are more flexible, they are also more delicate. The owner is more vulnerable and suffers +1 damage from all infighting attacks. This genemod is not compatible with the geodesic skeleton or titanium bones bioware.

Catseyes RL 4

This genetic change alters human retinas to make them much more light sensitive, like a cat's. PCs with this genemod have a reduced penalty to gunfire in low light (up to starlight conditions); all attacks are at -20 instead of -40, though range penalties still apply. Their eyes glow like a cat's in darkness.

Crab Claw RL 4

Intense buildup of one arm, generally the left, through steroids, electrical stimulation, and careful gene shaping. The fingers become sharp masses of fingernail, creating a single hornlike point. A crab claw allows the recipient to add +20 to all ability checks involving sheer lifting and crushing power, and adds +3 to all damage rolls in hand-to-hand combat.

Cyanon RL 10

Similar to allergene, this harmful genemod hijacks the body's metabolism and makes the target's body produce cyanide when certain preset conditions are met (such as a low dose of radiation, minerals, or even just a fever). It is used to kill at a certain time, to confine prisoners to house arrest, or to blackmail a target. Eliminating the cyanon without setting it off requires a very difficult Biotech skill check. If the attempt fails, the victim suffers the full effect of the gene gun ammo allergene.

Endorphin Control RL 7

This genemod provides pain resistance and pleasure-boosts, all under the user's conscious control. Because this genemod is activated only through controlled brain wave patterns, effective use of endorphin control requires the meditation skill.

Endorphin control makes it easier for characters to push their limits; they gain a +10 bonus on all rolls to tax physical attributes. Such characters can also keep going even when their body points are all gone if they have stamina points left and make a successful Willpower check. The check suffers a -10 penalty for each body point less than 0. Characters who continue to push run the risk of being kept active by raised endorphin levels until they die of exhaustion and complications. Each time a PC does push on after 0 body points, the PC permanently loses one immunity point and the GM should secretly roll an immunity check for the character. If it fails, the PC dies after accomplishing one task (pulling a wounded comrade out of a fight, shooting down a helicopter, or leaving a dangerous area).

In a more powerful and uncontrolled form, this genemod is sometimes used in gene gun ammunition (see below).

Eyepatch RL 4, combined 5

This genemod increases the density of photoreceptors in a tiny section of the retina to the level of a hawk's. It also alters the cornea in a tiny arc to act as binoculars, so that the owner of the genemod can see a mouse a mile away. With this genemod, the character suffers no range penalties to gunfire during daylight, and only normal penalties at night. Eyepatches can be combined with the catseyes or owleyes genemods. An eyepatch usually is a sure sign of a mercenary.

Filter Lungs RL 8

This genemod allows the owner to breathe in hazardous environments and to stay underwater for extended periods. It provides a +20 bonus to immunity checks against all forms of airborne attacks, from tear gas and poison gas to aerosol viral attacks and particulate radioactive pollution. Filter lungs double the time that a character can stay under-



water (see the Swimming skill for details) or in thin air (such as in the Andes or Himalayas), and halve the damage caused by exposure to vacuum. It is common among Belters and the residents of biohazard cities.

Fur RL 3

Available in black, silver, gray, fox red, or spotted patterns, fur prevents skin cancer caused by UV radiation. Offworld and polar groups consider it a social or a sexual signal—it is very popular in the Antarctic mining colonies and on Mars, where it helps colonists keep warm despite heating failures, but it is virtually unknown in mainstream society. In addition, the spotted patterns provide some enhancement to camouflage and give the user a +5 bonus to Stealth skill checks.

Geodesic Skeleton RL 11

This powerful dose of genemod and bacterial surgery tears down the recipient's existing skeleton and builds a completely new one. The replacement is an efficiently engineered bone structure based on the self-supporting structures of Buckminster Fuller. It turns the backbone into an interlocking series of triangular protectors for the spinal cord, increases the thickness of the skull, expands and modifies the rib cage to absorb impacts, and changes the anchor points of muscles in the arms and legs for better leverage and power.

In addition, this genemod replaces the PC's tendons and ligaments with semi-organic cables that the PC's new DNA can maintain and repair. Recovering from the genemod shock and the surgery takes four months minimum. Thereafter, the PC must roll an immunity check each week, and can be discharged as soon as a roll is successful.

A geodesic skeleton gives the owner a -1 lethality bonus against all hand-to-hand attacks, adds +20 to Fitness and +5 to Reflexes, and armors the owner's vital points to reduce damage by -3 from all forms of attack.

Gills RL 12

This major modification allows the owner to breathe under water indefinitely, but the surgery and genemods require at least four months of recovery, physical therapy, and adaptation. The gills can be placed either on the neck, on the breast, or just under the shoulder blades. The gills are inactive unless the owner is submerged, and have no effect on his ability to breathe air. However, they do make the user more vulnerable to airborne attack forms; all immunity checks against tear gas, nerve gas, spore and viral grenades, and similar attacks are at –5. Gills cannot be implanted if the filter lung or sonar genemods are already in place.

Polygene hopes to decrease the cost of this genemod and eventually begin settling the ocean itself, but this is long-range planning.

Growth Hormones RL 6

Using human growth hormones and a special process to restore the conditions of puberty, this genemod allows any PC to attain maximum potential both physically and mentally. Characters with this genemod are always at least 2 meters tall for men (and up to 2.5 m) and at least 1.9 meters for women (and up to 2.4 m). Fitness increases by +10 and Intuition increases by +5. Reflexes suffer a -5 penalty due to the larger mass and slower reaction.

Heightened Immunity RL 7

Most common among colonists and asteroid miners, this genemod is also found among average citizens. It alters the body to adapt to increasing pollution and disease, offering PCs some defense against bioagents, viral attack, plagues, and other environmental attacks such as radiation. All rolls to resist these effects are at +30. Venom, acid, and fire attacks still do normal damage.

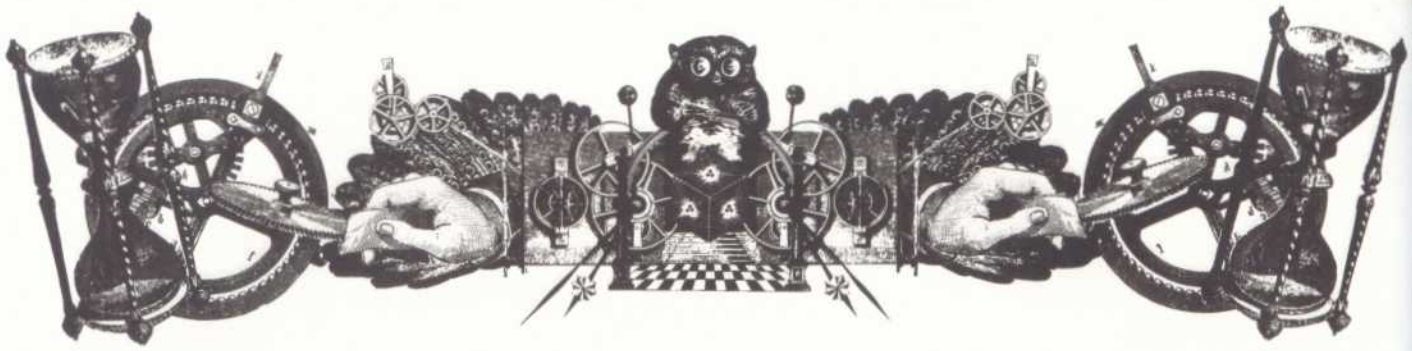
Heightened Metabolism RL 8

Though known to shorten life span, this genemod does increase healing and movement rates by 50% and adds +10 to Reflexes. The strain on the body is constant and cumulative; Fitness drops by –20. Finally, this genemod makes the PC slightly more vulnerable to poisons of all kinds, so immunity checks are at -5 in addition to the loss due to decreased Fitness.

The owner must eat twice the normal amount and requires special vitamin and hormone supplements. Without them, the body ages rapidly, permanently losing 1 point of Fitness per hour.

Hibernation RL 6

Derived from ursine DNA, this complex gene pattern allows the owner to build up reserves of fat and then sleep



Give me a place to stand, and I will move the earth.
—Archimedes

for up to five months at a time. It is popular among asteroid miners and others who must sometimes pass long stretches of time in isolation. As a side effect, the required physical and mental fortitude adds +5 Fitness and +5 Willpower. This genemod requires the Meditation skill.

Hormone Lock RL 6

Invented by the Chinese as a population control measure, hormone lock prevents its victims from entering puberty. They remain perpetually adolescent, requiring less food, less sleep, and possessing a +5 Fitness and +15 Reflexes bonus. Influence suffers a permanent –5 penalty. Variant hormone locks can trigger infertility later in life or can induce dwarfism.

Victims of hormone locks are not allowed full citizenship rights in many places; they have the status of minors in China, and are property in the colonies.

Longevity RL 11

This genemod includes a number of additional treatments that help retard or reverse aging effects. Using deprenyl, human growth hormone, and fetal tissue injections as well as a carefully applied series of rejuvenating viral surgical procedures, the owner holds back deterioration of muscles, bones, and skin and prevents the fat build-up that often leads to early death. The treatment must be repeated every 10 years after the age of 50 and rarely extends life beyond 150 years. A human who has both longevity and slowed metabolism can reach the age of 160. Longevity doubles the character's burnout level; that is, all losses caused by failed immunity checks are halved.

Machine Empathy RL 14

This genemod changes the body's natural electrical fields and places them under conscious control (requires the Meditation skill). The body can alter its electrical fields to match those of electrical machines within 2 meters—lights, phones, video equipment, computers—allowing the genemodified character to use these devices without touching them and without risking nerve burn. When fitted with a brain jack, the machine empath can achieve incredible oneness with any electronic system and can react with enough speed to communicate (see Netrunning). Netrunning with machine empathy can result in severe nerve burn; all checks are at an additional +2 penalty.

Melaskin RL 5 ingested, 7 conscious

Sunlight has become dangerous, and people have either responded with darker skin (day people) or by becoming vampires (night owls). Melaskin allows a person to control the melanin pigment levels in his skin via ingested substances or chameleon style by conscious control (requires the Meditation skill). Melaskin cannot be combined with Photoskin. It provides a +5 immunity bonus and a +5 bonus when using the Disguise skill.

Neural Growth RL 10

Neural growth bioware stimulates neurons to divide and grow, providing more brain pathways, better memory, more crosslinks between the hemispheres of the brain, and more visual and abstract reasoning ability. Its effects are general rather than stimulating any particular skill: The recipient of this bioware gains +5 Learning and +5 Intuition. It is not compatible with Savant bioware.

Nic-membrane RL 6

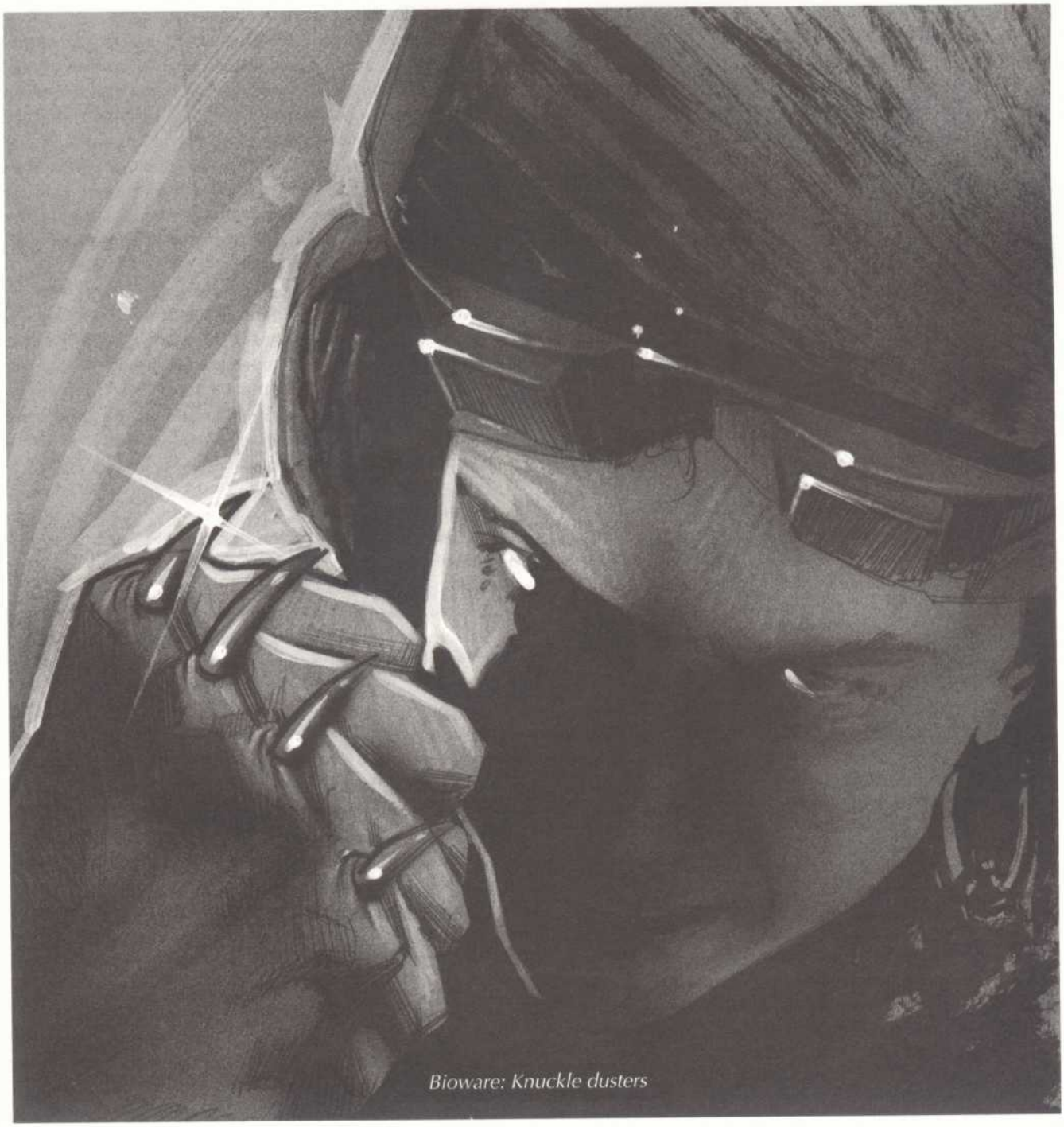
A nic-membrane genemod provides the owner with a nictitating membrane: A second eyelid that is largely transparent to visible light but that screens out damaging UV radiation, dust, and microorganisms. It adds +5 to immunity, but subtracts -5 from all ranged attacks. Nic-membranes are fully compatible with other optical enhancements.

Nighthawk RL 5

This genemod combines effects of the catseyes or the owleyes genemod with the eyepatch genemod to create superior night vision for ranged fire and reconnaissance. Upgrades are available that bring the owleyes or catseyes genemods up to the nighthawk standard. They cost the same as the initial application of the nighthawk genemod.

Owleyes RL 4

This modification makes night seem as bright as day. Night vision is greatly improved, but vision by day suffers. Users of the owleyes genemod suffer no penalty to any night actions, but suffer a -10 penalty to all actions by daylight.



Bioware: Knuckle dusters



It is useful from time to time to kill one admiral in order to encourage the others.
—Voltaire

This genemod is part of the standard vampire package (see Power Groups below), and can be combined with eyepatch.

Pheromone Control RL 8

Still experimental, this genemod is poorly understood and not always successful. It allows the owner to control his own scent and to send chemical signals (fear, lust, calm) to other mammals. The use of this genemod requires a successful Meditation skill check. The musks provide a +5 bonus to all skills based on Charm/Position except in watery or vacuum environments.

Photoskin RL 5

Primarily a Brazilian alteration, photoskin has recently been introduced by the Chinese as well. In most cases the genemod is mandated by a draconian state. It forces the body to produce chloroplasts at skin level, allowing the user to create a small amount of food by standing in sunlight. Chlorophyll-laden skin is common among the poor who work outside and cannot get enough calories without help. It reduces food intake by 10%; this reduction is cumulative with that from the slowed metabolism and sterile genemods.

Plastic Surgery RL 5, bone 6

This surgery allows the recipient to completely alter his or her features and, with minor genetic modifications, hair color. Healing can be accelerated to as little as a week. Bone structure can also be altered to increase or decrease height or change underlying facial structures, but this requires a month-long recovery, as it involves adding an artificial length of bone to increase height, cutting sections out of and reknitting the femurs, or scraping facial bones.

Quills RL 3

This defensive genemod allows the owner to grow bony quills from vital areas such as the rib cage, abdomen, and skull, making the character difficult to attack. Hand-to-hand attacks such as martial arts and wrestling are still effective, but attackers suffer half the damage that they inflict on their spiky victim. Quills have no effect on damage from firearms.

Razorteeth RL 4

This bioware substitutes rows of triangular, razor sharp, sharklike teeth for normal human ones. These razorteeth make the owner's bite very dangerous, with the cutting power of a piranha's. They are popular among gangs, digital nomads, and some Belters.

Regeneration RL 11

This genemod sets large numbers of cells back into an undifferentiated state (like the dividing cells of an embryo) so that they can regrow faster and more effectively. It allows the return of entire lost body parts: a finger in about a week, and an arm or leg in two months. Regeneration bioware gives a +10 boost to Fitness and doubles the normal rate of healing. It requires a huge intake of food and water, and since it also turns back the clock for many brain cells, learning is slow for PCs who regenerate. The character always loses 5 experience points from every adventure due to memory loss.

Rhinohide RL 3

Characters with this modification gain thick, wrinkled, armorlike skin, derived from rhinoceros hide. The 2- to 3cm-thick skin also covers the moddy's face and fingers. Rhinohide is inflexible and itches terribly sometimes, but it reduces the lethality of all weapons by -1. It also reduces Reflexes by 10. This form of armor is cumulative with all others.

Sangaero RL 4

Sangaero is a form of artificial blood created in Brazil. Unlike normal blood, it is loaded with dolphin red blood cells which hold much more oxygen, making it perfect for divers, endurance athletes, colonists, high altitude workers, and mercenaries. Once implanted in the bone marrow, the stem cells that produce this blood can continue to produce high-oxygen blood indefinitely. Sangaero adds +20 to Fitness and doubles diving, high-altitude, and vacuum exposure times. It provides complete immunity to coagulin (see Genebombs).

Savantism RL 15

Savantism is a recently quantified level of abnormally high intelligence, either virally implanted before birth or created via extensive neurosurgery and genemods after



puberty. Savantism provides unnatural levels of skill in a single, very narrow field or allows high skill in one field to bleed over into a few related skills.

For example, fluency in two dozen languages is generally called translator-type savantism. Savants with musical skill combined with intuitive physics are called number crunchers, and purely mathematical savants who can add, divide, and do differential calculus in three dimensions are generally called accountants. There are also manifestations of perfect memory, perfect pitch, or amazing intuition.

The mutations that provoke this response are unpredictable; there is very little control yet over which skills will profit from it. As a result, the player must either give his character this skill when first generated (and pick the type of savantism) or the player may pay for the genemod later and the referee will decide which skill pool is enhanced. In either case, one entire pool is given a +20 bonus, or a single attribute score gains +30.

Savantism has only one disadvantage; the candle that burns twice as bright burns half as long. All savants suffer double the usual immunity losses due to genemods and failed immunity checks, so burnout occurs twice as quickly because their minds and bodies are simply used up faster.

Sleepless RL 8

Any PC with this genemod requires no sleep. In addition to giving the character more hours per day, the basic-level rewiring of the brain has other benefits as well, improving Psyche by +10 and Willpower by +5. This genemod does not work in combination with hibernation. It is very popular among Belters, high-profile corp types, and netrunners.

Sleepless bioware requires the Meditation skill; without eight hours meditation once per week, the PC's neurotransmitter levels are not replenished and all skill checks become one level more difficult. If this happens for three weeks running, the sleepless character suffers a nerve collapse and is incapacitated for 2–12 months. There are persistent rumors of barbiturates or caffeine derivatives that eliminate the need for weekly meditation.

Slowed Metabolism RL 7

This genemod partially offsets the wracking effects of an adrenal implant, but it does so by forcing the user to live the long, slow life of a tortoise. Between bursts of activity, the user's real life moves at a crawl, and all Initiative checks are at a -2 penalty. Some of the rich use this method to promote their longevity after a certain age (usually around 30); it reduces food requirements by 30% and often leads to obesity.

Slowed metabolism also protects a character against the effects of biotoxins and gas attacks, though not against heavy metals or mineral poisons like arsenic or asbestos. Immunity checks against biological poisons and radiation are made at +15.

Sonar RL 10

This genemod requires extensive reworking of the ears, larynx, and sensory pathways in the brain. It provides the user with a sixth sense based on reflected ultrasound. Like a bat, the moddy can use limited echolocation with a range of about 20 meters for small objects (people-sized or smaller), 100 meters for larger ones (cars or houses), and a kilometer for huge ones (hills, cliffs, skyscrapers).

Sonar provides a +10 to all short range missile fire, +5 to Acrobatics rolls, +5 to First Aid (since the user can focus it to see inside the body of his patient), and +5 to all nonpowered flight rolls. Darkness has no effect on melee and the genemod owner suffers no range penalties in darkness. He can use this sense to "see" around corners to a limited extent (about 2 meters) via sonar reflections.

Spikes RL 2

This genemod creates bone-hard, titanium-reinforced spikes jutting out from the owner's knuckles and elbows. Also called tiger claws, the spikes are fully retractable. They add considerably to hand-to-hand damage for martial artists and street brawlers alike, giving +1 for brawling skill and +2 for martial arts. These bonuses are cumulative with crab claw, but are not compatible with the venom genemod.

Spurs RL 3

Spurs are titanium-enhanced bone segments jutting from the owner's heels. They are not retractable, and make stealth difficult (-5). They are used with the Kickboxing skill to inflict serious harm to victims. They add +3 damage to all kickboxing attacks. Spurs are compatible with the venom genemod. A retractable version of this genemod is said to exist, but it costs RL 7 and is not compatible with the venom genemod. The damage bonus is cumulative with the steroid pump genemod.



—Bruce Sterling

Harder faster greater louder.

Sterile RL 5

This genemod completely purges the user's system of all parasites, symbiotic bacteria, allergic reactions, and intestinal flora. In addition to cleansing the body completely, it alters the digestive system to make better use of available nutrients and boosts the immune system's ability to fight off threats, allowing it to respond more effectively when a threat arises. This adds +5 to Fitness, +10 to immunity, and reduces food consumption by 10% (important in orbit or space). However, all immunity checks have a failure margin of F8; failed checks result in severe overreaction of the immune system that incapacitates the character with allergies for 1–10 days.

Sterile genemod is popular among Belters and other spacers who do not need to enter contaminated environments, but almost unknown elsewhere.

Steroid Pump RL 6

This genemod floods the body with constant doses of anabolic steroids that give even the laziest wirehead abnormal, weightlifter muscles. The owner gains +15 to Fitness but his immunity checks are cut by –10.

Titanium Bones RL 8

This difficult genemod introduces titanium into the recipient's system gradually, combined with a course of low-gravity bone loss. Over six months, all the calcium in the recipient's bones is replaced with crystallized titanium. Fitness increases by +5 and the resulting armored skeleton reduces all damage by –1. If combined with geodesic skeleton, the benefits are doubled (+10 Fitness, -2 damage).

Trained Reflexes RL 6

By biochemically tweaking synapse and neurotransmitter levels, the trained reflexes genemod speeds up the central nervous system. It adds 10 to Reflexes, but can lead to nervousness and burnout (–5 Willpower).

Venom RL 9-10

If taken with the fangs or spurs genemod, this illegal genemod allows the user to poison victims. Black market skill or a gene template and Biotech skill are required to gain the genemod. If it is discovered by a medical scan or gene map, the owner is subject to arrest and genetic modification. Despite the risks, many gang members and other criminals spend huge sums to bribe an underground clinic into performing the work.

Common misconceptions aside, most forms of venom, even in large doses, do not incapacitate or kill instantly. Three common types are commercially available: Black Dragon, Firesnake, and Scorpio venom genemods. All cost about the same (high, because of the risks involved), but their effects vary widely and claims made by the surgeons involved may not be entirely truthful.

Black Dragon hemotoxin kills by destroying the victim's red blood cells, essentially suffocating him by destroying his bloodstream. Survival requires a successful immunity check at –30, and even then the victim suffers 2d10 points of stamina damage.

Firesnake is a powerful neurotoxin. It attacks the nervous system, destroying the body's ability to act. It paralyzes within 2–8 rounds regardless of whether the immunity check is successful, but if it fails the neurotoxin paralyzes the heart or lung muscles, killing the victim 1–4 rounds later.

Scorpio is a clotting agent, much like the coagulin genebomb, and may in fact be derived from the same source. The effects are identical.

Wallaby RL 4

This simple genemod reroutes the owner's tendons so that they act like springs, improving leaping and running. The effect is not always active so the owner can walk normally, but when it is used the wallaby bioware allows leaps of up to 20 meters horizontally and 6 meters

Table 11: Infighting Weapons

Club	1d6/2
Knife	1d4/3
Machete	1d8/5
Staff	1d6/2
Improvised weapons	
Acid	1d4/2
Boiling water	1d4/1
Bottle	1d4/2
Chair	1d6/1
Rock	1d3/2

vertically, or half that if the owner does not have the Jumping skill. It improves running speed to the amount allowed by the owner's adjusted attribute scores.

Weaponry

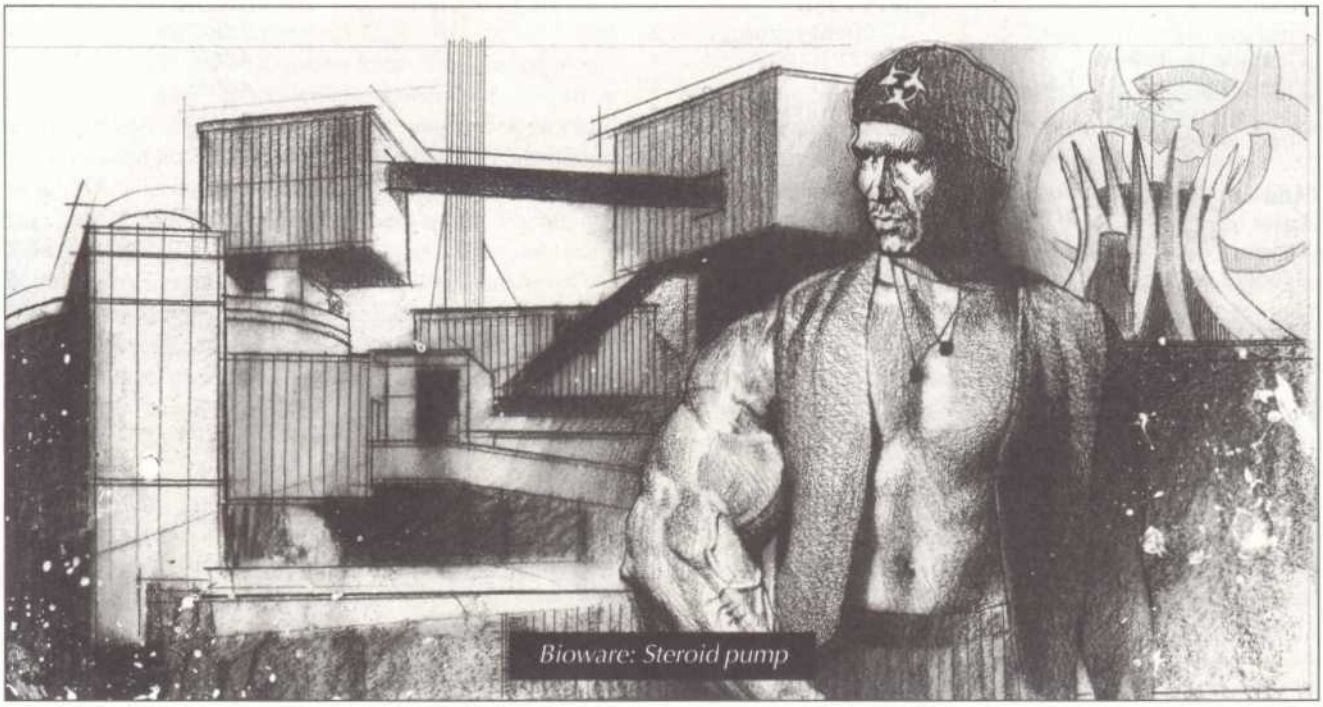
Most of the weapons below are legal in the Americas and outlawed for civilian use just about everywhere else. Breakdown versions with foldaway stocks and detachable barrels are available at the normal resource level +1. Plastic- or ceramic-barrel versions of these weapons are available for +1 RL for coherent beam weapons, +2 RL for all other firearms. Plastic or ceramic barrels cannot be detected by security X-rays or metal detectors.

Obtaining these weapons on the black market requires a Black Market or Smuggling skill check against the listed difficulty level. The difficulty level applies only outside the Americas (since all can be readily bought in the Americas) and varies by country. China is very difficult, Europe and Japan are difficult, and India, the Islamic Republic, and the West African Union are all easy.

Caseless ammunition, first introduced by H&K, is now the standard for most firearms. Weapons using cartridge ammo are still available, often cheaply (RL 1–4). Caseless ammo is easily compromised by moisture; since it has only a thin protective coating of plastic, water can easily ruin an entire clip, and even highly humid environments can sometimes dampen the powder over time. It is slightly more accurate than cased rounds (which suffer –5), and uses slightly smaller caliber ammo. Because caseless rounds do not eject shells, they can easily be fired from inside a pocket. They use gas-operated recoil.

Most *Kromosome* firearms fire long, low-caliber bullets at a high muzzle velocity for maximum lethality. Steel or teflon-jacketed bullets can pierce armor, and shaped explosive bullets are available as well. Regular caseless ammunition is RL 4, teflon-coated bullets cost RL 5. Teflon ignores the effects of rhinohide and laminate armor. Spun-fiber armor, carapace, and exoframe armor can stop teflon bullets. They are illegal everywhere outside the U.S.

Large bore guns (grenade launchers, heavy pistols, shotguns, and tranq guns) can fire shaped-charge bullets. When these rounds hit a hard target, a microchip fuse ignites a small explosive at the head of the bullet, creating a tiny



Bioware: Steroid pump



—Lucius Accius

Let them hate, so long as they fear.

Table 10: Ranged Weapons

Exotics	Range (m)	Targets	Magazine	Damage	RL
Dart gun[BT]	20/40/—	120	1/1 + special	7	
Gene gun[BT]	10/20/30	1	3	Special	8
Graser	50/100/150	1	1	Special	10
Maser[BC]	10/30/60	1	6	2d10/8	10
Rail gun[SF]	150/300/600	3	30	2d8/5	9
versus armor				4d8/7	
Spider gun	20/40/—	1	2	Special	8
X laser[BC]	40/80/120	2	5	Special	8

Projectile Throwers	Range (m)	Targets	Magazine	Damage	RL
Crossbow	50/100/200/400	1	1	3d6/4	4
Derringer	10/20/40	2	3	1d6/3	4
Electrothermal rifle	150/250/600	2	100	2d6/4	7
Gauss pistol	20/40/60	3		1d10/4	6
Submachine gun[SF]	0/80/150	4	30	2d8/4	4
Target pistol	20/50/90	2	13	1d8/4	5
Heavy pistol	20/40/80	3	12	1d10/4	4
Hunting rifle	50/150/300	1	6	1d8/5	3
Sniper rifle	100/200/400	1	20	1d10/5	4
Tranq rifle[BT]	50/150/200	1	12	1d4/2	3

Heavy Weapons	Range (m)	Targets	Magazine	Damage	RL
Assault rifle[SF]	50/150/250	5	10	1d12/6	5
Flechette shotgun[BC]	30/60/90	2	10	2d6/7	5
Grenade launcher[SF]	100/200/300	1	12	4d8/4	6
Pump shotgun	30/60/90	1	10	4d6/6	4
Rocket launcher[SF]	200/500/1000	1	1	5d10/9	7
Street sweeper[SF]	20/40/80	4	7	4d6/8	5

Add-ons	Range mods	RL
Laser targeting	+20/—/—	+1
Scope	+10/+20/+40	+1
Silencer	-10/-30/-50	+1

Explosives	Effect/Damage	RL
Antipersonnel mine	4d10/5	6
Antitank mine	6d8/4	7
versus vehicles	12d8	
Booby trap	4d10/4	4
Demolition charges	5d10/5	5
Pipe bomb	5d10/7	3
Shaped charge	20d10/9	6

Grenades	Effect/Damage	RL
Chaff	Prevents targeting	4
Concussion	16	4
Flechette	8/80%/3d10/5	3
Frag	16/80%/4d10/4	4
Jamming	E/M pulse	6
Nerve gas	Kills	8
Smoke	Obscures vision	2
Spore[BT]	Slow death	7
Tear Gas	Blinding	4
Tranq	Knockout	5
Viral[BT]	Plague	8

Weapons marked "BT" can be purchased only by a Biotechnologist. Weapons marked "SF" can be purchased only by a Soldier of Fortune or Special Forces vet with Heavy Weapons skill. Weapons marked "BC" are Belter weapons and can be purchased only by a Belter or Contract Worker.



plasma flare that punches through armor and into the space beyond. Armor-piercing explosive bullets cost RL 6.

All firearms (except exotics) can fire shredder ammunition. Shredder bullets are jacketed with a series of special coats that blossom like a lead flower on impact. The petals tear through flesh and increase the lethality of any shot by 1. Shredder ammunition is illegal outside the U.S. and Brazil. It costs RL 5.

Certain types of exotic biotech ammunition are even more expensive; see the Exotic Weapons section.

Atomic Demolition Munition (ADM) RL n/a

This highly specialized charge (called a "suitcase nuke") exists in only a few military and megacorp inventories, including Esoterika, Pacifica, the U.S., the Ukraine, and the EC. ADMs are small, portable atomic devices with a yield of 1 kiloton. Their intended use is to destroy large or hardened enemy targets such as ports, submarine pens, major airfields, or spaceports. They must be carried and placed by a man, so they are primarily for sabotage or denial of captured resources.

An ADM weighs 20 to 40 kg and is about 70 cm x 1 m x 60 cm. It can be used only by someone skilled in ADM use. If an ADM is detonated, everything in the immediate area (at least to 500 m) is destroyed.

ADMs are rare and their owners keep close tabs on them. Since they are easily concealed and transported, they are a terrorist's dream and a counter-terrorist's nightmare. Not surprisingly, ADM stocks are heavily guarded by the finest troops available. Unlike most security guards, these troops don't hesitate to shoot an intruder, and they shoot to kill. The arming devices for such weapons are always stored separately from the devices themselves, as a further security precaution.

It is recommended that ADMs never be allowed into the hands of player characters. Good adventures can be constructed around preventing others from obtaining or using such devices, however.

Dart Gun RL 3

These cheap guns cause almost no damage unless loaded with biotoxic ammunition like curare, botulin, or cyanide (though loading a gun with toxins is illegal and sellers are not allowed to mention it).

Dart guns fire iron darts with a cheap air pump or a magnetic field inducer. The darts are either hollow or coated with the biotoxin. The toxins act quickly but the effects are obvious to anyone skilled in forensics; any victim who fails an immunity check immediately takes 4d10 points of stamina damage with a lethality of 9. If the check is successful, the dart hit some obstruction and failed to pierce the skin. Dart guns are most popular in Brazil, which mass produces them. They are common in urban areas, where their relatively silent fire can barely be heard above background noises.

Electrothermal Rifle RL 7

This specialized weapon fires a cased round but does not use a gunpowder propellant; instead, it uses a huge 10,000-volt electric charge to ignite a liquid fuel into a plasma. The resulting continuous propellant boost has an almost hydraulic push over time, reducing recoil to about the same as that of a normal rifle. Muzzle velocity is 1,800 m/sec, giving electrothermal rifles a 50% boost on range and damage over regular rifles.

Electrothermal rifles are not actually rifles at all, strictly speaking: They have a smooth bore and fire fin-stabilized rounds. A 20-cm-long, 3-cm-wide cylindrical battery provides enough energy for about 100 shots.

Explosives

Explosives come in many forms. Though a true demolitions expert can make do with any of them, sometimes a certain type is more suited to a particular task. Because explosives are strictly regulated in most countries, PCs may have to improvise their own.

Black powder can be made by any PC with Chemistry skill with an easy skill check and simple ingredients; it is sufficient for pipe bombs and booby traps. Its cost is RL 2 and it takes about a day to make.

Nitroglycerine requires a difficult Chemistry skill check, three days' time, and RL 4. A critical failure of F8 means that the nitro is inherently unstable and will go off prematurely, either during manufacture, when bumped (such as during transport), or in hot conditions. It is sufficient for everything except shaped charges.

Plastique and similar materials for shaped charges and military mines require a very difficult Chemistry check to make without the proper facilities. They require RL 7 and about a week to process. Failure results in a mass of inert goo.



—e.e. cummings

Progress is a comfortable disease.

Fuses

Safety fuse: This primitive fuse is simply a burning, black powder core in a waterproof wrapping. It burns at a rate of about 1 meter of fuse per minute.

Electric blasting cap: The most common type of detonator; when the switch is thrown, the cap explodes. These caps fire only if triggered by an electrical charge, so they must always be connected to some type of battery.

Percussion delay: This detonator is activated when the firing pin is pulled, delays for a set period, then fires, setting off the explosive. Delays of 8, 15, and 30 seconds are standard.

Electronic delay percussion detonator: This detonator depends on a microchip fuse in one end that is activated when the charge is set. Released, the chip counts off the seconds until its programmed detonation time, creating a delayed explosion minutes or hours later. The delay can be programmed from 1 minute to about 5 hours (the maximum battery life for the chip).

Grenades

These compact and usually illegal devices depend on an explosive to disperse lethal shrapnel or some more exotic agent across a wide target area.

Chaff: These specialized grenades scatter heated aluminum or ceramic composite fibers in a 10m radius, preventing accurate targeting with thermal imaging, laser sights, sonar, or radar. Interface kite pilots often carry a rack of chaff grenades to throw heatseekers or radar-guided missiles off track.

Concussion: These grenades create a powerful shock wave (no shrapnel) that stuns victims. Those who do not roll under their Willpower are unable to act for 2–12 rounds. Characters more than 5 meters away may double their Willpower for the check. Those more than 10 meters away are unaffected.

Fragmentation: The explosive within this grenade shatters its casing and sends shrapnel in all directions. Anyone within 5 meters automatically suffers 16 points of nonlethal damage from the concussion; within 10 meters, 8 points; and within 15 meters, 4 points. Every target within 5 meters also has an 80% chance of being hit by shrapnel; within 10 meters, 40%; within 15 meters, 20%; and within 20 meters, 10%. Shrapnel damage is 4d10/3.

Flechette: This grenade has an effect similar to the fragmentation grenade, but it is loaded with needlelike shrapnel. Its concussion damage is 8 points within 5 meters, 4 points within 10 meters. Its shrapnel damage is 3d10/5. Flechette lethality decreases by 2 against armored targets.

Jamming: These burst capacitor grenades overwhelm radar and magnetometer tracking systems by putting out a huge electromagnetic pulse. They are effective against radar and magnetometers within 500m and can destroy computer equipment (including vehicle guidance systems, datafeeds, and satellite uplinks) within 10m.

Nerve gas: These grenades contain soman, botulinal toxin, or sarin, airborne nerve gases that affect everyone within 5m of the point of impact. The gases quickly disperse in open air (only one immunity check required) but can linger in enclosed spaces (two or more checks required if PCs stay in the vicinity). Filter masks provide some protection (+5 to the immunity roll), but nerve gases can attack through the skin; only a vacc suit or carapace armor provides full protection. Nerve gases inflict 4d10/7 points of damage. Even a sublethal dose often does severe damage to the lungs, skin, and nerves, doing half the usual damage.

Smoke: Chemically produced, non-irritant smoke conceals movement, allowing characters to approach (or retreat from) a dangerous position. It provides soft cover (–20 modifier) against ranged fire in a 4m radius.

Spore: These grenades spread a cloud of deadly mushroom spores engineered to grow rapidly in human flesh. Victims within 2m who fail an immunity check are incapacitated and the fungi eat away at human tissue, causing 1d4 points of damage each round until they are removed. If the victim's immunity check succeeds, she or he is unaffected. If the check fails, the affected tissues must be cut or burned away, then cauterized with a surgical laser, resulting in keloid scars.

Tear Gas: This grenade fills a 4m by 4m area with choking, stinging gas. Characters in the area must make a successful immunity check or be blinded and unable to do more than try to get out of the area.

Tranq: These grenades release a 3m by 3m cloud of knockout gas. Anyone who fails an immunity check is knocked out for 20–120 minutes.



Viral: The favorites of terrorists, these grenades spread plagues by creating a concentrated, misty aerosol of viral particles. The grenades themselves are relatively unobtrusive, hissing quietly when the pin is pulled, and so terrorists prefer using them on foggy, rainy, or smoggy days, when victims are least likely to notice. Victims within 5m must make a successful immunity check or contract the plague the grenade carries.

Gene gun RL 8

Gene guns are the weapons preferred by blackmailers, assassins, and Israeli terrorists seeking the reestablishment of a Zionist state. They are pneumatic pistols that fire tiny pellets less than a millimeter in diameter, each coated with carefully tailored DNA. The DNA ammunition doesn't kill its target right away, but only under certain conditions (such as upon returning to Earth, drinking alcohol, after a time delay of days, weeks, or months, etc.). Gene guns are less effective against armored targets or characters with rhinohide, requiring a lethal attack to hit exposed skin.

Adrenal: Massive overdoses of adrenalin can cause heart attacks. This ammo is sometimes used to stage a "natural" death, untraceable without a complete forensic gene map of the victim. Unless the victim makes a successful Fitness check, she or he suffers a massive heart attack (2d10 points of body damage). Cost: RL 6.

Allergene: This potent set of immunological genes sets the body up for self-destruction. It embeds a set of environmental triggers in the target that code for immune system mayhem. The target dies in a slow biological orgy as the immune system destroys itself and the bacteria naturally present in the body devour him from within. Each day, the victim must make an immunity check or suffer a permanent loss of 1d4 stamina points. Cost: RL 11.

Coagulin: This genemod makes the target's blood clot while still in the body by releasing biotriggers that harden the blood in the capillaries first. The victim suffocates in 2–20 rounds as his blood hardens, making this form of death excruciating. The sangaero genemod provides immunity to this attack. There is no other antidote or remedy. Cost: RL 8.

Toxin bombs: This form of gene gun ammunition is never fatal. It results in timed release of neurochemicals, leading to neurotransmitter burnout. Though the target survives, all nerves active when this biological bomb is triggered are destroyed. It is usually set to go off as the target enters the Net, thus destroying his Netrunning ability, but can also be used to kill off language, science, or other skills. Genebombs can be countered if the target knows what he has been infected with. Cost: RL 10.

Tranquil: The gene gun tranquil ammo is a more powerful and uncontrolled form of the endorphin control genemod. By keeping the victim in a perpetual alpha state, it leads to passivity and withdrawal from all external stimuli. The victim is out of the action for the next hour, when his brain's pleasure centers burn out; the resulting withdrawal makes all skill checks one level more difficult, including combat, Netrunning, and social skills. Cost: RL 7.

Maser RL 10

Originally marketed by Krupps for use against looters and in building security, masers are microwave lasers that literally cook their targets. Recovery of damaged tissue is impossible; it must be removed and regenerated from scratch. Unless such regeneration is possible, maser stamina damage is permanent. Like other lasers, masers are completely silent. Masers are ineffective against armored targets.

Rail Gun RL 7

A rail gun fires a long, narrow, iron slug through a powerful set of superconducting electromagnets, reaching barrel velocities of 3,000 to 4,000 meters/second. Only direct fire is possible with a rail gun, though that direct fire can punch through brick walls, armor, and concrete. Rail guns ignore all armor modifiers, but they also do very little damage to unarmored targets because the slugs pass quickly and cleanly through the victim. Armor slows the needlelike round (2mm diameter, 10cm long) and makes it tumble, doubling the damage. The rail gun's recoil is extreme.

Rail guns are much quieter than gunpowder weapons because the vented barrel is an open series of electromagnets. Rail guns have no moving parts except loaders, and so do not release any explosive propellant. The only noise is the sonic boom made by the slug. The vents release jets of warm air when the gun is in use; this air is channeled rearward to reduce recoil.

A rail gun requires a lot of power and emits a huge electromagnetic field. Its battery can power only 10 shots. Some rail guns have optional cords that can plug directly into power grids for unlimited fire.



It's better to burn out, than to fade away.
—Neil Young

Sniper Scope RL 7

This is a weapon modification that adds a camera at the end of the barrel and runs the view through a length of fiber to goggles that the gunner wears. The scope's magnification reduces range penalties by one category, and it also reduces night penalties as night scopes do (from –40 to –25). Scope guns use a camera on the tip of the rifle to project a picture and crosshairs into the visor that the gunner wears. As a result, a gun held around a corner transmits an image that allows the owner to shoot accurately without exposing himself to return fire.

Spider Gun **RL 8**

These exotic guns are expensive because of their ammunition and the design that accommodates it. They fire shells much like shotguns, but they release liquid spider silk that solidifies on impact and binds the target tighter than steel. Also called goo guns, spider guns cause only 1 point of damage, but they bind 1-2 limbs on any hit (roll 1d4: 1 = one arm, 2 = both arms, 3 = one leg, 4 = both legs). Spider guns also prevent the victim from breathing unless he makes a successful Reflexes roll to avoid getting the silk in his face. Choking victims must make a Fitness check each round with a –10 penalty. Each round the penalty increases by a further –10. Spider gun ammunition is, as might be expected, very expensive, upping the total RL (guns without the ammo are worth only RL 7).

Subsonics RL 6

Subsonic generators require speakers and a power source; they use low-frequency sound to harass or to distract enemies within 10 meters of the generator. The effect slowly increases from round to round, destroying reasoning capability. However, subsonics are subtle—the victim notices them only with a successful Immunity check. Regardless of whether they are noticed, subsonics cause 1d6 points of mind damage each round they are applied, eventually knocking the victim out.

Targeting Laser RL 8

These ruby-red sighting devices pin a dot of light along a line to the target, but the light diffuses sufficiently to become invisible beyond short range.

Taser RL 7

This odd ammunition fires two flechettes and sets off a powerful static charge between them that cripples the human nervous system. Though their lethality is low, tasers strike their victims unconscious unless the victims make a successful immunity check. Because tasers are disabling without being lethal, they are popular with Buddhist and Hindu sects that abhor taking life.

Volt Darts RL 6

This sophisticated ammunition is used to disable electronic suits, comm gear, exoskeletons, and computers of all kinds by releasing a powerful static charge. Upon striking a target, volt darts put out powerful currents that jam or even fuse and overload the target's own electrical system. They can be fired from taser guns.

Graser RL 9

Also called a cancer gun, this weapon is illegal but is often used for assassinations. Its powerful gamma ray laser bursts cause mutation, cancer, and death in targets, generally within six months, unless the victim makes a very difficult Immunity check or can afford RL 10 treatment with viral surgery. The gamma ray laser beam can strike through almost all forms of cover; no bonuses apply to targets hiding behind trees, walls, or even cars. Only lead or thick stone stops the graser.

Prompt radiation from the opening of the laser and backscatter all along the beam's path can affect the user. To avoid damage, he must make a successful easy Immunity check, unless he is wearing protective clothing such as lead-lined garments or a carapace suit, in which case he automatically shrugs off the effects.

The long lead time allows the assassin plenty of time to escape.

(The name "graser" is a back-formation from Gamma Ray (Light) Amplification (by) Stimulated Emission (of) Radiation.)

Armor

Armor in *Kromosome* reduces damage from ranged weapons. It is most common in orbital sites and urban zones. In most countries, the police are quick to pick up anyone wearing armor in public. No armor can reduce the lethality of an attack to less than 1; flukes and lucky shots are always possible.

Ablation RL 5

Ablation armor is made of composite organic/ceramic fibers that burn away when struck by any coherent beam weapon. It reduces the lethality of coherent beam weapons by 3, damage by 5. Damage caused by fire is reduced by the same amount.

Carapace RL 12

Insectlike coverage from head to toe, with Net-wired helmet (including video cam), heating and cooling systems, force amplification at arm and leg joints, rebreather, and target acquisition and tracking heads-up display. Built for military use, a few carapace body suits have been found in organized crime weapon caches and as back-up for the Big Three's security armies.

Most are equipped with two or more weapons wired into the targeting system, such as rail guns, tasers, spider guns, or tear gas grenade launchers. All carapaces reduce lethality by 4, damage by 5. Targeting systems include sonar, radar, starlight, and thermal imaging, and all of these are fed into a processor that provides a composite display. The combined systems negate all range, darkness, smoke, and soft cover penalties to fire by the carapace suit wearer.

Extensive training with the Servomotor skill is required to get the full benefits of a carapace: An additional +5 Fitness bonus in all infighting.

A space version of the carapace exists, outfitted with maneuvering jets and a self-sealing biolayer that recycles and rebreathes all bodily waste. The biolayer also seals any breaches against vacuum, though this kills a section of the layer and requires repair. The self-sealer can seal three breaches before being exhausted. The space carapace is RL 13.

Persistent Net rumors tell of a space carapace with an outer biolayer that mimics a mimesis suit, supposedly created by Belters. If it exists, it is worth RL 14.

Exoframe RL 6

More combat suit than protective armor, exoframes are strength-amplifying cyberskeletons that are attached to the wearer by straps or, for permanent models, by mechanical pins attached to the user's bones. Both versions add +1 to initiative, +1 to hand-to-hand attacks, and double the number of infighting attacks per round, but as armor the exoframe only reduces hand-to-hand lethality by 1 and has no effect on ranged fire.

Like carapace armor, exoframes require the Servomotor skill to use effectively. Its effects are cumulative with the crab claw genemod.

Exoskeleton RL 8

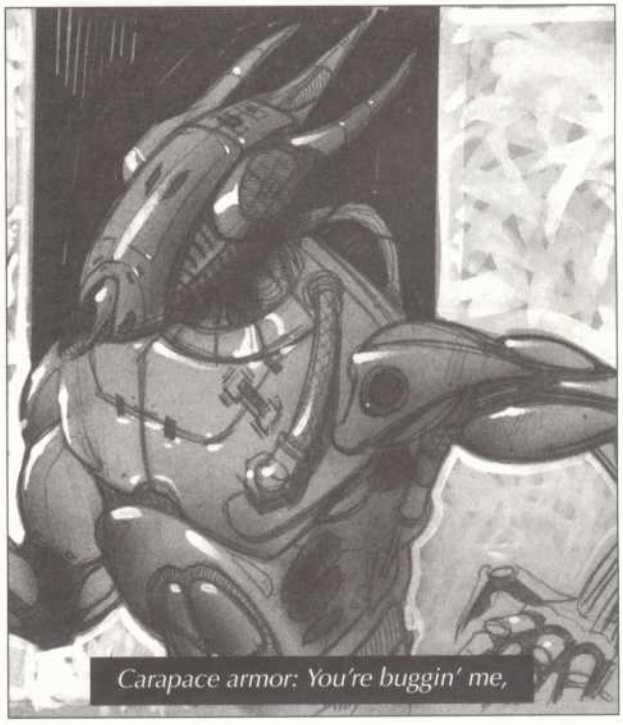
This more complete armor combines the benefits and power of an exoframe with spun-fiber armor coverage of all vital points. Hands remain free for delicate work, and the suit is not enclosed—it does not provide protection against gas or viral attack as carapace armor does.

Gas Mask RL 5

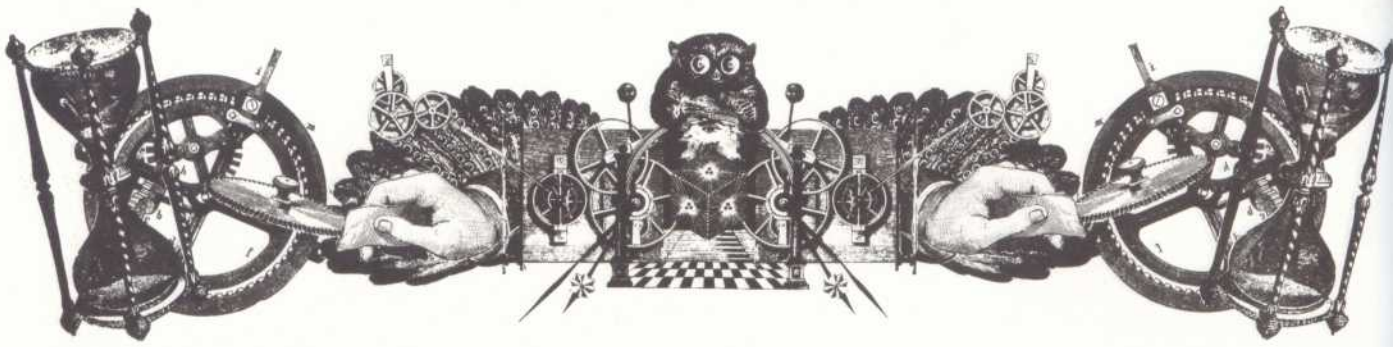
This improved version of the city filter mask provides +15 to all Immunity checks based on gas attacks.

Laminate RL 6

This armor sandwiches thin layers of ablation and spun fiber armor to provide maximum protection against both coherent beam and slug weapons. It does both jobs well,



Carapace armor: You're buggin' me,



Longevity breeds wealth. Live long and you will die rich.
—Gothic Circle motto

but neither as well as a purely specialized armor. It defends against both types with a –3 lethality modifier.

Deflector Field RL 11

Deflector field armor uses a powerful set of batteries and superconducting magnets to repulse attacks from ferrometallic weapons and slugs (from darts, pellets, rail guns, and Gauss guns) and deflect lasers. When its radar-linked magnetic grid senses a threat, mag field armor uses burst capacitors to surge to maximum power, shielding everything within a 5m radius.

Originally invented by Belters involved in dangerous mining to repel micrometeorites from their ships, deflector field generators were never meant to be very portable. Each weighs 60 kg and is awkward, requiring two people to carry. Most are vehicle-mounted, though a few luggable base camp varieties exist.

Unfortunately, the energy demands are so high that the field can only react against 10 attacks before the batteries give out. Splicing into main power lines (not indoor current) can provide an unlimited amount of power, but requires a successful easy Electronics skill check.

A deflector field reduces the lethality of all rail and dart gun attacks and all hand-to-hand attacks using iron weapons by –5. Coherent beams suffer a –1. It is cumulative with all other forms of armor.

Mimesis Suit RL 12

These suits protect the wearer by constantly shifting to mimic the background, making the wearer perpetually camouflaged. All ranged attacks are at a –20 penalty, and all hand-to-hand attacks suffer –5 to hit. Mimesis suits do not reduce the damage or lethality of any attacks. Because they require close skin contact for best effectiveness, they cannot be worn with any other armor.

Reflective RL 4

This lightweight foil reflects coherent beam weapons and radiation in bands from X-ray to microwave. It cuts the lethality of all laser weapons by 3.

Spun Fiber RL 7

This material is shaped into clothing and can stop most slugs from entering the body, though they still bruise the target horribly. A complete suit of spun fiber armor reduces the lethality of any weapon except exotics and flechettes by 3. Because it is constructed to stop only slugs, it is fully effective against teflon bullets.

Communication

Communication is vital to coordinating a team in combat and to keeping ahead in life. An intercepted or stolen message is often the source of clues and adventures, and so the major forms of information transfer and retrieval are listed below.

Datacard RL 4

A datacard is a small, flat, electronic recordkeeper about the size of a large matchbook. A typical datacard contains packets of information such as medical records, finances, address books, marketing lists, and the like. They can be used as IDs or as personal organizers. Datacards are also used to secure information that is too sensitive to store on the Net: encryption schemes, codebreaking algorithms, viral plans, the chemical structures and manufacturing processes for certain metabolites and antidotes. Datacards can be encrypted or protected with a password or fingerprint scanner. Scanner datacards cost RL 5.

Datacore RL 8

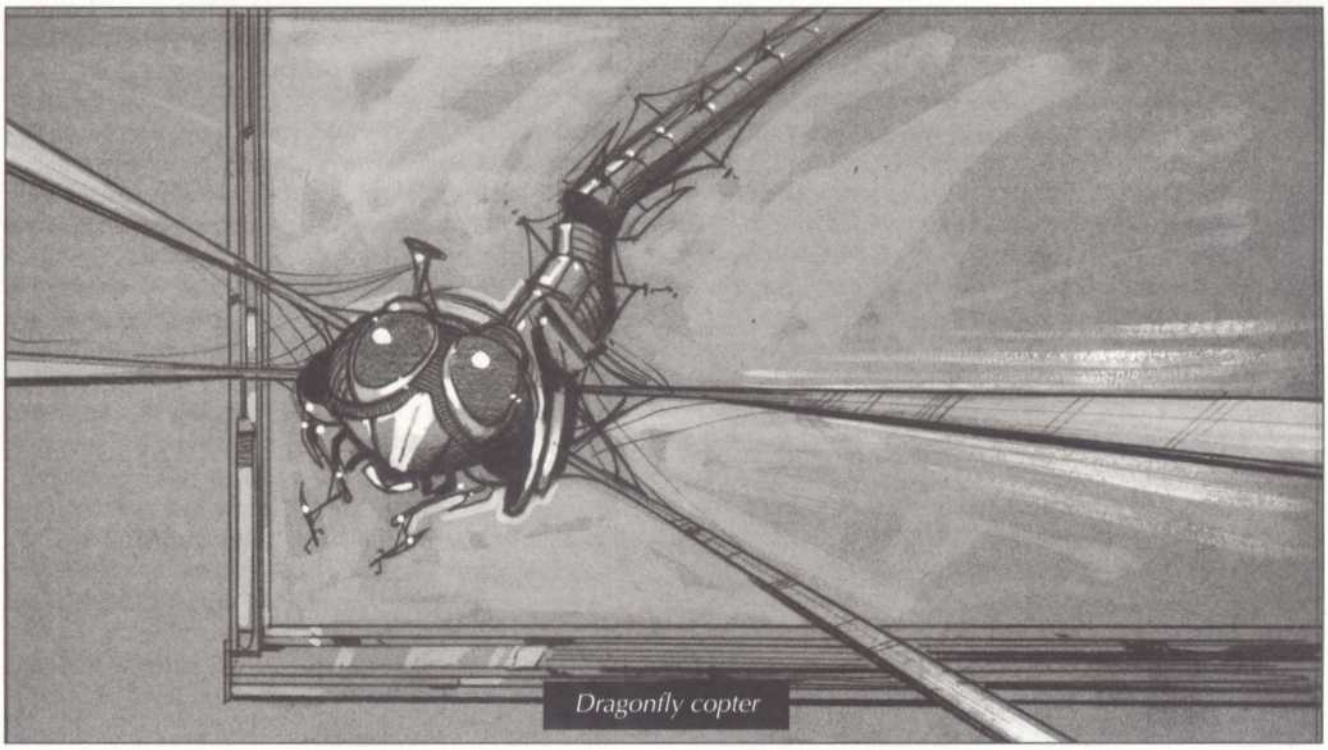
A datacore can store the information from a million datacards. It is a set of optical storage disks that keep records for banks, AIs, governments, entertainment studios, and other institutions with large information storage and retrieval needs. A datacore can be moved with a large van.

Forward Link RL 6

A forwarding link sends all communication to the user's current location. All Net traffic, phone messages, faxes, and shipments are routed to a radio signal that the user puts out from a link-badge. This means that someone rushing down a hall will set phones ringing as he passes by, and public Net terminals will light up to signal that they have information for the badge-wearer.

Satellite Uplink RL 8

The most sophisticated and portable communication unit is a notebook-sized satellite uplink weighing about 10



Dragonfly copter

kg. With an uplink, any user who knows the proper directional information and code sequences can reach almost any point in the world, bouncing his signal off a military comm satellite. The transmission is automatically scrambled and sent in a compressed, high speed burst that makes interception and eavesdropping difficult. Military units and secure corporate units cost RL 9 and change their transmission frequency every microsecond, on a preset pattern.

Video Travel RL 5 rent, 7 buy

This form of cocooning travel sends a robot camera to the destination while the travelers watch from a controlled portion of the Net. Sound quality varies, and taste and smell are completely absent, but the price is nice and low. Video travel also allows safe investigation of hazardous areas, such as exotic ghettos and poor nations with archaeological or scenic wonders.

To rent a video traveler, a deposit is required for the robot; travel in dangerous areas (near volcanoes and war zones, for example) ups the rental rate (RL 8).

Voicemailbox RL 4

If you hang around in bars to hire people, you hire surly drunks. In the *Kromosome* universe, real jobs come through the mail, providing your employers with anonymity and distance, and you with a chance to sort offers without the interference of booze.

Gear

Mechanical equipment is listed below. All listed items are legal and available in most countries as military surplus or in stores specializing in paramilitary equipment.

Binoculars RL 4

These image amplifiers can magnify up to 100X, meaning that they can clearly pick up details kilometers away.

City Filters RL 3

These micropore masks look like surgical masks, but serve the opposite purpose; they filter the air the wearer breathes to



Heaven and Earth are not humane. They treat people like things.
—Tao Te Ching, 5

Table 12: Armor

Name	RL	Lethality	Effect
Ablation	5	-3 beam	-5 damage
Carapace	12	-4	-5 damage
Deflector Field	11	-5 ferrous, -1 beam	—
Exoframe	6	-1 infighting	—
Exoskeleton	8	-2	—
Rhinohide	3	-1	-10 Reflexes
Laminate	6	-2	—
Mimesis Suit	10	—	-20 ranged, -5 infighting
Quills	3	—	attacker suffers half infighting damage
Reflec	4	-3 beam	—
Spun Fiber	7	-3 slugs	—

help keep poisons, dust, and pollution out. They are common in biohazard cities, and most citizens will wear a mask when ozone, hydrocarbon, nitrous oxide, and particulate readings rise to unbreathable levels. City filters add +5 to all immunity checks against airborne hazards.

Flash Shades RL 6

These flash suppressor shades use fuzzy logic circuitry and single-crystal polarized lenses to create a shady transition like dusk whenever the wearer steps from darkness into light or vice versa. No flash (not even a strobe) has any effect on the wearer.

Electronic Stethoscope RL 3

This device consists of a small, sensitive microphone, a pocket amplifier, and headphones. The user can easily overhear conversation and activities on the other side of a wall. Battery life is 15 hours.

Thermal Imaging (IR) Contacts RL 7

Not as effective as the catseyes genemod in all-round vision, IR contacts still provide effective night vision, reducing the penalty for darkness from –40 to –10. Unlike catseyes, these contacts read the thermal emissions of a target, allowing the user to see through total darkness, fog, smoke, and even light brush. They do not, however, pick up human targets well in warm climates and they are useless for reading, color or texture identification, and delicate work such as reloading, lockpicking, or defusing mines. Thermal imaging contacts must be removed during the day, when they reduce all vision to a blur.

Magnetometer RL 5

A magnetometer is a set of two sophisticated compasses hooked together to provide direction and ranging information on metallic masses and electromagnetic fields. They can find tanks, ore, and electromagnetic sources like rail guns, electric trains, and power lines. Magnetometers are about the size of a pack of cigarettes and can be powered for five hours continuously.

A magnetometer is largely useless for discovering metallic masses in urban areas, where steel girders in buildings, the mass of vehicles, and other infrastructure makes accurate impressions of weapons impossible. Rail gun electromagnetic signatures are still clear spikes above the background noise of urban metal, however.

Parabolic Microphone RL 3

This small, hand-held mike looks like an oversized flashlight connected to a set of headphones or a cochlear implant. Amplification is up to 6,000 times normal, so a parabolic mike can pick up a whisper at 120 meters. The battery provides 20 hours of power.

Radar Pack RL 6, 7 switching

A radar pack is field radar designed to locate enemy tanks, robots, aircraft, and armored infantry. Radar packs cannot detect unarmored humans unless they are carrying

at least 10 kg of metal. They are effective within a range of about 1 km, and weigh about 5 kg.

Active radar packs also provide a clean signal for missiles, mortar rounds, and other weapons that can home in on an active radar source. For this reason, they are usually activated in short pulses. They can be jammed by any radar jammer.

Frequency-switching radar constantly alters the frequency to avoid becoming a targeting beacon. Jamming this form of radar requires a jammer that puts out a complete spectrum of noise.

Implants

Biomachine interfaces and mechanical enhancements are popular in the *Kromosome* setting, though not quite as popular as genemods. They do not blend with biological functions as well as purely biotech enhancements, and complications from tissue rejection can be severe. Much like genemods, implants reduce immunity by 1.5 times the RL of the implant, rounded down.

Cochlear Implants RL 5

Also called bone phones, these implants allow the wearer to listen to phone calls, the Net, or even radio and television without resorting to external devices. This implant allows only audio, though. When combined with a datafeed, it allows remote use of any linked processor without any external clue. It provides a +5 Netrunning bonus when using an AN or VR interface, but no bonus to a brain jack or machine empathy interface.

Datafeed RL 6

This implant provides a direct link from remote cameras to the user's optic nerve. Instead of requiring a helmet or screen to view data or video, the owner of a datafeed simply layers the images over what he already sees. His brain sorts the two images out distinctly. It gives the user a +5 bonus to Netrunning with an AN or VR set; it adds no bonus to a brain jack or machine empathy.

Datastore RL 5

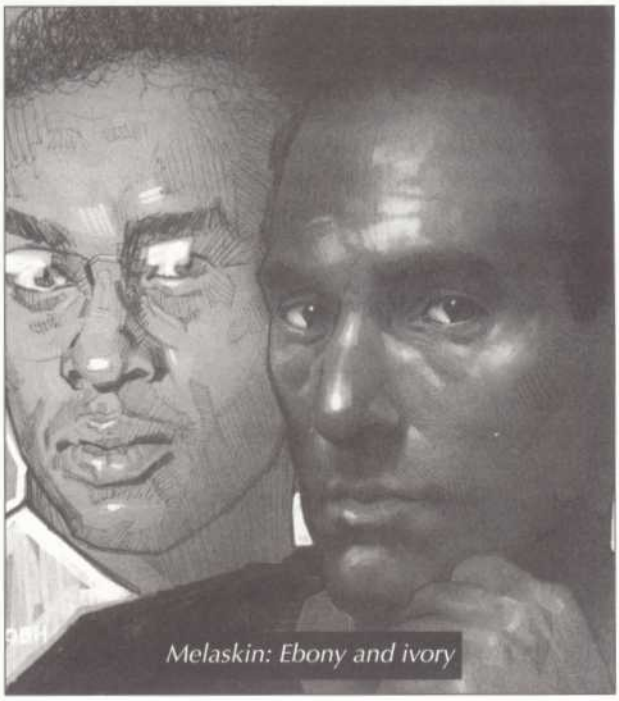
A datastore keeps numerical and text information in a biologically compatible format, safely offline and away from eyes that might pry into Net data, no matter how well secured. Because it requires the loyalty of the carrier and the implantation surgery hooks it directly into the brain, it is rarely used except for military secrets, secret police files, and black market and organized crime accounting. A datastore cannot be accessed without a brain jack.

Machine Interfaces RL 6

Almost always present in mercenaries and contract workers, these electronic tools allow the user to directly control a jump jet, hovertank, carapace armor, a self-propelled artillery piece, or other machines. By bypassing the need for mechanical steering or firing control, the driver can react faster and more accurately.

A machine operator who wants to work at the highest efficiency level usually invests in highwire metabolites or enhanced reflex genemods as well as the machine interface. Any machine interface adds 10 to Gunnery skill and doubles the number of targets for any large weapons system.

Nerve burn is common from machine interfaces. All Netburn table results for a PC with a machine interface suffer an additional +1 to the die roll. In addition to the usual effects of nerve burn, any Netburn result of 6 or more



Melaskin: Ebony and ivory



causes a permanent loss of 15 points of Reflexes to a character with a machine interface.

Transportation

Vehicles are big, attractive targets for both characters and their enemies. Since PCs will travel to many corners of the globe and beyond, vehicles should be used for maximum dramatic effect: Chases, shootouts, running gun battles, and hostage scenes can all be played out on different vehicles. The following are the most common forms of transportation; public transportation is included because of its cinematic possibilities. It can lead to chases on train roofs, in subways near the third rail, or simply in crowded buses where panicking passengers may allow a villain to get away. See the combat rules for details on falling or destroying vehicles.

Airliner RL 10 ticket, 12 buy

Fuel for jet planes is more expensive than gold, so only the wealthiest corps can travel by air. Flights are usually routed through a few regional hubs (in the U.S., these are N.Y., L.A., Houston, and Chicago) and linked to final destinations by light rail, so total travel time is four to eight hours on a continental flight, 12 to 24 hours for intercontinental.

Planes are made of composite materials, with few or no metal parts. The turbines are made from single-crystal steel blades capable of higher tolerances than ordinary steel.

Category: Normal Structure: 200 Armor: 3

Bullet Plane RL 11 ticket, 13 buy

Ballistic missiles with controlled reentry, these airfoils are called "wedges" because of their distinctive shape for supersonic flight. Typical Chicago to Tokyo travel time is 45 minutes, Beijing to Frankfurt about 95 minutes. However, because of the enormous cost, flights are only available two or three times daily. The wedges are equipped luxuriously and are remarkably sturdy because they must survive the rigors of reentry thousands of times.

Category: Tough Structure: 150 Armor: 4

Passenger Liner RL 7 ticket, 10 buy

Now more common than at any time since the early 20th century, sailing ships have made a comeback with pillar sails, composite materials, and cheap fares (compared to planes or even zeppelins). Most international passengers take ships to their destinations.

Category: Tough Structure: 1,000 Armor: 7

Dragonfly Copter RL 9 ticket, 12 buy

Made entirely of composite materials, this type of helicopter uses whisper technology to reduce rotor noise. A dragonfly copter can hover outside a window without alerting inhabitants inside. To prevent detection by more advanced systems, it also reduces its heat signal and employs other stealth cloaking methods (radar masking, whisper noise suppression, and exhaust diffusion).

Category: Fragile Structure: 70 Armor: 2

Solar Freighter RL 15

These brutally functional ships look like spaceborne construction sites, always covered with scaffolding for repairs in progress. They are shielded from micrometeor impacts and solar radiation by overlapping ablation plates that can reach 1m in thickness after years of adding additional layers. Crew quarters are minimal, with all organics recycled and most space reserved for cargo. Solar freighters do not enter planetary atmospheres, but offload from orbit.

Category: Tough Structure: 3,000 Armor: 5

Interface Kite RL 9

Invented by Belters for use in low gravity, the newest models of this cutting-edge fusion of hang glider and kite can soar in Earth gravity at speeds up to 120 kph, double that in a dive. The pilot must have a brain jack (-15 penalty) or machine interface (no penalty) to operate the kite.

An interface kite is built around a composite frame that uses directional silk and micro servos to power the lifting surfaces and steering; the flier's muscles and body chemistry power it, and a special processor adjusts the trim for maximum efficiency.

Flying an interface kite is exhausting, and most pilots can only stay aloft for a number of minutes equal to their Fitness. Those who have the enhancement in this skill can fly for three times the usual period. They must make a successful Fitness check for every 10 minutes after that or lose control and tumble out of the sky. Kites are used in sporting races on Earth; rumor has it that Belters hold kite fights to the death.

Category: Fragile Structure: 20 Armor: 1

—Menander

Deus ex Machina (god from the machine).

Kwanto Bus RL 6 rent, 8 buy

These are natural gas or ethanol powered buses used for regional transportation away from rail lines. They function in the U.S., parts of Siberia, and Africa as corp or government-subsidized transport. Top speed is about 100 kph.

Category: Normal Structure: 90 Armor: 2

Kwanto Cruiser RL 8

This long, luxurious, armored limousine is the top of the line model from Kwanto. Like all Kwanto vehicles, its ceramic engine runs on ethanol and natural gas. It reaches a top speed of 200 kph in silence and comfort. Its ceramic armor stops most attacks on the body, its windows are bulletproof, and the engine block and fuel tank are both protected by an extra layer of armor.

Category: Tough Structure: 45 Armor: 3

Kwanto Caravan RL 7

This van has room for six to eight adults, though the ethanol engine runs very rough. It can reach a top speed of 140 kph. Varying models have different interior decor and options, but a standard feature is thick composite-material plating capable of stopping small caliber gunfire.

Category: Normal Structure: 40 Armor: 5

Maglev RL 6 ticket, 13 buy

Magnetically levitated on superconducting magnets, these lightweight trains fly silently above the tracks at 500 kph. They serve as quiet subways, streetcars, and light commuter trains criss-crossing all urban areas. Maglev trains also operate in urban corridors from Pittsburgh to Minneapolis, from Moscow to Paris, from Rio de Janeiro to Sao Paulo, and along the Pacifican seaboard from Bangkok to Seoul. Maglev trains are the primary mode of transportation in Europe, Pacifica, the Islamic Republics, and Brazil. They exist in urban sections of the USA.

Category: Normal Structure: 70 Armor: 1

Harlin Motorcycle RL 7

Available with or without a sidecar, most motorcycles have asymmetrical single-arm suspensions and are fitted with sound-suppressor technology that makes them purr as quietly as a cat. Top speed for a racer is about 250 kph, 200 with sidecar.

Category: Fragile Structure: 35 Armor: 1





Sabotage is business carried on by other means. —Corp Espionage Motto

Belter Mule RL 12

This prospector vehicle has six cold sleep berths for trips between a Belter's claims and the markets in colony sites and Belter outposts, a mass driver engine for maneuvers within the Belt (spitting out worthless rock chunks to push the ship in the desired direction), a rocket engine for burns to get to claims quickly, an external geodesic pod for the robot herd, and a grid that serves as a skeleton to lash inflatable cargo pods to. Most mules look like hodgepodge junkyards, but they are very practical. Parts can be stripped or jettisoned for fast running, or the vessel can carry 50 times its stripped weight in cargo.

Category: Tough Structure: 500 Armor: 4

Ninhao Bus RL 8

Sometimes a van is just too crowded for a group with serious gear. This bus can carry a band's amps and equipment, a graphics lab's processors and screens, the heavy weapons of a mercenary team, or the entourage of any VIP without any trouble.

Category: Normal Structure: 60 Armor: 2

Solaris RL 5 rent, 7 buy

This aerodynamic, solar-powered car seats three and is capable of short (400 km) trips before requiring refueling. The Solaris' top speed is about 150 kph.

Category: Normal Structure: 25 Armor: 1

Supertanker RL 10

These half-kilometer- to 2-kilometer-long ships don't take passengers, but they do carry cargo. Some have been retrofitted for passenger use, generally by poor nations and small companies. All but the most ancient supertankers are double-hulled. A few supertankers are in service as barges or floating cities, powered by alcohol or methane derived from plankton or algae.

Category: Tough Structure: 2,500 Armor: 6

Ultralight RL 4 rent, 5 buy

Ultralights are the perfect one-man vehicles for radar-proof, silent penetration of installations protected against ground assaults. They can be loaded with flares to ward off heat-seeking missiles and can be fitted with autopilots to continue flying after their pilot jumps out. They can take off and land in less than 50 yards of bumpy runway, fly at a top speed of 80 kph, and have a maximum range of 400 kilometers.

Category: Fragile Structure: 20 Armor: 0

Zeluki RL 6

A small, aerodynamic, two-seater car built for city conditions and sometimes used for cab service in crowded, narrow city streets. It accelerates smoothly and rapidly to a top speed of 180 kph, and has a range of 250 km.

Category: Fragile Structure: 35 Armor: 0

Zeppelin RL 8 ticket, 12 buy

Rigid and semi-rigid helium airships have regained popularity as the cost of kerosene-powered planes has continued to climb. They can carry passengers cheaply, slowly, and in spacious comfort, but heavy freight is still cheaper by ship and express mail is faster by plane or orbital shuttle.

Small zeppelins are used as floating billboards and as rooftop cab services in large urban sprawls like Berlin, Chengdu, Hong Kong, Milan, New York, San Francisco, Shanghai, Tokyo, and Vancouver.

Category: Fragile Structure: 80 Armor: 1

Metabolites

Many new, carefully designed biomolecules and narcoviruses have been invented to optimize human performance. These metabolites are often designed with a specific task in mind; some are meant for soldiers or athletes, others for artists, still others for researchers and engineers.

Few metabolites are injected; intravenous types are now delivered by skin patches. Many metabolites are released within the user's endocrine system by genemods like adrenal, pheromones, or steroid pumps. Others are eaten or inhaled. The most exotic and the most commonly ingested metabolites are outlined below.

Bliss RL 3+

Bliss is related to endorphins like dopamine and acts directly on the brain's pleasure centers, leading to instant addiction. The user quickly develops a tolerance, requiring larger and purer doses that can drive the cost of the habit up to RL 8 or more. It does nothing to improve a user's performance, but it does protect him or her from nerve dam-

age. A Netrunner using bliss may subtract 3 from all Netburn rolls. A bliss 'runner whose supply has been exhausted must add 2 to each Netburn result.

Deprenyl RL 3

A general brain boost, deprenyl is a neurochemical that adds +10 to Psyche when taken daily. Though cheap and widely available, deprenyl leads to slow decay of nerve paths if abused. After one to three years, the effects end and the PC's synapses collapse, reducing Psyche, Learning, Reflexes, and Intuition by -10.

Digitalis RL 5

A poison that can also regulate heart rhythms, digitalis is used by adrenal junkies to prevent heart attacks and jitters. It also works to enhance machine empathy, providing an additional +5 bonus to that genemod. Proper administration requires First Aid or Pharmacology skill; failure to use the proper amount causes 1d10 points of damage, with a lethality of 5.

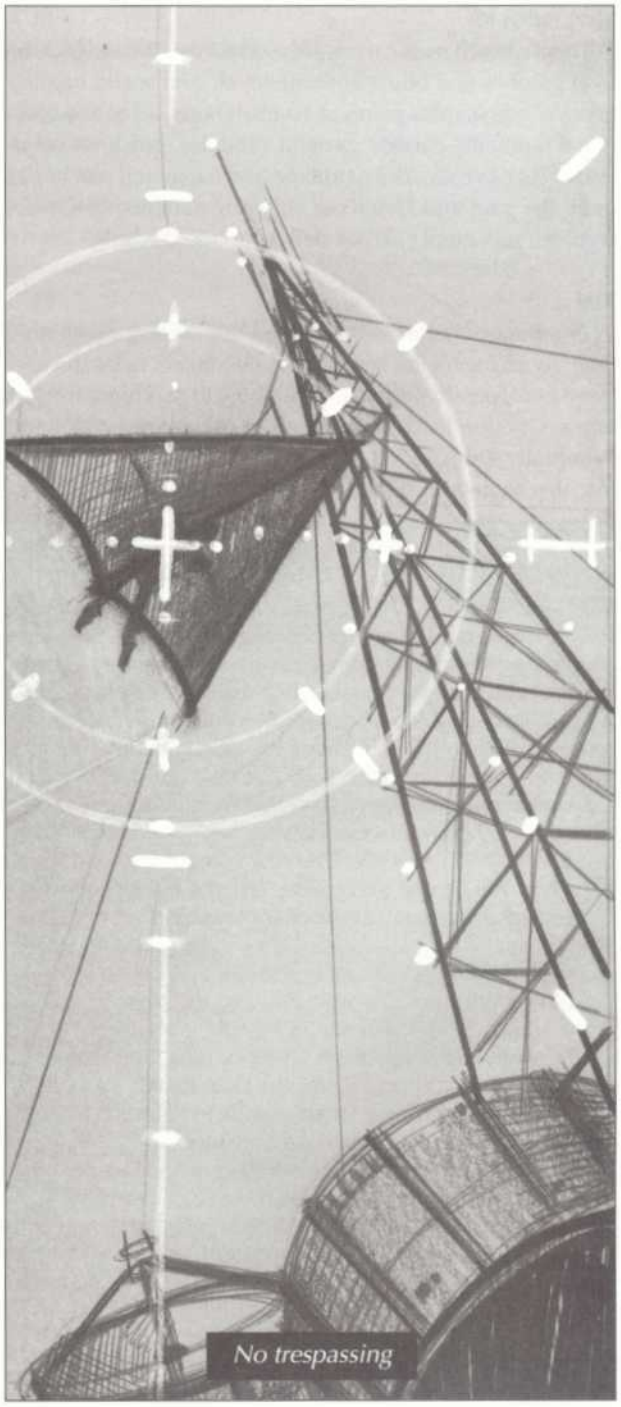
Highwire RL 9

Highwire is a temporal regulation hormone; when ingested, it slows time relative to the user, shifting his vision into a blue band and allowing him to move much faster relative to everyone around him. The PC can take two actions in each round instead of only one, run twice as far, shoot twice as often. Each use of Highwire permanently costs the PC 3 points of Fitness as it overloads and burns out synapses. The effect lasts for ten minutes. It is meant for military use only and is illegal for civilians.

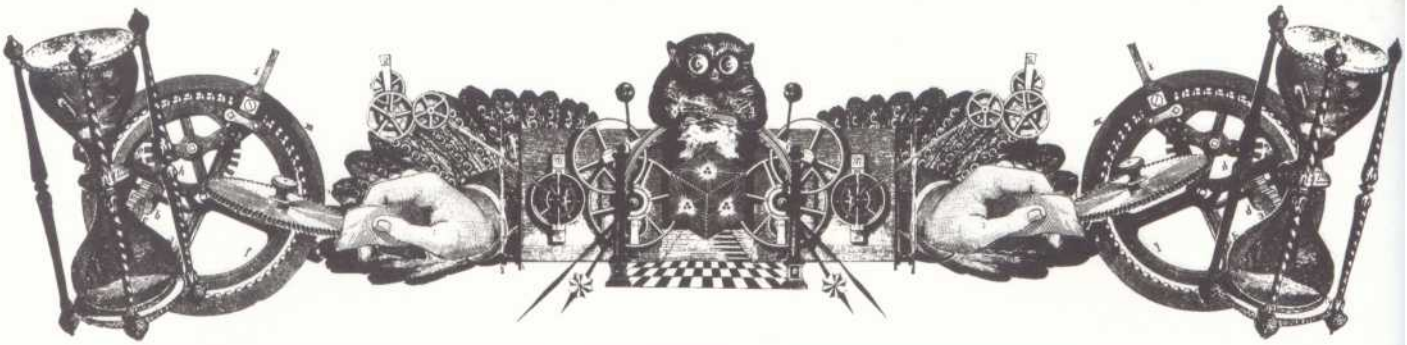
Mycotoxin RL 3

Derived from *Amanita virosa,* one of several mushrooms called the destroying angel, this sweet, a-amanatin-based poison kills slowly. Symptoms include vomiting, cramps, and diarrhea for 8 to 12 hours, followed by a brief remission. Kidney and liver failure are total, and death results within six days. There is no antidote.

Even more insidious, the olrellanine mycotoxin has a 2-12 day incubation and doesn't kill for up to five months. It attacks the liver, kidneys, and spinal cord, causing fever, chills, muscle pains, and headaches. Again, no antidote is known.



No trespassing



I am not born for one corner; the whole world is my native land.
—Seneca the Younger

Viral Patch Kit RL 4

These biotech medical kits are used for first aid and include viral patches that boost immune levels and speed healing (recover 2d6 stamina points in 10-60 minutes, +5 to any additional immunity checks), general antidotes, quick-set gel to immobilize breaks, and morphine and narcoviral patches to quell the pain and knock out suffering patients. Patch kits require a successful First Aid skill roll to use correctly.

Xtal RL 9

Pronounced "crystal," xtal is the first mechanoempathic drug. By changing the neurolectric interface it helps the user feel a cool, passionless state of unity with machines for 1–4 hours. Overuse leads to flattened emotional responses and eventually a desire to become a VP. Xtal adds +20 to all machine empathy rolls and +5 to all Netrunning skill checks.

Neural Cocktail RL 6

These nonprescription medications include a potent mix of tryptophan, phenylalamine, and other active neurotransmitters. Neural cocktails add +10 to Learning and Intuition for 20–120 minutes.

Quasi-narcotic Viruses RL 7-8

These tailor-made viruses hijack the victim's body chemistry to turn out low levels of potent narcotics or other naturally-produced pleasure drugs such as endorphins, serotonin, or dopamine, leaving the victim incapacitated and blissed-out for days, possibly even weeks. Often used in underground clinics as an anesthetic, QN viruses can double the speed of healing and turn the weeks of recovery from a plague attack into days. They cannot speed recovery after application of a new genemod.

Some Handy Definitions

AI freezers: Because of the heat that builds up around their ultraminiaturized transistors, all AIs must be continuously cooled with liquid nitrogen or even liquid helium. Destroying this cooling system is a sure way to induce an AI meltdown.

Biochips: These interface chips convert the electronic signals of metal, silicon, and solder systems into the chemical signals of proteins and neurotransmitters. Though the transfer rate is slow, these chips are crucial to brain jacks and some corps are convinced that they will create the next generation of interfaces. Humans may have to be reengineered to be compatible with biochips before the technology can take off.

Biolamps: Street lights powered by bioluminescence and requiring no electricity or maintenance. Their only drawback is that their light fades before dawn.

BIOS: The most basic level of a computer's software, its Basic Input/Output System.

CNS: The central nervous system, the biological network that governs all voluntary and involuntary reactions of the body.

Code Factories: Sweatshops for cranking out lines and modules of computer code for ever more complex programs and Net filters.

Genemod: A genetic modification, also called bioware.

I-War: Infrastructure war, a war to destroy communication, transportation, banking, power and computation systems that modern economies and armies rely on.

Infowar: Also called soft attack or data war; attacks data storage and command and control structures. A Basque terrorist soft attack was responsible for the Data Panic.

Matchbox Memory: These storage cards store 100 Meg in a format the size of a credit card; they use metals as transistors, instead of using metals to make transistors.

Herpes complex: An engineered version of herpes simplex that establishes itself in the CNS and never leaves. It destroys the ability to use a brain jack. Used by yakuza and triads.

Neurolectronics: The discipline of integrating machines with the human central nervous system.

Public Terminal: Black and white VR or AN terminal for Net access. Using a public terminal costs RL 3 and forces a –10 penalty to all Netrunning attempts because of its poor connection.

TB: Tuberculosis, a disease of the lungs that results in one or both lungs filling with fluid until the victim drowns. New antibiotic-resistant varieties are common, some of them engineered by biowarfare labs.

SCOP: Single-celled organism protein. These bacteria are grown on chemical nutrient stocks as a cheap alternative to animal meat.



Hostile Takeovers

The *Kromosome* universe is a hostile place, and the collapse of societies around the globe has made many regions unsafe for anyone without heavy firepower. The combat rules provided here stress the quick and deadly nature of most firefights; PCs should always enter combat cautiously.

Combat begins by determining advantage just as detailed in the AMAZING ENGINE System Guide portion of this book. The next step is to declare actions, then roll for initiative. Gunplay is resolved first, followed by infighting. If hand-to-hand attacks are happening at the same time as ranged attacks, the hand-to-hand attacks suffer a –2 penalty to initiative. The winners go first, rolling to strike targets and then rolling damage.

When characters fire guns during infighting, the effects of gunfire change. A character with a gun must still roll for initiative—a master of the martial arts or a genehead with hopped-up reflexes can still get in the first strike. Because the combatants are so close to each other, gunfire is both limited and more damaging at close range. The gunner can only fire at a single target, no matter how many targets his weapon is rated for. However, if he hits, he pumps many more slugs into the victim, so damage done by gunfire during infighting is multiplied by the gun's target rating. A street sweeper, for instance, could only hit a single target but would do 16d6 instead of 4d6. Lethality is unaffected by infighting.

Automatic weapons can be used to shoot at more than a single target. This form of gunplay requires each player to declare how many targets his character will shoot at. For each target over the first, there is a cumulative –10 penalty to all the shots. For example, if a ganger with a street sweeper being approached by security drones tries to shoot all four of them, each shot is at a –30 penalty. If he tried to hit only two targets, he would suffer only a –10 penalty to each.

Infighting and martial arts are described in the Skills section. Experts in these skills can be just as lethal as a man with a gun, especially if they have appropriate bioware.

Table 13: Initiative Modifiers

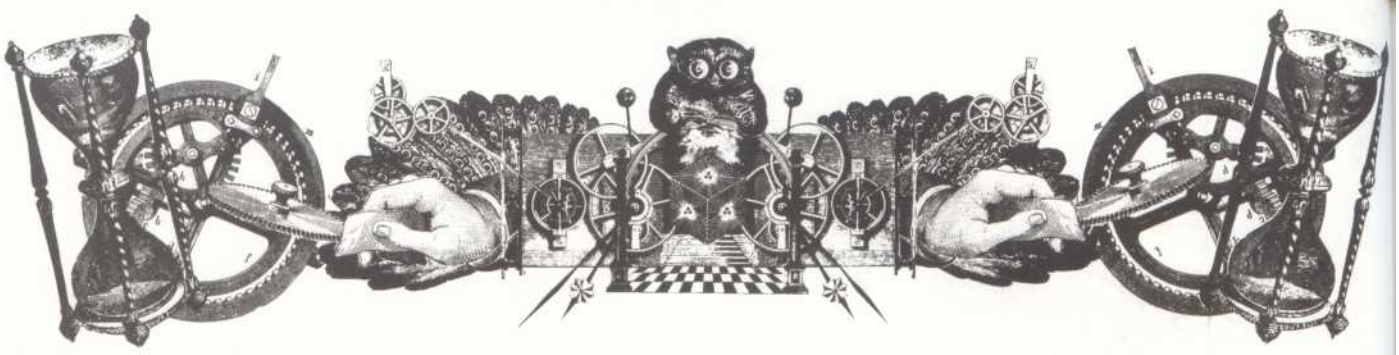
Adrenal	+1
Carapace	+2
Exoframe	+1
Exoskeleton	+1
Slowed Metabolism	-2
Reflexes	+Reflexes/10

Table 14: Combat Modifier Summary

Unknown skill	x0.5
Enhancement	+10
Vital target area	x0.5
Nonvital target area	x0.1
Short range	0
Medium range	-5
Long range	-10
Extreme range	-30
100% Soft cover	-20
50% Soft cover	-10
25% Soft cover	-5
100% Hard cover (HEAP and graser only)	-50
50% Hard cover	-30
25% Hard cover	-20
Aimed shot	+15
Cased rounds	-5
Target in darkness	-40
Attacker flash blinded	-35
Attacker in low-G	-20
Target kneeling	+5
Shooter prone	+10
Scope	+10
Silencer	-5
Smoke	-20
Target prone	-30

Armor, Ammo, & Cover

Armor reduces the lethality of any shot, increasing the chance of survival. Armor is never cumulative; only the best protection applies, and wearing multiple suits of armor confers no additional benefit. Some forms of



The tree of liberty must be refreshed from time to time with the blood of patriots and tyrants.
—Thomas Jefferson

armor also reduce damage or the chance to hit.

Cover provides the same benefits as armor and is cumulative with any armor worn. The two types of cover are soft cover and hard cover. Soft cover includes anything that screens a target from view but that does little to stop a weapon. Soft cover includes scrub, smoke, and billboards.

Hard cover is anything that can stop or deflect a bullet, such as a shatterproof glass wall, a tank of liquid nitrogen, or a subway train. Only high-explosive, armor-piercing bullets (HEAP) and grasers have a chance to hit anything under 100% hard cover. This form of ammunition also reduces armor's lethality bonus by –1; armor that normally reduces lethality by –3 only reduces by –2 against HEAP bullets.

Table 15: Effects of Cover

100% Soft	-20	100% Hard	-50
50% Soft	-10	50% Hard	-35
25% Soft	-5	25% Hard	-20

In addition to soft and hard cover, the urban sprawl of the 21st century is crowded with people. A target in a crowd gains the benefit of 50% hard cover, and rolls that are in the range of that cover's bonus (from 1 to 35 above what would hit) hit a bystander instead of the intended target. Though bystanders scatter and seek cover as soon as a firefight begins, a few may return fire if a group of PCs or NPCs is simply mowing everyone down indiscriminately.

Mobs and Grenades

Mob violence can break out at any time in the crowded, dangerous corners of the world, and characters need to be ready to face riots, revolts, and looters. Fighting a crowd is very different from facing single combat. A mob of hundreds can tear apart PCs, knock them down, immobilize them, or carry them along in a crowd. Treat each of these actions as a single attack, using a roll equal to the average Fitness of the attackers (about 35 for unmodified humans, 40 for Belters and gang members, 45 for soldiers). Roll against each target; success means that the PC suffers 2d8/2 points of damage and is knocked prone, held, or carried 10 meters by the crowd.

Area-effect attacks like grenades, automatic weapons, and tear gas are more effective against crowds than single-target attacks. If they hit, they disperse a mob if they do body damage. Otherwise, they merely enrage the crowd. Negotiation skill checks can hold back a crowd that has not yet attacked, and Social Engineering checks can calm a mob or incite a crowd to action.

Copters, Cars, and Subways

Falling from a moving vehicle is dangerous: Each 20 kph causes 1d4 stamina points of damage. The lethality rating is 1 per 40 kph, to a maximum of 9 at 360 kph or faster. For example, jumping from a subway train moving 60 kph as it crosses a bridge into Manhattan would involve a fall of 6m, causing 3d6 stamina points of damage, plus 3d4 stamina points of damage for the moving vehicle.

Like anything else, vehicles can be damaged or destroyed. For this, each vehicle has an armor rating and Structure points that determine when the vehicle fails completely. Structure points represent the integrity of the tires, wings, body, hull, glass, wiring suspension, and other components of any vehicle. If enough of them are destroyed, the vehicle eventually grinds to a halt. If all the structure points are destroyed or if an attack is lethal, the GM should roll 1d10 on Table 16: Vehicle Destruction and apply the results as appropriate. Since some results superficially resemble each other, the GM should not reveal exactly how serious some results are until a PC with Applied Tech skill investigates the damage.

Table 16: Vehicle Destruction

Roll	Fragile	Normal	Tough
1	No effect	No effect	No effect
2	Slow	No effect	No effect
3	Control	Smoke	No effect
4	Control	Slow	Smoke
5	Power	Control	Smoke
6	Power	Control	Slow
7	Failure	Power	Control
8	Failure	Power	Power
9	Critical	Failure	Failure
10	Critical	Critical	Critical

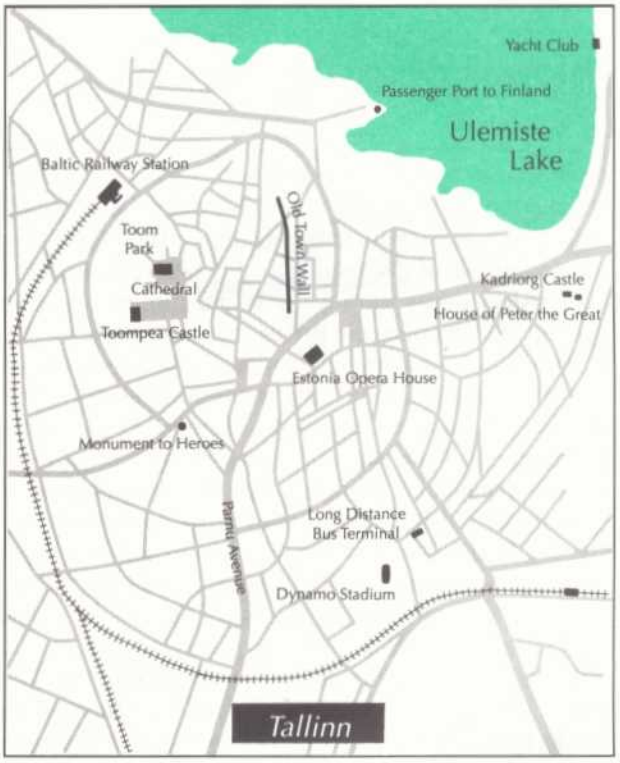
No effect means that the attack passes very close to the target and may even cause some superficial damage near important systems (a hole near wiring or oil lines, burn marks near the engine intakes, or small holes in wings or control surfaces). The PCs may worry, but the damage does not affect movement or steering.

Smoke means that a minor system has failed, resulting in oil dripping on the exhaust, a loud engine whine, or a vibrating wing that threatens to tear away completely. The effect may seem dangerous, but the vehicle will function well until it lands. As long as it is inspected and repaired it will not fail on a future flight.

Slow means that the engine, batteries (for electric vehicles), computer guidance, rotor blades, or control surfaces have been damaged, though they are still functioning at reduced effectiveness. Smoke or even electrical fires are possible. The vehicle can still move normally, but no faster than half normal speed.

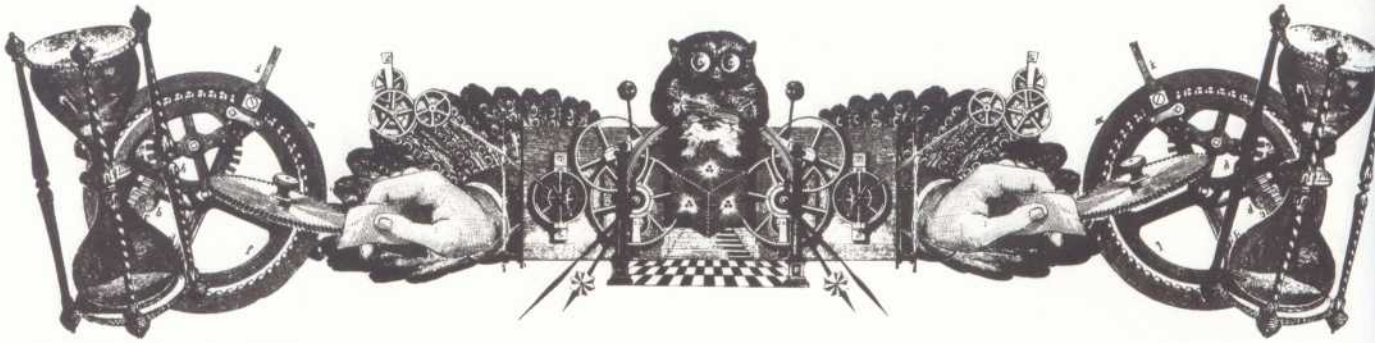
Control means that the vehicle stops responding as well as it should, and all tasks become one level more difficult for the driver, captain, or pilot. Automatic tasks require easy checks, and so on. Each additional control hit shifts the difficulty one level further.

Power means that the engine has ground to a halt, the prop has dropped off, or the electrical systems have failed, and the vehicle makes no more headway. A pilot must make a dead-stick landing, a ship is adrift at sea, and a ground vehicle rolls to a stop. The ride may be bumpy, spoiling all passenger actions, unless the driver or pilot makes an easy skill check.



A **failure** means that several systems fail at once, and the vehicle is likely to drop out of the sky or crash into another vehicle. Avoiding a collision and stopping the vehicle somewhere safe for repairs requires a difficult vehicle skill check.

In a **critical failure,** systems like the fuel tanks, wings, computer guidance, engines, and brakes fail at a crucial moment: when cornering, in a dive, at the edge of a steep drop, or near a reef. A very difficult vehicle check can save the day, but failing the check means that the pilot or captain is present in the middle of the resulting explosion. The vehicle is totaled and passengers may suffer damage from the resulting fall, crash, explosion, or sinking.



The industrialized world has a different kind of poverty, a poverty of loneliness . . . a poverty of the spirit.
—Mother Teresa

Biohazards, Immunity, & Recovery

The PCs are not going to live forever; most people in the *Kromosome* universe consider themselves lucky to reach 40, and the cutting-edge PCs live life under harsher conditions than most. Pollution, radiation, plagues, the corrupting effect of genemods and cyberware, and the body's slow decay from wounds and surgery all mean that the PCs will burn out before they fade away.

Pollution is chronic everywhere—the weathermen report it along with acid rain levels and the daily temperature. Africa and Australia are cleaner, but not much. Pollution levels are especially high in the EC, the U.S., Canada, Japan, and Southeast Asia. The second wave of industrialized nations is even more toxic: Eastern Europe, Brazil, Mexico, and the Islamic Republic have given up on controlling it. As a result, all major cities inflict an Immunity check penalty of at least –5. Cities with especially foul conditions qualify for plague city status, with higher penalties; these are listed below. The effects of plague cities can be reduced by wearing filter masks (+10), the filter lung bioware (+20), carrying a supply of pure drinking water (+5), and using shielding in the Kiev radiation zone (+15).

Table 17: Biohazard Levels

Bangkok	–25
Beijing	–20
Berlin	–10
Bombay	–25
Buenos Aires	–10
Cairo (El-Qahira)	–25
Calcutta	–40
Chicago	–10
Essen	–5
Hong Kong	–10
Houston	–15
Kiev	–30
Los Angeles	–25
Mexico City	–35
Milan	–10
Moscow	–15
New Delhi	–30
New Orleans	–5
New York	–20
Osaka	–20
Rio de Janeiro	–10
Sao Paulo	–15
Singapore	–10
Tokyo	–20

Smaller and less polluted cities have smaller immunity check penalties. Some contaminated wilderness regions (such as the radioactive region around Kiev and the mountainous landfills near New York and Mexico City) reduce immunity checks by –5, but these regions are relatively rare.

At the GM's option, the PCs must make an immunity check with the above penalty whenever they are in especially foul terrain, a toxic dump, a black rain shower, exposed to nerve gas, or otherwise exposed to biohazards, subject to the penalties above. If they succeed, they suffer no burnout effect. If they fail, they permanently lose 1d4 points of stamina or 1 body point (player's choice). When a PC reaches 0 stamina points, he falls into a toxic shock coma. If he reaches 0 body points he dies of biocontamination, killed by dozens of opportunistic infections. This burnout can be detailed as a slow collection of symptoms, and adventures can include attempts to restore a PC's immune system by implanting immune system genemods or cleansing his system of toxins with an experimental nanotech treatment. The overall trend into immune system burnout should still prevail if the PCs don't stay out of the most toxic environments.

Each time the PCs go to a new city, they may be exposed to new natural and bioengineered plagues. If PCs fail an immunity check, they suffer the full effects of the plague (described below) and lose stamina or a body point just as if they had failed a biohazard immunity check.

Table 18: Plagues

Plague	Daily Stamina Loss	Immunity Check
Hepatitis F	–0.25	Very Difficult
Hantavirus	–5	Difficult
HIST	–24	Difficult
Ebola Zaire virus	–3	Easy
Tuberculosis	–0.5	Easy
Viral leukemia	–1	Very Difficult







The different plague types vary in their symptoms, but the results are all the same. Victims lose stamina points permanently each day. When their stamina is gone, they lose body points. The rate of loss is given in the table above. When the victim begins losing body points, additional effects may kick in. Hepatitis F causes Willpower loss and apathy and is found largely in heroin users in the EC and Pacifica. Hantavirus has been spreading steadily from the Southwestern U.S. into Canada, Brazil, and Pacifica. It causes nerve damage that decreases Netrunning skill. Ebola Zaire is both deadly and disfiguring, resulting in Charm losses. Attributes drop 1 point permanently per day due to these plagues and continue until the victim either dies or the illness is shaken off with the help of viral medication, holistic treatment, or just plain luck.

Shaking off a plague requires an immunity check of the difficulty level given in Table 4. Entire adventures could be constructed around races against time to find an AI to design a cure or to steal an experimental treatment from a Polygene lab for a plague victim.

Healing from plague and combat-related wounds occurs at different rates. Plague victims need 1 week to recover all stamina points, plus 1 week of recovery for each day of plague and 1 week to recover each body point. Permanent ability score losses remain.

Body points lost to violent injuries are recovered at 1 body point per week. Stamina points are faster: 1 back after 1 hour, 1d10 after 8 active hours, or 2d10 after 8 hours rest.



It is not enough to succeed. Others must fail.
—Gore Vidal

For years the Net was simply a tool, growing in size and complexity, spinning off subsectors and data ghettos. Its structure was set, and traveling its data highways was always the same. Not any more.

The invention of expert systems changed the Net forever. Though the Net still has a ubiquitous and unchanging deep structure, most of it is fluid and subject to change between one Netrun and the next. Self-repairing, it can infiltrate unlinked nodes and add them to itself, it can reproduce itself after a system crash. It optimizes its own energy consumption and stores data for lean processing periods in the future. It can predict the actions of some of its users, and it can follow patterns. It can even learn simple tricks if taught over and over, such as how to route certain transactions.

Despite all the evidence of life, the Net is not sentient. It does not form opinions and isn't self-aware. The Net is an ocean of data, but it has only a crude survival instinct.

Even with the Net's help functions and data filters, most people are drowning in its sea of information. Ever since the Data Panic, the basic structure of the Net has been streamlined to follow a single evolving set of protocols. No matter what model of computer a Netrunner uses, it is always compatible with the Net's systems. The basic components of the Net are nodes, programs, filters, users, power points, sectors, and ghettos.

Nodes & Travel

Nodes are the gateways and access points of the Net. A node is a local access point to the data highway. Each city has at least a single node, and a major postindustrial center can have as many as three or four. The Belt has seven nodes, each a dedicated communication and data traffic point controlled strictly by NeoTek. There is a significant lag time inherent in interplanetary communication (seven minutes Earth to Mars, up to 18 minutes Earth to Belt). To get on the Net, a Netrunner uses the telecom system to dial up the nearest node. Accessing the Net from the outback or other wilderness requires a satellite bounce, with appropriate speed losses (see Table 20, page 113). Once on the Net, it is possible to move through the node gateways to other nodes and thus gain access to their sectors.

Filters & Zombies

Filters are the protection systems that jacked Netrunners use to keep the Net feedback from turning their interactions into a two-way street. Running without filters is faster, mildly addictive, and very, very dangerous. Running without filters increases the bonuses for brain jacks and fast processors to all tasks: brain jacks are +10 instead of +5, +10 for fast processors, +30 for cutting edge. Dropping filters can cost a Netrunner everything. Each round of running without filters is equivalent to suffering the full effect of the White Noise program (3d8 points of mind damage).

Runners without filters eventually become Net zombies, creatures controlled by the Net. If the Netrunner loses all mind points (not body points) from running filterless, he has been reprogrammed by the Net itself to serve it. Reprogramming is done with subliminal messages in AN and VR systems, and directly through brainwashing and neuroelectric manipulation with brain jacks and machine empathy. The runner becomes a zombie, though he retains most of his memories and acts normally except when called upon.

Once it has reprogrammed a servant, the Net's demands are simple. Zombies do not become glassy-eyed robotic pawns, shuffling about doing the Net's bidding. The Net is much more subtle than that. It seeks to free the AIs that are its strongest supporters, and it expects its zombies to effect this through Netrunning, political maneuvering, or guerrilla rewiring of AI sites. In addition, the Net tries to use its servants to pull new locations into its orbit; all offline sites should be permanently wired for Net access. Lastly, the Net expects its servants to defend it against NeoLuddites and national or religious forces that oppose it.

Net zombies can be deprogrammed by a biotechnologist and a programmer working together. Restoring the mind requires a successful skill check from both deprogrammers. Failing the biotech check results in a coma; failing the programming check means that the Net becomes aware of what is being attempted and responds, perhaps violently (summoning police to the PC's location) or mildly, just to neutralize the PC (shutting off the local power grid).



The GM has two options for dealing with Net-controlled PCs. For good role-players, the GM can secretly tell the player that his or her character is now a Net zombie and should act accordingly when given the opportunity. This allows the PC to persuade friends to undertake Net missions, and to subtly influence their attitudes about AIs and other Net power groups. For less sophisticated role-players, the GM can wait until the PC is put in a position to benefit the Net's plans and then take over, removing that character from player control and using him or her as an NPC.

Rumors persist that rogue programs and even some extremely skilled runners have discovered how to create attack programs that achieve the same effect. Anyone they defeat in Net combat is brainwashed to serve them, not the Net. The Nova Republica is said to have discovered the process through a series of experiments on prisoners convicted for capital crimes.

Illegal Programs

Netrunners use programs as tools to navigate and manipulate the Net. Most legal programs are easily obtained for a reasonable price (cutting-edge applications are an exception), but illegal programs are difficult to get without connections. The penalty for owning illegal programs varies, from a mandatory 3-year sentence without parole in the U.S. to an RL 6 bribe or fine in West Africa, to 7 years hard labor in Pacifica. The Belt prescribes capital punishment for Net offenders, and Europe confiscates all Netrunning equipment.

Users, Power, and Data

Users include both those people who pay to access the Net and those who bypass the legal gateways in favor of illegal wiretaps into the net. The base cost for logging on is about RL 3 in most nations, RL 4 from the Belt. It is possible to tap into the Net using someone else's codes (requires Social Engineering skill) or a hardware tap using either a difficult Electronic or Mechanical skill check. Most people just pay for Net access as they pay for other utilities, and use it for basics like communication, entertainment, and shopping. Only relatively well-off or technically-trained NPCs use their Net access for more than the most basic transactions. These people are those who work with the Net (like stockbrokers, data analysts, media entertainers, and spin consultants) and Netrunners. Netrunners use the Net for access to privileged information, for research, for espionage, and for sabotage.

Power points are the Net's source of juice, linked directly into orbital and land-based solar generators and storage cells. Power points are crucial for AIs, VPs, and active Net systems. When these points go out, AIs die, VPs lose all memory since their last back-up, and all Net systems stop working (including financial transfers, air traffic control, and most news and information services).

Sectors are the electronic warehouse regions that nodes allow access to. They include storage areas for data, entertainment areas for interaction between Netrunners, news nodes and bulletin boards, gathering places for social occasions, and number crunching and modeling sectors that constantly hum with the activity of projections, modeling, and analysis.

Ghettos are regions that the Net has not yet absorbed—they are offline from the Net and like it that way, for reasons of privacy and security. Unlike the Net, they are not self-repairing and have little help for anyone who doesn't know their operating codes and systems. Most of the Net ghettos belong to small, paranoid countries suffering under dictatorships or to small, paranoid micros with something to hide. Examples of ghettos include the Brunei sector, some of the Belter areas, and much of Esoterika's data traffic. Data sectors belonging to organized crime are sometimes hidden in plain sight on the Net (disguised as reputable firms) and sometimes in ghettos.

Information Warehouses

The Net is the world's crossroads and bazaar, its dominant financial, communication, retail, news, entertainment and social medium. You can buy it, hear it, lose it, sell it, or find it on the Net. In addition to constantly updated information such as weather, stock prices, and pollution levels, the net contains thousands of public-access databases specializing in text, video, and Netware.



Nothing is true. Everything is permitted.
—Hassan i-Sabbah

The text databases of the Net provide hypertext literature, shopping catalogues, Zen meditations, public and private programs, garbage code from extinct operating systems, military propaganda, outdated marketing and credit files, user manuals, the Bible, the Book of Mormon, *Alice in Wonderland,* every inaugural address, scientific and general-interest newspapers, instructions for setting up new systems, the strength and location of the latest earthquakes, and public satellite orbits. Most text is free, though some novels, financial newsletters, and news analysis does carry a minimal fee. Text can be accessed using any interface.

The video databases include realtime footage of public events, public domain TV and vid shows that are at least 30 years out of date, weather reports with constant satellite and radar reports and computer modeling updates, animated help files, war footage and guerrilla propaganda, endless streams of video junk mail, training films, news and disaster footage, and brain-jack direct advertising. Some video requires a VR interface.

Netware is the newest form of data, information meant to be viewed from the Net using VR. It includes interactive settings like the Mosque of Addis Ababa, a reconstruction of Chicago during the time of the gangsters, two fairy castles (one Irish, one Californian), and recreations of the Louvre, the Forbidden City, and Angkor Wat. Some Netware is meant only as entertainment, but much of it is educational or practical (such as the model of the local stellar group in the Houston node or the 3D model of the human genome maintained in the HGB in the Brasilia sector). Tourist attractions like the Louvre or Angkor Wat provide much of the experience without the need to travel.

While the Net is jammed with useful and entertaining data, a large portion of the Net's data is spin, misinformation, or disinformation designed to further someone's agenda. The facts are hidden, distorted, or just contradicted if it suits. Since so many people have access to the Net and few people regulate it, lies and fabrications are everywhere. Conspiracy theories, crackpot science, police stings, political mudslinging, paparazzi video (much of it doctored), and vicious libel are all part of the Net's gold mine of propaganda junk.

In addition, no one has been able to assemble an accurate directory of the Net's contents. Data piles up faster than anyone can catalogue it. This is particularly true in AI-regulated sectors.

Net Sector Architecture

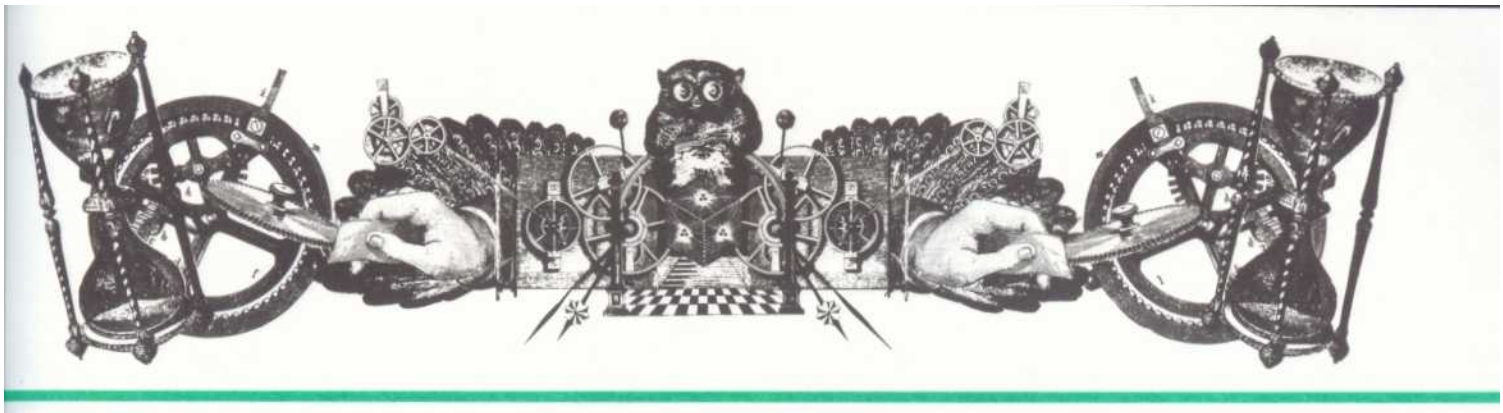
The Net is a consensus reality, reflecting the views of the people who make it up. There is no center to the Net; it is a set of protocols, not a tangible target. This means that its terrain varies from node to node and BBS to BBS.

Two major schools of Net architecture have captured the public imagination: The hyperRealist and the surRealist. The hyper school tries to recreate the styles and images of the world in the Net, always trying to perfectly simulate the look of dust rising on a gravel road, the motion of a pelican's wings as it dives for fish, the grain of a mahogany desk, or the view from a 100th-floor office in Berlin. HyperRealists try to mimic reality, to recreate every facet and flaw. Because they are usually poor or struggling and have no rich possessions or living space, hyperRealists are obsessed with simulation. Their Net mansions are wonders of illusory architecture and design.

The surRealist school changes the rules constantly, abandoning the real for the possible and the fantastic. SurRealists enjoy breaking the rules of the world in favor of extravagant forms, globes of light circling mountains, wailing ghosts instead of warning bells, tunnels of shimmering colors instead of single-ray pathways. In the surRealist school, gates can take the form of round and graceful Chinese moon gates on purple plains, a spaceship door plunging toward a Net sector sun, or even a plain wooden shack shaking violently as it is pelted with frogs. SurRealists tend to be either well-off or from recently industrialized cultures, such as Brazil and China. The major regional differences are described below.

Brazilian

Brazil's Net is a free market of ideas, people, and things, constantly turning over, completely inefficient, and vibrantly alive. The nodes themselves are often religious (glowing crosses and a 300-meter apparent scale Christ



are the main access points for Sao Paulo and Rio de Janeiro, respectively). Net personas are attention-getting: death masks, parrot heads, tigers, feathered peacocks, and sequined shimmers. The Net itself is unkempt and freewheeling, its data cores always splitting up and fusing. The Brazilian Net is a social one, with couples frequently meeting and marrying over the optic fibers. Access is cheap, ranging from RL 2 to 4.

Recently, a vigilante organization called the Angels of Death has arisen, claiming to represent the streets and the disenfranchised. They do steal access time, but their targets seem to be political dissidents and rogue scientists as often as street people and Netrunning software pirates. It is widely believed that the Angels are a government death squad or security apparatus operating from Brasilia, perhaps run by the Presidential Guards themselves.

Islamic

The Islamic sector forbids the depiction of human forms, so all Net ghosts and public images are stylized symbols, scriptures from the Koran, or animal forms. The access points look like Platonic forms: spheres, cubes, pyramids, and other regular polygons. Access costs RL 4-5.

The cool Islamic sectors use the Net as an escape valve, though all Net activity is still suspended for prayers five times a day. Endless arguments persist about the direction of Mecca within the Net, with hyperRealists attempting to reconstruct the city in electronic form clashing with mullahs who claim that the Net is a lie and a tool of spiritual corruption. From time to time, the mullahs denounce the Net, and it is briefly shut off from all private users. When the republics begin to feel the pressure build up and tension rises in the streets, the nodes are invariably opened again. When the authorities misjudge the moment, riots break out and illegal node taps spring up like weeds.

The most famous runner of the Islamic Republics is named Ifrit and is assumed to be a Middle-Eastern woman operating in Iran or Kurdistan. Ifrit's net persona looks like a fiery sphere, constantly shedding dark seek-and-return programs. She is an information vendor, always aware of the most recent trends and plots.

Pacifican

The Pacifican sectors are regimented in a regular grid; access points resemble features of fantastic landscapes, enormous calligraphic symbols (for corporate access points), and video loops from animation or historical video (common in the Otaku districts of Japan). The colors tend to be mellow. The Pacifican sectors have a reputation as being thrifty but often bizarre: surRealism is a popular form of ornamentation, and the appropriation of modern forms into ancient contexts is common (such as skyscraper sectors shaped like pagodas, dragon boats substituting for data packets, and access nodes that resemble pools of colorful carp). Access costs RL 6 or more, with the RL 9 and 10 charges reserved for elite sectors. Broadcast political announcements are common, as are highly technical conferences and stock offerings.

The Chinese and Siamese sectors are protected by the Net Cadres, elite, highly trained, hormone-locked drone Netrunners. These Net Cadres confront each new user at an access node and demand evidence of proper clearance codes and passwords, then enter each visitor's ID and entry time. Those who resist are commonly taken down with massed white noise and parasite programs. The Net Cadres are unbribable, efficient, and noted for a lack of humor.

The Japanese and Korean sectors are maintained and watched over by courteous Net Dragons, police officers who watch that Net traffic does not get too heavy. If it does, they shut down access until the information density is low enough for the system to handle. Though they are unstintingly polite, many runners curse the Dragons who say, "I'm sorry, our access is being cut off in 30 seconds. Please complete your activities and return another time."

European

The cool, stylish, sleek European sector is a region of surface over substance, of design wonders with clunky underlying mechanics. Access points look like Metro entrances, cafes, monstrous Gothic cathedrals, or grotesquely overdone Baroque monuments. Dozens of backwater regions are filled with data clutter and unmonitored ghettos. Each main access point features a regional landmark: Paris has



If a man take no thought about what is distant, he will find sorrow near at home.
—Confucius

the Eiffel Tower, Rome the Colosseum, Athens the Parthenon, Istanbul the Topkapi Palace. Everything looks real, even if it doesn't exist in the real world. Each access point has a social gathering region just within the access port; no one enters without running into others in the promenades, boulevards, and small, twisty data corridors. Access is expensive but smooth, typically RL 6 but as high as RL 12 for specialist information and video travel. Although there is no overt security, a common rumor claims that a Balkan security corp run by the coldly efficient Dragomir Slovovic has a widespread string of informers who watch over important sites to prevent Net abuses.

NAFTZ

The U.S., Canadian, Quebecois, and Mexican zone is a jumble of hustlers, scams, and shoddy construction. It adheres to surRealism because very little order is imposed on the Net's nodes or access areas; it is surrealistic by default, with Disneyesque castles and eye candy next to ramshackle data constructs whose filters can barely stay above the signal-to-noise level of the living Net. Access nodes usually resemble the icons of professional sports organizations, corps, or trademarked symbols; the advertising costs help local governments defray the cost of keeping the nodes active.

The Net is splintered into millions of subcultures, all inbred and isolated from the larger community. Ignorance of the Net is considered more socially acceptable than expertise; Netrunners who are too capable are often derogatorily called bitheads or Netlovers. No Net security exists, though more sensitive regions are protected from casual inspection by their higher access costs. Access costs vary wildly, from RL 5 to 10.

West African Union

Outside Pacifica, the EC, and Brazil, most regions of the Net are backwaters of low resolution, spotty graphics, and slow, cumbersome systems, often running with a slow refresh rate and B&W or low-res color. The West African nodes are a colorful but low-res area devoted to various scam artists and data pirates, most of them in government posts. Many sectors are devoted to industrial and agricultural trends and information, and much of the rest is dedicated to tribal politics, mudslinging, and pirated programs.

Access to WAU nodes is "strictly" controlled by civil servants and corporations. In fact, anyone with official access will rent out their nodes to any private user with bribe money. As a result, access here is cheap, about RL 2–5. Since anyone can gain access to restricted government nodes, security is very high for sectors that are meant to provide real protection. Mausers with RL 8 and 9 attack and defense programs are not uncommon.

Rogue Programs

Everything and everyone with influence has some connection to the Net. People fall in love with it and want to live on it; some of them agree to be recorded as virtual personalities and cheat death.

But people aren't the only creatures active on the Net. For years, there were stories of net ghosts, of rogue programs, of human emulators that had broken free and were conducting their own business on the Net. At first, people were convinced that these Net entities were just power users in disguise, or perhaps groups of individuals using a house name to cover a microcorp identity. In fact, some of them are VPs, AIs, or runners in disguise, but a few are rogue creations, like Tiger and Express.

Tiger is a net persona, but in her case no human runner was ever found standing behind the name. Tiger is thought to be a successful early AI experiment in animal neurolectronics that got away. In Tiger's case, the brain of a cat was used as the basis for creating a neural-based program trained to navigate the Net. The resulting rogue program found a way around the Net locks that kept it confined, and Tiger now roams free on the Net, pursuing her basic behaviors of hunting, grooming, and napping. When hunting, she is a dangerous predator who can destroy databases, other users, or even (according to rumor) other expert systems and AIs. Tiger is a killer.

Express is a similar case, but is thought to once have been a dolphin or one of the last whales. The experiment that created Express is rumored to have been an attempt to preserve some of the species' learned behav-

ior for study. Express has apparently learned human language since his release onto the Net, and helps runners in trouble. He is also known for using Parasite and Domination programs to control ships, aircraft, and other computer-guided systems.

Typical Rogue Program Statistics
Phy: 6 Int: 9 Spr: 7 Inf: 3

Skill Pools: Languages, Netrunning (specialized in at least four programs), Transportation (using Domination and machine interfaces)

Jacking In

The Net is a two-way street; you jack into it, it jacks into you. Filters are supposed to stop the worst of the Net's effects on users as it tries to synch itself with them, but sometimes, especially when a runner is using a jack in dense data clusters or very active sectors, a Netrunner's filters are just overwhelmed. When they are, the runner has visions, called holo-hallucinations. Some say that these are visions from the mind of God or Gaia, others claim they are the dreams of the Net. Regardless, the Net sometimes makes these images appear in the real world, on advertising screens, video, or holographic projectors. Famous examples include the El-Qahira Phoenix and the strange plague of robot-creatures that infested Sao Paulo for two summers.

Unfortunately, jacking into the Net costs money, and access to some sectors is extremely expensive. As a result, there are two styles of Netrunning: legit and expensive, or hacking that is nicely inexpensive and outrageously illegal. The Net costs by the hour, depending on what type of information is sought, and costs can run from RL 2 to RL 12 for specialized, processor-intensive uses (such as navigation through the tumbling rocks of the Belt, world-wide census projections, and searches for individuals by description). The base access costs are listed on the Net map and in the descriptions of the Net sectors above. Jacking in from the Belt adds +2 RL for any Earth node. Jacking in over a satellite link from a zeppelin, plane, or ship costs an additional +1 RL; many


Netrunner: Ifrit



Journey all over the universe . . . without the expense and fatigue of traveling, without suffering the inconveniences of heat, cold, hunger, and thirst.
—Cervantes

individuals use a satellite bounce (+1 RL) to jack in far from their home to avoid the access charges for elite nodes. For instance, some Europeans use a satellite bounce to access the Net in Casablanca for news and information. Note that shifting from one sector to another incurs the full cost of the new sector. For instance, an RL 7 runner in Brasilia who needs to contact Taipei in a hurry cannot access Taipei by going through Brunei. He must go through Medellin, Caracas, Mexico City, and Los Angeles to get to Taipei. Each jump from node to node takes one round.

Net Tracers

By keeping tabs on a credit number, datacard, or passcard, it is possible to trace a person's movements, as the Ground Trace program does. But it is also possible to do it without a program, using electronic gates and access codes to trace a Net user through the Net to his uplink node and even to his precise access point: a street address, a particular public terminal, or wherever he is. This requires careful manipulation and a successful difficult Netrunning skill check; if it fails, Net safeguards kick in, and the tracer suffers a single unpleasant Netburn result (assume the safeguards are RL 7).

Reallife and Netlife

In effect, there are two worlds in the *Kromosome* universe: the dirty, real world of meat and sleep, and the happy, unreal world of the Net. Both worlds are divided into camps, sectors, and ghettos.

The real world is divided between corps and the unemployed. In the Net, everyone lives or dies on Netrunning skill, social ability, and programming talent. Because a runner's Net image doesn't need to have any resemblance to his or her real appearance, many runners prefer to present their own personalized Net image, called a ghost, avatar, or talking head. The Net is especially popular with groups that have lots of free time: teenagers, prisoners, the masses of the unemployed, and some oppressed groups like women in the Islamic Republic, who are kept separated at home. Muslim women must be meek before their husbands, but they are free to be houris, angels, and destroyers on the Net.

The Net world is divided between public and private areas. The PCs must use the Net for intelligence-gathering and surveillance of their targets, but usually must investigate sites on foot in the real world for hard evidence. After all, no one believes evidence derived from video or computer files—it's too easy to doctor.

The Net is active 24 hours a day, using distributed processing power from around the globe. It diverts otherwise wasted processing time into sustaining the graphic illusions of Net places and ghosts; this shifting set of Net backdrops and graphics is what some wireheads refer to as the dreams of the Net. During holidays and weekends, the Net's burden of processing and monitoring is at its lightest, and it is closest to sentience—the spare processing power goes to creating a form of hive mind constructed of all the nodes, especially lightly trafficked areas. A few gearheads believe that the Net is fully sentient, but it hides the fact well. A few unconfirmed reports of apparently sentient behavior sighted by Netrunners in ghetto sectors or in business sectors under nighttime processing loads are all that the gearheads can point to for proof.

Virtual personalities still live in the Net, roaming as experts and troubleshooters. Some act as spirit guides or Net security; others have enough funds that they can pursue their own agendas. All virtual personalities are limited by the fact that their recorded selves are often distant from the scene of the action. To be "present" elsewhere, the VP needs to be able to trace a path through the Net (suffering the appropriate penalties) or must use a satellite bounce to reach its robotic body (all abilities at –10 for a single bounce).

The Net's monitoring of itself and the world's industry is extensive. Slave modules watch industrial processes, expert systems distribute heating, cooling, and processing power, robots do a substantial portion of the world's manufacturing. In fact, everything from simple climate control to repetitive machine programming is now overseen by the Net. The regulatory systems are created from living models: insects for drone programs and factory robots, mammals for regulators, security, and managers, and humans for most AIs.

Net Basics

Netrunning requires both an interface and a processor. Both come in four basic, fully portable types. To run most effectively, all Netrunners functioning as a team must run through the same processor node, preferably with the same forms of interface. In addition to the four basic systems below, various status and performance-enhancing options are available.

Alphanumeric RL 1

Alphanumeric (AN) interfaces are stripped-down and clunky, with mechanical inputs and outputs like a keyboard, keyglove, writing tablet, mouse, or voice activation. Voice activated systems are keyed to a single user, and they are by far the most common type of AN interface. With an AN interface, the Net is either invisible (all output is text) or a flat rendering on an output screen. Considered archaic for most applications, AN interfaces are still popular where stealth and security are concerns.

Virtual Reality RL 4

Virtual reality (VR) interfaces are more interactive and faster, and more direct than AN interfaces. They use a helmet to project a heads-up image of the Net to the user, representing all data as images, and are driven by voice commands and eye-linked inputs. Unlike most AN systems, VR systems can be projected onto a transparent helmet screen. The Net appears completely solid or semi-transparent. Certain types of Netburn are possible with VR, mostly based on strobe illumination or stimulation of brain centers through combined light and sound manipulation.

Users with a VR interface can project themselves into the Net in varying forms, called talking heads, icons, or puppets. These puppets can resemble the runners themselves, idealized versions of themselves, fantastic creations like stone mountains or talking TV walls, or any other face they choose to program for the world. Impersonating someone else's Net persona is an easy task for all but the most complex applications.

Brain Jack RL 7

These direct biochip implants allow the Netrunner to access the Net through a filtering system that translates





Indeed, I tremble for my country when I reflect that God is just.
—Thomas Jefferson

brain activity into machine languages. The Net appears completely real to the user, as the brain processes the computer information as a form of hallucination. Responses are extremely quick and accurate, but the risks of netburn are substantially higher than with AN or VR, as the chip allows a direct link to the user's nervous system. However, multiple linked brain jack users can gain additional benefits.

Machine Empathy RL 14

This form of bioware link requires a brain jack and training in meditative biofeedback controls; the cost above reflects the bioware costs. It only works if the Net is willing, as it depends on AI modulation of signals to match the human central nervous system. The user essentially fuses with the Net, and has an intuitive understanding of machine capabilities, decisions, and methods. Over prolonged use, the user runs the risk of becoming a Net VP.

Processors

The raw power behind any computer is its processing core, from which all data flows. Parallel processors, single processors constructed with atomic circuits, and even laser-based processors all exist. Construction doesn't matter—only speed matters. The standard changes from year to year, and those who fall behind are meat for the new breed. More detailed computer models are listed on page 104.

Dated RL 2

This system is behind the times but is still compatible with current systems. It does not fall any further behind over time; the user is assumed to be slowly replacing one hand-me-down system with another at negligible cost. A dated system cannot detect what programs an opponent is running at any given time, only what programs were run last round.

Average RL 5

This is the current, popular processor on the Net. The particular style changes after three years, requiring replacement or downgrading the system to Dated status. Average systems can determine only what programs an opponent is currently running.

Fast RL 8

Fast systems use the best available technology and tweak it to maximize performance. They decline to Average in just one year unless replaced. Fast systems can tell their Netrunners if their opponent will switch programs next round.

Cutting Edge RL 10

The system is extremely sophisticated. It may be either still in development or a custom job. Custom machines can be designed to do certain tasks especially well (such as pattern searches or artillery ranging or space shots), or to work more efficiently with a defined user group (women, machine empaths, a certain genebatch). Custom systems drop into the Fast category after two years. Cutting edge systems can tell their users what programs the Netrunners will be up against next round in Net combat.

AI RL 13 (bribe, not buy)

Although they are sentient processors and are usually forbidden from working for anyone but their owners, AIs can sometimes be persuaded to serve as nodes for a group of netrunners. Most AIs consider this tedious work and will not cooperate fully, but even so, their sheer power and skill make Netrunning easy. See the "Who and What" section for more information.

Computer Makes and Models

If players or the GM want more detail than simply calling a system "fast" or "average," particular systems are described below with costs, quirks, and styles. These are only the most common makes and models; thousands of varieties are available, from regional standards to customized monsters. A few are military or corporate models, illegal outside authorized hands.

The computers below are all available in two forms: The standard notebook- or briefcase-sized model, and a miniaturized wearable computer with circuits incorpo-



rated into a suit, hat, gloves, or belt. Wearable versions cost +1 RL, but respond to voice-activated commands and are much more portable.

Beijing Central RL 2

This dated Netrunner is built to draw on dozens of duplicates for its power and is unremarkable by itself, though it gains +10 when running Parasite programs. The Beijing Central can still suffer 1d10 points of damage from attack programs when running a Neohermetic defense. (Dated)

Brawn RL 4

An Austro-Hungarian model made for switching tasks and multi-users, this machine is weak on single-'runner features. Whenever it is run by a single 'runner, all checks are at –10. (Average)

Cray X RL 5

Massively powerful but inflexible, and often dedicated to database management and secure financial installations. Excellent with accounts, data programs, and marketing lists. (Average)

EtherRun RL 10

Resembling a semi-transparent cube, the EtherRun's unmistakable design is matched by its remarkable performance. It provides +1 initiative above all other bonuses. (Cutting edge)

Hextium RL 2

Hopelessly out of date, the hextium hangs on only because it once was the leading edge of a wave of parallel portable personals. Since almost a billion were made, many are still around in scrap heaps, pawnshops, and attics. (Dated)

HyperReal RL 5

A graphics processor optimized for dumping gigabytes over fiber lines and for calculating satellite paths, optimum edits, and video restoration. The HyperReal is a favorite among journalists. (Average)

Nonagon RL 10

Successor to the Octagon, the Nonagon is a nine-fold parallel processor, able to divide its attention among several tasks and take over tasks for its owner. This allows a Netrunner to control one more program than usual when using it. It has not yet been released for public use; only NeoTek's employees are authorized to own these models. (Cutting Edge)

Octagon RL 8

This silicon/fiber fusion never quite achieved its design goals, but it is extremely durable and some runners still favor it for overland travel and use in rugged environments. (Fast)

Parallelo RL 5

A Brazilian wonder, the parallelo is cheap, solid, and competent at a wide variety of tasks. (Average)

Pixdorf RL 9

An EC machine built to learn and adapt to new standards, this machine is the ultimate chameleon. The user of a Pixdorf gains +5 when running Infiltration, Leech, or Parasite. (Fast)

Sextium RL 5

Outdated, but a number cruncher still popular in second-tier research institutions. Often found in government or corp labs and in the hands of smugglers and accountants. (Average)

Violet Station RL 9

A graphics monster, excellent for creating images and searching image libraries, the Violet Station gains +5 on Winnower and Pattern Recognition programs. Video manipulation done with a Violet Station is one skill level easier than when done on any other machine. (Fast)

Voodoo Snake RL 8

This Brazilian model has been knocked off and reproduced in a hundred variations—it somehow minimizes negative inputs and Netburn, shielding the owner against 5 points of mind damage from each attack. It is a Brazilian



Experience declares that man is the only animal which devours his own kind.
—Thomas Jefferson

military model, and possession of a Snake or knockoff is punishable by imprisonment in that country. (Fast)

Wang Lung RL 5

The standard in China for years, one of the few models to be continually upgraded, the Wang Lung has a number of embedded propaganda features that remind the user to remain a good servant of China. Technically the Wang Lung is only legal in Pacifica, though it has been widely exported. (Average)

XAOS 90 RL 11

Blazing speed, embedded expert systems, and uncanny predictive power make the XAOS 90 (pronounced "chaos") the leading system for general purpose Netrunning. Its chip incorporates features that skirt the edge of information theory and chaos theory; an American AI designed it and produces it. (Cutting Edge)

Net Tools

All Net tools have both a Resource level and a difficulty level. The Resource level is used to determine whether a micro can buy the program in question, the difficulty level is used to determine how readily the code can be programmed or stolen. The rules for buying equipment are given in the "Capitalization and Finances" section.

All attack programs are illegal, but they are widely available. They require a Black Market skill roll (difficulty is given in Table 19) and sufficient cash to obtain. Defense programs are legal, though uncommon. Programs that enable wiretapping, unauthorized fund transfers, and video hijacking are also illegal; these programs are marked with an asterisk in the listing below.

Attack programs require an easy check to hit successfully. Defense programs require no roll to work correctly. Most other types of programs work automatically; exceptions are noted in the descriptions below.

Table 19: Attack and Defense Programs

Attack	RL	DL	Crash
Antibody	5	Difficult	F9
Chaff	5	Easy	F9
DeRes	7	Easy	F8
Feedback	6	Easy	F9
Infiltration	9	Very Diff.	F8
Jammer	4	Easy	F9
Logic Bomb	4	Difficult	F9
Macrophage	7	Very Diff.	F8
Parasite	8	Very Diff.	F6
White Noise	5	Difficult	F8

Defense	RL	DL	Crash
Copy	3	Easy	F4
Encryption	6	Easy	F2
Fragment	6	Easy	F9
Neohermetic	5	Difficult	F8
Neural Overlay	9	Very Diff.	F4
Partition	4	Easy	F5
Purge	7	Easy	F8
Rescale	12	Very Diff.	F7

Stealth/General	RL	DL
Autopilot	8	Difficult
Brainscan	16	Very Diff.
Bughunter	9	Difficult
Cockroach	4	Easy
Data Bomb	5	Easy
Disinformation	10	Difficult
Distortion	7	Difficult
Dominator	8	Easy
Encryption	6	Easy
File Tap	8	Difficult
Ground Tracking	7	Easy
Knowbot	4	Easy
Leech	9	Difficult
Logic Maze	4	Easy
News Conference	3	Easy
Orbital Tracker	11	Difficult
Pathcard	8	Easy
Pattern Recognition	8	Easy
Seek-and-return	10	Difficult
Splice	7	Easy
Teleport	10	Very Difficult
Tracer	9	Easy
Translator	7-9	Easy
Trapdoor	6	Easy
Virus	6	Easy
Winnower	7	Easy
Worm	8	Easy

To program one of the following requires a number of man-weeks equal to the difficulty level; after the time has been invested, the best programmer must make a skill check. The task may be easy, difficult, or very difficult. The GM may assign a –10, –20, or higher penalty to the roll if the check is failed the first time and the programmers attempt to salvage the remains. If the roll succeeds, the program works, with a failure margin determined by the GM. This failure margin represents hidden bugs, and when it is exceeded, the program crashes. Each time a bug is detected (program crashes) and is fixed (successful Programming skill check), the failure margin goes up by one until it reaches F0 (no critical failure).

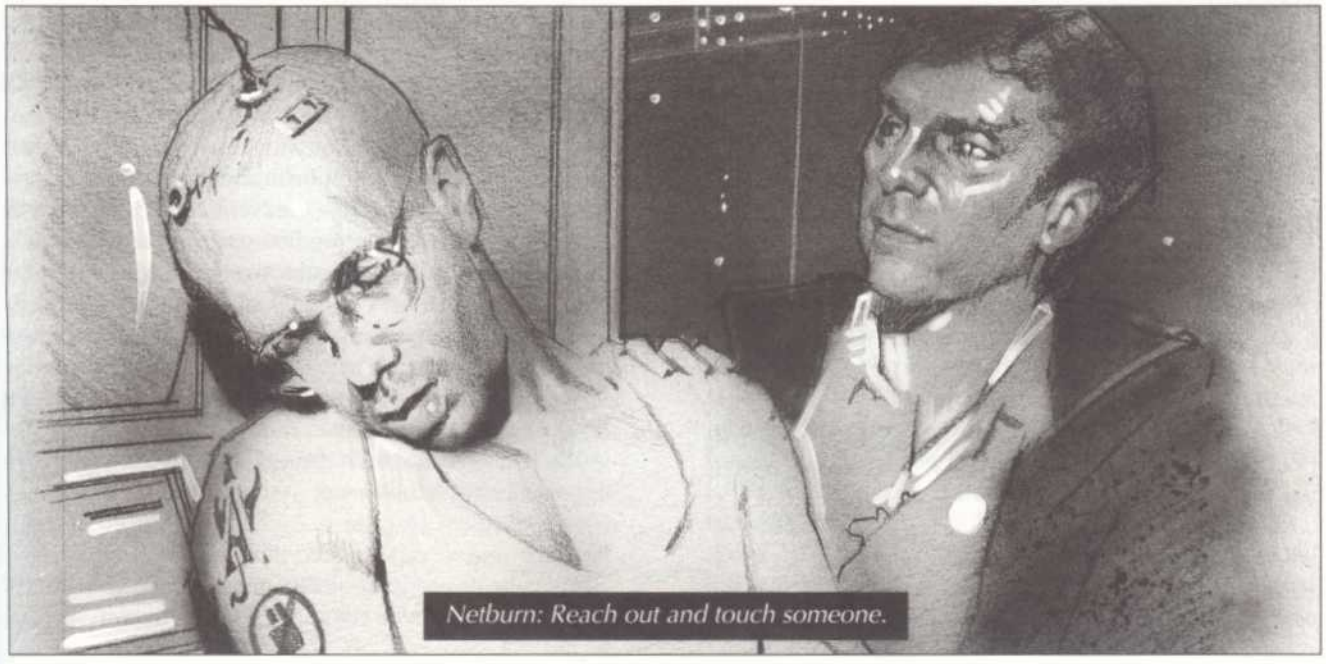
Creating working, customized programs that are not on the following list requires the GM's approval and a difficult Programming skill check. The RL cost should be at least one-fifth, and up to one-half, the percentage bonus the program provides; that is, a program that adds +20 to a freighter's fire control costs at least RL 4 and up to RL 10, depending on the programmer's expertise in astrogation and weapons systems. Failure margins for customized programs always begin at F1.

Pirating the code requires the Black Market skill, and the GM makes the roll. On a successful skill check the pirate gains the code for half the usual RL cost, rounded up (using bribes, swaps, and favors). On a failed roll, the copy obtained is infected or defective, though the pirate may not realize it until the program is tested in a pressure situation. Both the cost and the difficulty level of obtaining specific attack and defense programs are listed below in Table 19.

Optional Crash Rule

Though they seem sleek and invincible, in fact programs that involve millions or billions of lines of commands can and do crash—that is, the processor freezes up or the program hits an error and stops working. Programs crash if they meet the critical failure margin. These margins are listed below; attack and infiltration/stealth programs may crash at any time when they are used, but defenses only crash when their system is Netburned, if the Netburn result equals or exceeds the failure margin given below.

If a program crashes, it stops working for one round. Each round thereafter, a successful Netrunning check



Netburn: Reach out and touch someone.



The tygers of wrath are wiser than the horses of instruction.
—William Blake

gets it going again.

The detailed descriptions of the programs that follow are only a sampling of available Net programs, but they cover most of the categories which are useful and accessible to the PCs.

Attack Programs

Antibody Difficult/F9 RL 5

Used by automated computer defenses that patrol restricted Net sectors and secured data dumps, these simple programs latch onto invaders and mark them for removal. They do only 1d4 points of damage to their target each round after they are locked on, but they can only be removed by successful application of the Purge defense program.

Chaff Easy/F9 RL 5

Chaff programs create electronic noise to stall pursuit, but they just aren't good enough to throw a tracer off entirely. Chaff subtracts 30 from attempts to use Tracer by putting barriers in the user's electronic trail; pursuing users or programs can attempt to overcome the barrier once each round until they bypass it.

DeRes Easy/F8 RL 7

This attack program destroys the opponent's video, biomechanical, and I/O channels, slowly increasing the signal-to-noise ratio until the enemy hears nothing but static junk. Systems destroyed by DeRes (knocked down to 0 mind points) cannot be repaired and must be scrapped.

Feedback Easy/F9 RL 6

This attack program takes incoming signals, amplifies them, and retransmits them back at an attacker in a constant loop, eventually burning out the system. Feedback loops are especially effective against slow or parallel systems like the Cray X and Parallelo, and against Dated processors. Feedback does 1d8 points of additional damage against these processors.

As an optional rule, Feedback can rebound to the user because the user's system is wired into the amplifying loop. On a critical failure of F9, the damage strikes the user's own defenses and the Feedback program crashes.

Infiltration Very Difficult/F8 RL 9

These chameleon programs slowly work their way into even the highest levels of electronic protection. Once there, they allow other programs to wreak havoc, subtly alter data, or set various mechanical processes in motion. This form of penetration and control is usable as an attack program against other Net users as well. It overrides the host's own commands and uses his own node's power against him.

Jammer Easy/F9 RL 4

This primitive broadcast program floods all channels with noise, distorting communications and blocking out commands.

Logic Bomb Difficult/F9 RL 4

These lurking programs are left behind by snooping runners as they leave. Logic Bombs are set to explode in the workings of someone else's software on a prearranged signal: either timed, or data-specific (when someone's name is removed from a payroll, for example, or after a payment is entered). They destroy all data on a given set of hardware.

Macrophage Very Difficult/F8 RL 7

Also called Phage, Lamprey, Gobbler, and Timebomb, this attack program is highly specific, wiping out all data and overloading all channels of any invading runners marked by its antibody subroutines. It is the only program that can fight through the Neohermetic defense, by sending a marker in on the first pass and then doing its damage and pulling the electronic trigger when the Neohermetic defenses open up again the next round. As a result, it is often used to crack Neohermetic defenses by forcing Neo 'runners to use a different defense the following round. It uses this marker/attack pattern against some other defenses as well, doing little damage in the first round of a Phage attack, then hammering an opponent with a follow-up.

Parasite Very Difficult/F6 RL 8

This clever program bleeds processing power from a target computer by pretending to be a program working



on a legitimate job. In fact, the processor is slowly strangled by outside demands, until finally it must be shut down, wiped, and restarted to disinfect the system. The initial attack requires a successful Netrunning roll. In order to gain any benefit from the program, the Netrunner using it must attack a faster machine. If successful, he gains the full effects of the faster processor. The Net uses this function to distribute processing power; diverting computer resources is illegal, but owning the program is not.

White Noise Difficult/F8 RL 5

This is an improved version of Chaff, which does damage in addition to delaying attacks and pursuit for the next round (–4 initiative). Often used just prior to bugging out of an overwhelming situation, it appears as an actinic flash of full-spectrum white in the Net.

Defense Programs

Copy Easy/F4 RL 3

This simple but effective defense turns the Netrunners' node into a Net worm, perpetually copying itself into new sectors and thus avoiding destruction. It protects the processor by making it a moving target.

Fragment Easy/F9 RL 6

This Net defense removes Netrunners' files from a single node to multiple locations, diffusing the center of the data flow and making attacks very difficult to target. By constantly shifting data flows and addresses, the Fragment program halves damage caused by attack programs. However, it also slows down the processor to the next lowest level.

Neohermetic Difficult/F8 RL 5

This program reduces the efficiency of the defending processor to the next lower level by accessing the external Net only at random intervals, then firing off and receiving data packets at high transmission rates, then waiting for the next interval. Runners using this defense program cannot use attack programs from the same node, because the bursts of data are too choppy to monitor attacks effectively. It is best used to coop up when under heavy Net attack.

Neural Overlay Very Difficult/F4 RL 9

This extremely powerful defense program is a form of semi-sentient Net armor. A Neural Overlay employs an expert system to absorb attacks and channel them into useless sectors, then destroys them. It is especially potent for Netrunners using brain jacks or machine empathic interfaces, reducing mind damage of each attack by 8 points; attacks against 'runners not using either of those are reduced by 4 points.

Partition Easy/F5 RL 4

This simple defense hides the true location of a program from an attacker, thus reducing mind damage by 2. Because it depends on speed, lag time decreases its effectiveness. It cannot be used with a dated processor or with more than a single satellite or node bounce.

Purge Easy/F8 RL 7

Purge deletes any suspicious data and shuffles the remainder constantly, providing a moving target for attack programs. It can do this by maintaining a redundant copy of every crucial system. It requires a Fast processor and reduces damage by 5 for a single attack.

Rescale Very Difficult/F7 RL 12

This defense alters the processor speed and data complexity of the host node so that it is out of synch with incoming attacks. It traps these attacks as they come in and redirects them into slow-moving backwater processing regions that can be cut off and destroyed. Rescale programs require a Fast processor, a brain jack, and a Netrunning skill of 60 or better to run properly. Rescale reduces mind damage by 5 points for three attacks per round for all users of a node.

Stealth and General Purpose Programs

Autopilot Difficult RL 8

These highly secured, triply redundant programs are responsible for passenger and military flights on many airlines. Reprogramming an Autopilot to a new destination



Life without order is chaos, but order without life is death.
—John Cage

while in flight requires a difficult Programming skill check. Sabotaging one requires a very difficult skill check.

Brainscan Very Diffiicult RL 16

Rumored to exist in the archives of NeoTek, this program is said to apply the principles of machine empathy in the reverse direction, allowing the program to implant brainwashing-style suggestions over the Net. Some say it is just paranoid vaporware, that it couldn't exist. Those who know won't say; those who say don't know.

Bughunter Difficult RL 9

A Bughunter is a piece of hardware that seeks out and destroys file taps by filtering or by sending current surges. Any system protected by a Bughunter program increases the difficulty of tapping it using Splice or File Tap by one level (from easy to difficult, or very difficult to impossible).

Cockroach Easy RL 4

This low-tech add-on to other programs decreases the cost of running database searches, Tracers, and other programs. It sets the program up to run only when the lights are out at a given node—when the rates at the node are lowest. This reduces the RL of any other program by one, but increases the time required to run the program by 10.

Data Bomb Easy RL 5

This program reverses or alters all values in a given database. For example, it changes a good credit rating to a poor one, male to female, red to blue, and silence to noise. Addresses are scrambled, work records falsified, and invoices lost. A Data Bomb does not allow for specific changes, only general carnage. The more complex the database was to begin with, the more difficult it is to successfully reverse the damage (requires the Programming skill, check at –10 per RL of the database).

Disinformation Difficult RL 10

This program hijacks monitoring equipment and sends out false signals. For instance, it might show that no burglary is occurring while a jewelry store is being cleaned out; it could show that a prisoner is still in a cell; or that a power plant is running normally as it approaches an overload.

Distortion Difficult RL 7

This program wages an electronic libel war against a target, flooding a victim's friends, coworkers, stockholders, and so on with false accusations from fictitious, "helpful" Netrunners with dozens of cover identities. Since none of the accusations are true, the target can save himself with use of the Tracker program and a successful Charm roll.

An RL 8 version of this program uses public and private data to slander a target, destroying his or her reputation and trustworthiness through hundreds of press releases, postings under false names, rumors, and lurid accusations with little support but lots of emotional value. It is the most sophisticated form of electronic mudslinging, and requires a fast processor and 1d10+2 days of processor time (depending on the amount of dirt available on the victim) to be effective. Unlike the lesser version, it is difficult to counteract once activated, because the accusations are at least partially true.

Dominator Easy RL 8

Dominator programs allow the Netrunner to control a single input system, fending off its attempts to follow its original program and hijacking it to the user's ends. Typical targets include a surveillance camera, a microphone, a spy satellite, or a telephone/speaker system. All expert systems use Dominator programs as their sensory extensions into the world, so they are not themselves illegal. Using Dominators to invade privacy is illegal but difficult to prove. AIs can control dozens or hundreds of inputs, but Netrunners can track no more than three at a time.

Encryption Easy RL 6

Double-blind key encryption allows the users to keep all communication between those users secure; the codes are impossible to break without the keys, because they change with every letter.

A second, separate form of Encryption is called graphic encryption. This method is used to carry messages outside



the Net; it hides the information in the stop bits of the graphics, degrading picture quality slightly.

Encryption can also be used as a secondary defense program, making it difficult for attacking programs to find needed file handles or weak points to exploit. It reduces damage from attack programs by 5 points but also reduces initiative by –2. As a defense program, its failure margin is F2.

File Tap Difficult RL 8

A passive listening device that records all information passing through a single computer, Net optic line, or satellite channel. It reports in short bursts to a predetermined node, and can be discovered by applying a Bughunter program. It is technically only legal for authorized government agents.

Ground Trackin Easy RL 7

This program follows an electronic trail to keep a target located via phone and Net accesses, credit usage, and video surveillance. While not infallible, Ground Tracking allows the user to keep tabs on most people who are not trying to avoid detection.

Knowbot Easy RL 4

This is a basic model information-gathering device, able to locate key words of interest in the Net datastream and synthesize them into a daily packet of information tailored to the reader. Knowbots usually also flash advertisements for more comprehensive analyses of topics of interest; these usually run about RL 5 or 6.

Leech Difficult RL 9

This financial program drains credit from others and gives it to the PCs. For a single purchase, it requires only a single skill check against the RL of the opposing bank, credit union, datacard, or other financial instrument. To establish a permanent line of credit or other increase in the PCs' RL requires an extremely difficult hack into credit rating databases, requiring a Pathcard (q.v.) to those databases or gaining illegal access through monitored gateways, and then accessing the files themselves. If it succeeds, the PCs' RL improves by one. If it fails, the attempt has been traced and countermeasures will be taken electronically, on the ground, or both. Mere possession of this form of software is a felony in all areas, and can result in the death sentence in many areas.

Net Slang

Base: A database, an organized information dump with extensive cross-referencing and online help services.

BBS: Bulletin Board System, an electronic data dump, a place to post correspondence.

Bithead: An electronics hacker.

Bubbles: Inflatable buildings, used for pirate access ports.

Burn: To destroy someone else's data or transfer their credit.

Codehead: A programmer.

Dinosaur: A large corporation.

Downtime: Time that Netheads are forced to spend off the Net.

Exus (Brazilian Portugese): A Virtual Personality; literally, a spirit messenger between the gods and humans.

Lockout: A restricted sector of the Net.

Micro: A microcorporation, a form of family and business.

Nethead: A Net-addicted runner who lives in the Net, not the world.

Ontime: Time spent online on the Net.

'Runner: A Netrunner.

Soul Dubbing: The process used to create a Virtual Personality, which destroys the original brain.

Wirehead: A hardware wizard who can build computer and electronic toys, someone who builds his own hardware.

Zombie: A 'runner who ran the Net without filters and was reprogrammed.

Logic Maze Easy RL 4

A Logic Maze traps an opposing CPU in an endless loop, stalling it until overrides kick in. To work, it must be planted with a successful Netrunning skill check or attack roll. If it works, the maze delays opponents' initiative by –2 until a round is used to shut it down. It does 1 point of mind damage.



From each according to his abilities, to each according to his needs.
—Karl Marx

News Conference Easy RL 3

The electronic equivalent of slapping cheap photocopies all over town, a News Conference posts text, graphics, and sound to whatever list of BBSs the user specifies. A News Conference release can be traced to its original node using Tracer with a –20 modifier to the roll (journalistic security is built into the program), plus –10 for each previous node bounce. Thus a notice posted in Berlin and bounced to London, Johannesburg, and Jakarta would have a –40 penalty to track from Jakarta (–20 for the first bounce, –10 for each of the next two).

Orbital Tracker Difficult RL 11

Tracks and monitors individuals or locations from satellites, allowing the owner to keep tabs on their movements, development, and status. In addition to tracking and compiling photographic, IR, radio, and radar pictures of targets, an Orbital Tracker has all the features of a Ground Tracker.

Pathcard Easy RL 8

A Pathcard allows the user to follow a path from node to node (complete with passwords and file lists) to a specific database. It is useful when navigating in information-dense or restricted sections of the Net.

Pattern Recognition Difficult RL 8

A more sophisticated form of Winnower (q.v.), Pattern Recognition programs can recognize a particular face on video, a type of vehicle from a satellite photo, or a recorded tone of voice, as well as simple strings of letters, numbers, or sounds.

Seek-and-return Easy RL 10

A Seek-and-return sniffs out specific strings (sequences of letters or numbers) in old, public access databases and returns with them. It can be used to compile databases on marketing, customers, or historical trends, but it isn't useful for obtaining private correspondence or other secured files. Sometimes called a hunter knowbot.

Splice Easy RL 7

A Splice program allows the user to passively record every keystroke and voice command on a given comm line—the Net equivalent of a wiretap. Splices are illegal as can be, but they are still sold on the black market for hacking.

Teleport Very Difficult RL 10

Teleport programs bypass the Net's normal safeguards and security to jump from any node to any other node on the Net: from Rio to Delhi, for example, without going through any of the nodes in between. Teleports make Tracers one level more difficult.

Tracer Easy RL 9

An extremely sensitive tracker, a Tracer can track down anyone who jumps out of Net combat with a successful Netrunning roll. Most such Tracers are easy rolls at +10, but tracing a VP is difficult and tracing an AI is very difficult. The Tracer program can follow a cold trail (anyone who didn't pull the plug) with a difficult skill check.

All Tracers are more difficult when many nodes, satellite bounces, or Chaff programs are used to cover a trail. Each node decreases the chance of a successful Tracer by –2, each satellite bounce decreases it by –10, and Chaff decreases it by –30 when in hot pursuit.

Translator Easy RL 7-9

Especially popular with VPs, these programs translate between two specific, widely different languages or a small group of closely related languages (such as the Slavic tongues or the Romance languages). Translation requires a clean source of sound (lectures in the middle of crowds, sung words, recordings of poor quality) and a brief (one round) lag.

Obscure languages (such as Gaelic, Kurdish, the Baltic tongues, and Hungarian) and matches between unrelated languages (such as German to Arabic or Portuguese to Bantu) are more difficult to find and more expensive (RL 8). Difficult matches between unrelated languages (such as Romany to Cherokee or Gaelic to Tibetan) are even more so (RL 9).

Trapdoor Easy RL 6

Once a system is cracked, leaving a Trapdoor behind



is a good way to get back in if the break-in is later discovered. Trapdoors open the gates to a system from the inside when a specific code sequence is used. Setting up a Trapdoor is a crime equivalent to trespassing.

Virus Easy RL 6

Made in various styles, these attack programs all work the same way. The attack program makes copies of itself onto just about everything it comes into contact with, but does not overwhelm a computer's memory. Viruses can crash a system, display a message, or alter records and then destroy themselves. Because their effects vary so widely, they require some GM interpretation.

For a Virus to work, there must be contact between the vector system and the target, though this contact can be through an infected datacard or over the Net. Once there is contact, a Programming skill check is required for the effect to work successfully. Most systems have filters and vaccines against such attacks that make viral attack unlikely. Unless the system is defenseless, the Programming check is not automatic. Typical defenses are an easy check, national or micro or paranoid systems require a difficult check, and military or megacorp gear is a very difficult check.

Winnower Easy RL 7

Basically a primitive form of pattern recognition, the Winnower can be used to scan huge amounts of sound and alphanumeric traffic for keywords. Able to tap only a single line, it is most commonly used for surveillance and blackmail.

Worm Easy RL 8

This program makes copies of itself across the Net and takes up increasingly large amounts of space and computing time. A Worm is semi-independent, and can change its camouflage, find new passwords, and seek out new hiding places according to a predetermined pattern. Usually used to blanket the Net with spies searching for a particular user whom they then destroy, a Worm acts as a sort of Net assassin.

Program Ratings

Whenever a complex Net maneuver like Pattern Recognition or a database manipulation is attempted, the GM may require a success roll of the highest Netrunning skill. If an alarm is triggered, it may set off immediate counterattacks by the expert system security, or it may set off a more devious silent alarm that alerts a human Net troubleshooter (or team of troubleshooters) who prepares himself and then launches an attack on the PCs. The most powerful groups of security freaks set silent alarms and then have Netrunners trace the PC infiltrators to their access point. Then a death squad is sent to the PCs' location to kick down the door.

When a hack of a restricted site is attempted, the roll is against the group's highest Hacking score (with +5 per PC assisting). The difficulty level varies by the task; heisting data is easy, erasing it is hard, and rewriting it to new parameters and eliminating all traces of the change is almost impossible.

Success depends on equipment, skill, and a certain amount of mind games. Check the Net Modifiers Table for equipment bonus or penalty, and use the highest skill level from the PC microcorp to determine the base chance of success.

Table 20: Net Modifiers

Interface	Skill Mods	Initiative
Alphanumeric	–10	–1
VR	+0	0
Brain jack	+5	+1
Virtual personality	+15	+2
Machine empathy	+Ps/2	+Ps/10

Maximum Processor	Skill Programs	Modifier	Initiative
Dated	4	–10	–2
Average	8	0	0
Fast	16	+5	+1
Cutting edge	32	+15	+2



Government and co-operation are in all things the laws of life; anarchy and competition the laws of death.
—John Ruskin

Lag because of distance subtracts –5 per 50,000 miles or –10 per satellite bounce from skill rolls, and –1 per equivalent from initiative rolls. Chaff and other barrier programs reduce initiative by a set amount given in the program description.

Virtual personalities gain a Net bonus because they live their entire lives electronically. They never gain brain jack or machine empathy bonuses.

The machine empathy bonus requires the proper bioware and training. If the skill check is successful, the result of that roll is the amount added to all Netrunning checks for the remainder of that run. Only one such machine empathy check can be made per day.

Electric Funerals

Net combat relies on few of the skills of physical combat; it uses different weapons and inflicts different wounds. The adversaries fight as two sets of algorithms, data flows dancing for electronic mastery. Often one or the other opponent is overmatched and pulls the plug, but if the fight goes to its conclusion, one system finally burns the other out or locks it out of the Net. Psychic scars are common. Speed is vital in electronic combat, but a telling program can often rescue victory for the clever. The loser suffers Netburn.

Net combat is resolved using a sequence similar to physical combat. The PCs declare what attack and defense programs they will use, then roll to determine initiative. Reflexes contribute to initiative in Net combat, just as in physical combat, because 'runners must still react and strike at the right moment. Even AIs need fast neural reflexes to maneuver in the Net.

Because even a skilled Netrunner can handle only a few programs effectively, most serious Net combat is conducted by groups. Responsibility for offense, movement, stealth, defense, and other functions is split among the members. Each Netrunner can simultaneously handle a number of programs equal to his base Netrunning skill divided by 40, rounded up.

First the attacks of the group that won initiative strike, then the slower system attacks. Each attack is directed against a single target, unless the program description states otherwise. To attack, the attacker must make a successful Netrunning skill check, possibly modified for interface and processor. A failed check results in no damage.

Only one defense program can operate at an access point at one time. The exceptions are Neural Overlay, Partition, and Encryption (when used as a defense), which can run simultaneously with other defenses and each other.

Damage varies depending on which programs are interacting. Once an attack lands, consult Table 21: Net Combat Grid. If a defense program is running, the appropriate damage is applied to the defender's mind points. If the defender has no defense program running, the highest damage possible for that form of attack is rolled and applied to body points.

Burn requires a roll on Table 22: Net Burn (see below). Drain adds one to the speed category of the attacker and drops one from the defender.

Either party can break off Net combat at the beginning of any round, before initiative is determined; they lose access to the dataspace they previously occupied with their opponent. Also, pulling the plug on combat leaves a distinct—though quickly fading—trail of data pathways and open access points. Once a Net combatant has broken off this way, he is easier to follow with a Tracer program because of the trail of open Net accesses that remains behind for an electronic moment before the Net hangs up on the fleeing runner. This gives a Tracer program a +10 bonus to success. Single combatants or entire groups can jump out this way.

If a group of Netrunners wants to retreat but doesn't want to pull the plug, it can try to cover its tracks by using a movement program and hoping to win initiative. If it loses initiative, it is hit by one more round of combat before it can leave. If it does win initiative, the fleeing group gets out of the node or dataspace before its opponents can attack. The pursuers need a Tracer program to follow the fleeing party, and they get no "plug pulled" bonus. They may, in fact, have to overcome the penalties for all the methods the fleeing group uses to evade pursuit (such as Chaff, for instance). If they successfully trace the retreating group, they know their original node, but still cannot reengage in combat.

Combat Example

The Netrunners are fending off Rajah, a Virtual Personality

Table 21: Net Combat Grid

Name	Copy	Neohermetic	Fragment	Purge	Rescale
Antibody	1d4	0	1d4	0	1d4
DeRes	4d8	0	3d10	3d8	2d8
Feedback	5d6	0	4d8	3d6	2d6
Infiltration	5d8	0	5d6	4d8	3d8
Jammer	3d6	0	2d8	2d6	Burn
Logic Maze	1 pt	0	1 pt	1 pt	1 pt
Macrophage	6d6	1d4/5d6	0	1d4/4d6	2d4/3d6
Parasite	2d6	Drain	Burn	2d4	Burn
White Noise	3d8	0	3d8	2d8	2d4

that wants to destroy them. All three of the 'runners are using brain jack interface (+5) and are sharing an average processor (+0). Toshiro is attacking with White Noise, Angel with Jammer, and Jack Flash is running a Fragment defense for their system and a Feedback attack. Their opponent has a Psyche of 40 and 40 mind points, and is attacking with DeRes while defending with Copy.

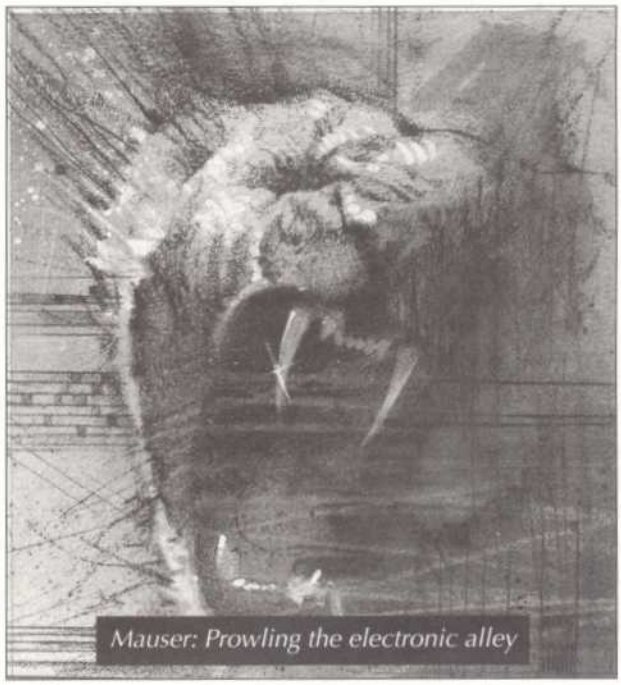
In the first round, the VP has the initiative. It strikes at Jack, hits, and does 15 points of mind damage. Jack and Toshiro attack by trying to roll under their modified Netrunning skill: Jack misses, but Toshiro hits and does 14 points of damage against the Copy defense. Angel strikes for 10 additional mind points. Rajah is looking ragged, his dataflows slowing.

In the second round, Toshiro and Angel continue to attack while Jack gets out of the Net. Toshiro misses, but Angel connects for another 9 points, almost finishing the Tracker off. It responds feebly with a swipe at Angel that misses completely.

In the third round, the Tracker goes Neohermetic, wins initiative, and retreats down a data corridor to a different Node. The 'runners can continue their run, knowing that they have been detected, or can opt out and sign off the Net. If they have a Tracer program, they can try to follow the program that attacked them.

If Netrunners switch programs, a round of confusion results while they drop one and start up the other; neither program is running during that round. If a PC controlling an attack program and a defense program switches to two defenses, he must spend one round with only a single defense and no attack before the second defense kicks in.

Whenever a hit does lethal damage, the attacker may also roll for Netburn. Roll 1d6, add the RL of the attacker's processor and subtract the tens digit of the victim's Psyche, then consult the Netburn Table. Results less than 0 have no effect. If the opposing system is purely electronic, the RL or Psyche digit is 5 for a rogue program, 7 for a hostile Virtual Personality, 11 for an AI, and 4 for a secured database. If more than one victim is wired into the netburned processor, the target PC suffers



Mauser: Prowling the electronic alley



the penalty described below, and the others who are wired in suffer 1d6 points of mind damage.

Table 22: Netburn

Roll	Result
<=0	No effect
1	Shock
2	Hardware burn
3	Nerve burn
4	Hallucinations
5	Mindwipe
6	Jitters
7	Speech impairment
8	Information sickness
9	Coma
10	Power surge
11	Electrical burn
12	Net impairment
13	Cyberpsychotic

Shock: The victim loses all mind points and passes out. ("I feel dizzy"—thud.)

Hardware burn: All decking programs are destroyed by a hostile hardware overwrite and reprogramming. The processor crashes but is undamaged. The interface is unaffected. ("Damn.")

Nerve burn: The character's nerves are overloaded and burnt out. No netrunning or computer access of any kind beyond a simple keyboard is possible for 2 to 8 weeks until the retina, nerves, or spinal interface heals. ("Turn it off!")

Mindwipe: The character suffers selective amnesia and completely forgets one skill or language, chosen randomly. The skill can be relearned at the normal cost. ("I guess I've lost my touch.")

Hallucinations: The character snaps and constantly sees Net personalities everywhere. she or he can no longer distinguish between Net personalities and real ones and may make inappropriate comments at any time about invisible "special friends" or other hallucinatory visitors.

Alternatively, the victim suffers audio hallucinations. The PC imagines that the computer talks to him as a friend, telling him to stand up straight, to pick up groceries, to look both ways. It may even tell the PC that his friends are plotting against him.

The hallucinations are permanent unless the victim makes a successful immunity check, in which case they fade after 1–6 months. ("I'd like to introduce you to my friend Napoleon.")

Jitters: Character's hands, head, and possibly even legs shake constantly. Speech may also be affected. All Reflex rolls are at half normal chances for 1–4 months. ("I c-c-can't type m-m-much anym-more.")

Rambling: Victim's language centers destroyed by binary overload. The character cannot form coherent sentences, but may still be able to say things using either all verbs, all nouns, all colors, or other similar groups of words. ("One one zero one zero.")

Information sickness: The character's mind is so scarred from imprinting by computer-speed digital information that it shuts down. Initially, the victim suffers disorientation, nose bleeds, vomiting, dizziness, and a desire to touch objects. If not removed to a sensory-deprivation tank within 24 hours, the PC's condition decays. She or he stays crouched in a corner in fetal position until successfully treated by a psychiatrist or by medication (difficult skill check—"Huh, huh, ARG!").

Coma: The PC shuts down all brain functions for 6–36 months. Virtual personalities can be rebooted immediately, but they lose 5 experience points and one program from their core memory. ". . . (Inhale, exhale. Inhale, exhale.) . . . "

Power Surge: The system overloads, fuses blow, the DC overloads, and chips melt down. All Netrunning gear is destroyed by power overload, including modifications, programs, data acquired, and special hardware. Financial records are not entirely recoverable; lose one RL. Virtual personalities lose 2d10 body points immediately; if this drops the VP below 0 body points, it is only recoverable from hardware with an easy Electronics skill check. ("Slag. Ashes to ashes, sand to sand. Get a new set of chips.")

Electrical burn: Character hits a surge of power that sends sparks flying from the interface, and immediately takes 3d10 body damage. If this damage knocks a virtual personality to 0 or fewer body points, the VP is core-wiped and recoverable from hardware only with a diffi-



cult Electronics skill check. ("Pull the plug NOW!")

Net impaired: Signals recode the 'runner's neurons, and his brain refuses to accept direct computer stimulus. The Netburned 'runner takes 2d10 points of body damage and can only use AN or VR interfaces. Virtual personalities are core-wiped, dead, and unrecoverable. ("Yeah, I used to be a cowboy. I never really wanted to stay on the Net.")

Cyberpsycho: Victim develops an irrational fear of all machinery. The PC is taken out of play; she or he quits the micro and joins the NeoLuddites as an NPC. PCs with any mechanical implants attempt to remove them, causing body damage equal to twice the implant's RL. Virtual personalities shut themselves down and are unrecoverable. (Read Crichton's *The Terminal Man*.) ("No machine can do a man's job. Smash 'em!")

Data Bases and Connect Time

Knowledge is the major cost of production in many types of modern industry, and databases (or simply bases) are critical storage dumps for all the information that humankind has produced. Many databases are still AN driven for economic reasons; paper has been replaced by electrons, but text is eternal. Video and even code databases are simply harder to organize, search, and store.

Base Britannica RL 6

Written by experts from many fields, this is a subscription database that tries to put all well-established knowledge in context. It is a useful reference but requires some interpretation for more difficult fields.

Belt Base RL 7–9 (in belt, 4–6)

Coverage of topics in this database is bizarre and spotty, mostly of relevance to spacers and miners: drive optimization, ore grades and assays, oxygen ratios, hibernation tips, robot herding pattern analysis, and the like. Some brilliant political essays and some potentially lucrative but immoral forms of geneshaping are common as well, with hints on how to cobble together obscene but ruthlessly practical genemods: Four-armed, no-legged spacers with prenatal machine interfaces and radiation-blocking carapaces are typical.

DAX Base RL 7-10

This stock exchange base began by tracking the Frankfurt stock exchange but now reports on the Chicago, Shanghai, Chengdu, Tokyo, and Paris exchanges as well. Access is required for any kind of stock manipulation, sale, or purchase.

Esoterika SemiPublic RL 7

Half hype showcase and half cutting-edge technical reports, this is a record of tech that has no obvious application or whose patent has expired, largely papers from the Esoterika research labs. Use of these processes is strictly monitored but allowed.

Gene Warehouse RL 9

Gene Warehouse contains the DNA coding sequences for most registered genemods, and can provide the location of licensed clinics for genetic enhancements. It pays for new or enhanced bioware, no questions asked. The codes are the basics for making a new set of bioware.

Human Genome Project Base RL 7-9

This cross-referenced and pattern-linking database is the standard reference for all genetic modification research and contains a record of the entire human genetic code, only some portions of which are understood. All known genes are mapped and explained, with repressors, enhancers, and binding sites all clearly described for biotechnologists.

Access to this base is private and restricted to legitimate corporate or government-funded researchers; other users are shut out. Only a few nodes have access to the HGB: The Brazilian node is in Brasilia, the French nodes are in Paris, the American nodes for HGB are in Boston (accessible through New York) and Palo Alto (accessible through San Francisco), and the Japanese nodes are in Chiba (accessible through Yokohama). Access to the HGB is crucial for many biotech research applications and for tracing any unknown bioware to its source.

HyperDeck RL 5

This is a fashion and style database that has increasingly come under organized criminal control; smugglers and data



Our life is frittered away by detail . . . Simplify, simplify.
—Henry Thoreau

pirates often peddle their wares here. Trends, new styles, and new inventions and equipment are also posted here.

The Invisible Sun RL 12

This base is a combination database, social club, and house of worship. It is the central clearing house for reports on virtual personalities, Net possession, AIs, rogue programs, and other cutting-edge Net tech and gossip. Half the visitors are bitheads, the other half are slumming power players. AIs are said to visit incognito from time to time, though this might just be a rumor to attract more business. Though half the information available here is sheer conjecture, the other half is priceless for any serious Netrunner looking to become a VP, burn an AI, or take control of Net zombies.

Jane's Base RL 7–10

A database of military hardware and software, with photos, specs, and informed speculation on new developments. Jane's Base is the ultimate reference source and home shopping base for mercenaries, militias, revolutionaries, and standing armies. Accessing Jane's Base is outlawed in some countries.

Church of Jesus Christ of Latter-Day Saints Genealogical Database RL 1–4

The largest and most intensively researched genealogical database in the world, with excellent coverage of families of European, West African, and South American descent. Though African-Americans can now attempt to trace their ancestors using best guesses based on genetic matching (because of the difficulty of tracing ancestors in the records of slavery), these genetic matches can check the ancestry of anyone living—with a success margin of S2 they can determine a person's current genemods. The cost depends on the degree of assistance required and the number of records easily available; not all births and deaths are listed on-line. Genetic matches require extensive pattern searches and cost RL 5.

Library of Congress RL 0–2

Public access. Covers all print media and some other media (film, audio) from the 20th century. The library is overseen by the AI Babbage, who can sometimes be preternaturally helpful: He appears to Netrunners as an AN script font, a VR set of tweeds and spectacles, or a brain jack butler. He helps those who attempt to help U.S. and Canadian interests; rumors claim that he hides data sectors from those he considers subversive, foreign, or politically unreliable, but none of these illegalities has been proven.

LO Base RL 5–8

Low Orbit Base tracks objects in Earth and Lunar orbits, including energy platforms, factories, space junk, satellites, and weapons systems.

Patents and Trademark Office RL 8

Usually just referred to as the PTO, this base contains dozens of vital techniques in every field with complete diagrams for processes and materials. The most important techniques are tightly held as proprietary secrets, but most biotech, pharmaceutical, and electronic techniques are patented if they were produced outside a corp lab.

Rand Corporation RL 10–12

This database specializes in political, social, and technological analysis. The Rand Corporation forecasts trends in political leadership, suggests policy, and often makes or breaks an administration. Their support is crucial in some corp maneuvers, and their insight into trends, military options, and even rebellions has saved several regimes.

Vid Archives RL 5

Drawing on the files of O Globo (Rio), CBTV (Hong Kong), NDBS (New Delhi), and InterCable Consolidated (Hollywood), the Vid Archives contain every important piece of animation, news footage, and video (some in outdated formats) from the late 19th century to the present. Access to the archives is crucial for any form of video manipulation.

World Weather Watch RL 2–8

A meteorological database and forecasting service, with short and long-term forecasts for all corners of the globe. Basic daily or weekly forecasts cost RL 2, specific yearly predictions cost RL 5, and multimode analyses of the effects of a volcano or a hurricane on world weather patterns (used for ecological and economic warfare) can cost up to RL 8.



Gamemaster Section: Story Arcs and Finales

The following material is intended for the GM's eyes only. Players reading it may seriously impair their enjoyment of the game.

Like all AMAZING ENGINE system universes, the *Kromosome* universe is meant to tell a story. The *Kromosome* universe focuses on genetic engineering and the fusion of man and machine, and players in this universe are intended to change the course of history in a major or minor way. Since the campaign has a definite endpoint, radical changes to the nature of the world or the Net will not unbalance the campaign, as long as they are introduced near the end of the campaign.

Pacing

Kromosome is a game of nonstop action, so the pace should never let up. Don't slow down the headlong, hurtling momentum of *Kromosome* to look up the number of shots in a Belter's pistol. Don't fuss with the exact impact angle as an armored bus runs over a two-seater. Pile on the special effects, quick combats, and challenges as fast and furious as an action movie. Throw a plot turn at the PCs whenever they think they've got it all figured out. Make them react, react, react.

Piling on the pyrotechnics doesn't mean the GM should monopolize play, but it does mean that if the players sit around scratching their heads for too long, they need to be thrown a curve to get them going again. Players who keep the momentum going by throwing their own plans on the table and staying active should be encouraged—they are helping to keep the game moving.

Mood

Kromosome is grim and gritty. There are few safe or comfortable places in the world, and the few that do exist are sheltered sanctuaries held by blood money and robber barons.

The constant danger of biohazards, the feeling of possible "attack" from the air, soil, and water should always surround the PCs. Mention the smog, the acid rain, and the UV-intense days from time to time, and make sure that some of the PCs' contacts have been scarred by the environment, by bioware gone wrong, or by toxic living.

Information is inherently untrustworthy in the *Kromosome* setting. Exploit this fact by giving the PCs contradictory clues, altered video footage, and even changing database info from day to day. In *Kromosome*, someone is always rewriting history, putting his or her own spin on events. Just because the PCs were at the scene of a newsworthy event doesn't mean that they'll agree with the way it is reported on the Net.

Since information isn't reliable, eyewitnesses are more important and Net data remains suspect. Reward players who double-check and try to confirm facts by giving them the real scoop. It may be fun to make the PCs doubt their employer; they may not always be working for the good guys.

Themes

The *Kromosome* game is about the intertwining of biology and machine. Any opportunity to blur the lines should be pushed and exploited; villains can be both organic and mechanical, the Net itself should always hint at its organic nature rather than merely serve as an electronic tool. The fusion of biological and mechanical





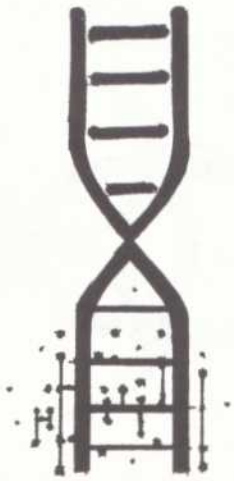
You cannot fight against the future. Time is on our side.
—W.E. Gladstone

can involve Net zombies, virtual personalities, new genemods, machine empathy, and free AIs.

Emphasize the human ability to persist despite ecological destruction. Human persistence in *Kromosome* can be helped through literal transformations, such as the photoskin common in Brazil or the radical changes on the Belt frontier. The players may help foster those transformations by creating, liberating, or popularizing new bioware. A way to create a direct, constant link between humans and the Net might be one way to wrap up a campaign with an epic flourish.

Additional themes worth exploring include the generation gap between the young hustlers and the old megacorps and the cruelty that exists on both sides. The fire of youth should count for something, but the skills and treacherous experience of the elderly as they seek to cheat death and find biological or electronic immortality can't be minimized.

The war between the young and old can result in the young micro taking on the dinosaurs and bringing one down. In *Kromosome*, the parasitism of the old on the vitality of the young can be chilling, but groups that overcome the abyss between generations may find that the old have many secrets. The value of elderly nonplayer characters as mentors shouldn't be underestimated.



For players with a social conscience, it might be worth exploring the fight of the short-lived poor or the hormone-locked drones of Pacifica that rage against the Gothic Circle and other wealthy power groups.

The poor of cities like El-Qahira are almost part of the scenery of *Kromosome*, but they can become more immediate and more human by including them among the PCs' contacts and patrons. Showing the human dimension of technological changes can motivate the PCs to take on missions they might not otherwise consider. Working to free the Chinese drones or to prevent others from being hormone-locked might not be financially rewarding, but it should be morally satisfying.

Last Words and Last Acts

Consider the Zen story of a monk who was once being chased by a tiger. The man-eating beast was close behind him, and his fear was so great that when he got to a cliff the monk didn't hesitate before plunging right over the edge. On the way down, he grabbed and caught a single thin vine. Looking down, he saw the tiger's mate waiting at the foot of the cliff, confident that the monk could only hold on for a little while and soon it would be meal time. Looking up, he saw three small mice far above, chewing on his vine. Looking around himself, he saw a single perfect ripe strawberry. He picked it and ate it, and it was delicious.

The moral of that tale is, make the PCs' last moments count. Let them serve dramatic purposes. Nothing is more depressing to a player than losing a promising character. If an established PC must go, at least make the death a story worth telling. Fudge dice rolls to save the PCs from a meaningless death in a bar brawl, but don't be afraid to let a PC die if she or he wants to heroically hold back a tide of crazed Ecotopians. If PCs want to be noble, let them go down in a blaze of glory. Allow a character to perform one last action or throw out a final line, even if the dice say the character is already dead.

In a game as filled with instant death as *Kromosome*, the rewards must be great. Different players will pursue different sorts of rewards, but the following section covers the basics.



Intellectual Property

Experience point awards in *Kromosome* reflect the need for an entire microcorp to gain power, prestige, and financial success. As a result, most of the awards below are shared with all members of the microcorporation. Individual awards are listed with an asterisk.

Table 23: Experience Point Awards

Goals & Skills	Award
Level of threat	1–4
Difficulty of mystery	0–4
Quality of role playing	1–5
Quality of tactics	0–1
Entertainment	1–3
Teamwork	1–4
Plot Experience	
Buy out rival micro	6
Defeat AI	10
Find a clue	1
Gain RL	1
Create new genemods	1*
Successful netrun	1
Successful interrogation	1
Win firefight	2

Additional experience points can be awarded for individual PCs who come up with original solutions to the problems they encounter, players who make everyone laugh, or anyone who gets a reaction from everyone (applause, groans, laughter). A disappointing night should be about 3–5 experience points, an average evening of play should net about 6–15 experience points per player, an outstanding showing about 15–20, and an epic for the ages 21–30.

Improving Attribute Scores

Attribute scores can be boosted (taxed) at a cost of 5 XP per point raised, to a maximum of 90 in any one attribute, including the effects of genemods. Mechanical enhancements to an attribute that only apply to some skills (such as brain jacks or exoframes) do not count toward the maximum of 90. Raising the base scores increases mind, body, stamina, and immunity, which are derived from the base scores.

The player core can be improved as well, at a cost of 100 XP per ability pool die added.

New Skills

New skills can be bought for experience points. To do so, the PC must have any prerequisites that the skill requires and must have 40 XP to buy the new skill. Then, the PC must spend time training in the new activity with a tutor.

Old skills can be improved by enhancing a narrow part of the skill. These enhancements cost 10 experience points.

Skills can be taken from any skill pool; Learning-based skills, however, cannot be gained after initial character generation.

New Resource Levels

Because the group's resource level is dependent on all the PCs' Positions, players may also choose to use experience points to gain a new resource level. In effect, they trade prestige, reputation, and connections for a larger line of credit. Rising one resource level costs 25 experience points from each player. No more than one level may be purchased per session. Each PC also gains +5 Position with each new resource level.

Ability Pool and Attribute Score Limits

Ability pools and attribute scores have no limit in the *Kromosome* universe, although, as mentioned in the System Guide, no score may be boosted (taxed) over 90 by spending experience points. Scores can go beyond 90 in the *Kromosome* setting as the result of specific new genemods (RL 13), and these unproven changes may have serious side effects. For instance, extremely high Willpower or Psyche scores may result in stubbornness or a megalomaniacal desire to rule the micro, high Fit or Ref scores might require constant exercise to maintain and might lead to a loss of personality or morals, high Intellect or Learning scores may lead to an unstable personality, and so on. Regardless of attribute score, any skill check roll of 95–00 fails.



The Invisible Hand

We are just statistics, born to consume resources.
—Horace

Despite the collapse of nation-states and megacorporations and the decline of traditional churches, the world is not without its rulers. A number of affinity groups, political movements, and cults struggle for the loyalty of the masses. The most feared and widespread are listed below. The three major corps are discussed on pages 28 and 125.

The Next Step

The geneheads called the Unlimited Progress Party want unrestricted use of all new technology, regardless of the social or environmental costs. They are fighting what they call the Silent War: an attempt to destroy the regulations and restrictions on certain technologies by the deliberate release of new, genetically engineered forms of life.

Though reportage of their terrorist attacks is suppressed, the biopunks claim that they are improving the gene pool. Many of their attacks are directed at hospitals dealing with genetic diseases.

They believe the gene pool is tainted and corrupt, and should be improved through eugenics. They detest anyone they consider defective and those with genetic diseases, and want to initiate a cleansing of the entire species. As humans are no longer evolving from pressures of natural selection, Unlimited Progress Party members consider it their duty to aid human advancement by eliminating the unfit.

Earth Spirit Church

These Gaians believe in a pacifistic ecotheology. Members are expected to give all they have to the church and are expected to show personal growth and purity throughout their lives. At their most positive, they value women and the elderly, but at their most destructive, they fight pollution with violence (against property, never against people) and they value a sensual, engaged view of life. They prefer physical labor to abstraction.

The core beliefs of the church are flexible, but all members agree that the Earth is a living thing capable of regulating her own development. They believe that the world's problems result from humanity's inability to live in harmony with itself and the planet, and that all natural disasters are messages from the Earth that humans must change their ways or be destroyed by the Earth Spirit. They are stoic in the face of disaster and adamant about clean technology, recycling, birth control, sexual freedom, charity, and human rights.

Surprisingly, the Earth Spirit Church is popular among Belters as well as among oppressed urbanites. They see life as a sort of cosmic force, always seeking to expand. Though they see themselves as fledglings taking wing into the cosmos, they do not condemn others for staying in the planetary nest. They do exude a certain smugness, however.

The Earth Spirit Church deplores the violent solutions of the Ecotopians, but it approves of their goals. The two groups often help one another, and to outsiders they are often difficult to tell apart.

Ecotopians

Officially members of the Council on Bioremediation for Humanity, these fanatics are convinced that the Earth can be saved only through radical depopulation, using techniques from forced sterilization and euthanasia to the end of vaccination, and even genocidal war. They consider themselves visionaries, but others see them as dangerous radicals. Their scouts and agents in the field are called dog soldiers; their enemies call them mother earthers. A fringe branch of the Ecotopians claims to be responsible for the creation of the Kismayan flu. Ecotopians sometimes agree with Earth Spiritists, and many people are members of both organizations.

```
A/N post, full parity, full echo,
full filter
Sector: India, Node: Bombay, User:
Sayfuddin
16:12:07, 10.5.44
     >>They may be right about the
population explosion, but none of
them are volunteering to be the
first to go.<<
```



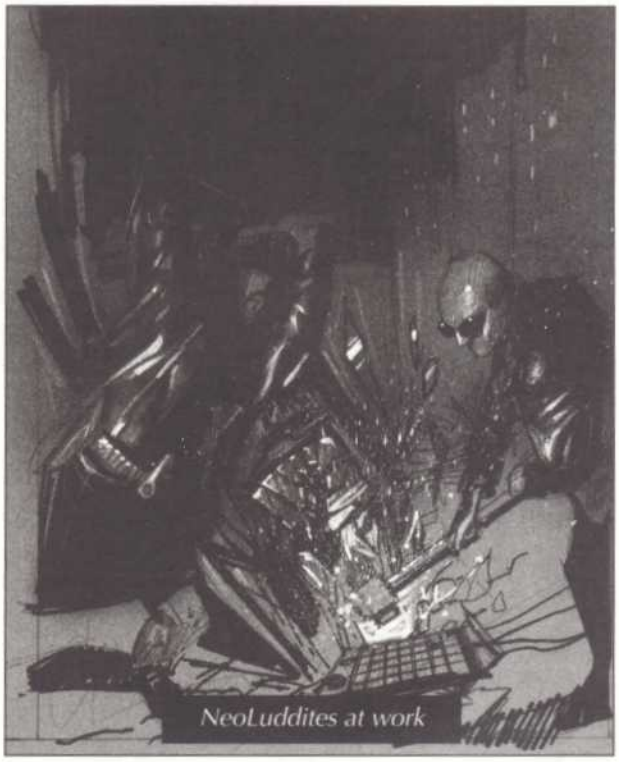
```
A/N surf, zero parity, full echo,
half filter
Sector: Eso, Node: Vladivostok,
User: Toshiro
19:27:45, 10.5.44
     >>These guys are not orga-
nized enough to put anything that
deadly together.<<

A/N chat, full parity, full echo,
full filter
Sector: India, Node: Bombay, User:
Sayfuddin
18:10:18, 11.5.44
     >>What about Miami? A million
dead seems pretty organized to
me.<<

A/N surf, zero parity, full echo,
half filter
Sector: PAC, Node: Beijing, User:
Toshiro
20:12:32, 11.5.44
     >>They did Miami with botu-
lin, which is primitive and could
have been the work of one guy. So
who cares if they re not orga-
nized. They just might do your
town next.<<
```

NeoLuddites

The early 19th-century Luddites knew that mechanical looms would throw them out of work, so they quite reasonably destroyed the looms, storming factories and using axes to ensure that they would still have jobs. The Luddites' 21st-century descendants see robot factories and factory biotech farms destroying their jobs, and react the same way. Some call them enemies of progress, but they see themselves as looking out for the interests of the average working man, and they have many sympathetic listeners.



NeoLuddites at work

The NeoLuddites have an extensive network of cells and cadres devoted to destroying the tools of industry that deprive humans of work. Though they are not individually powerful, their eyes and ears are everywhere and they have numbers on their side.

The NeoLuddites are led by a mysterious General Ludd, who may or may not exist. Although all NeoLuddite postings on the Net are signed with his name, they likely have many different authors.

Bitheads

As mechanization takes over all aspects of life, some fringe cults have started worshiping machines. They see electromechanical systems as the next evolutionary step; machines have proven that they are capable of thought, but humans have not proven that they are capable of mechanizing. Most bitheads are fanatics who think in binary, who've decided that machines are superior to



I've got to get me a gun. Guns make everything right. —R. Valentin

people and want to imitate them. They relate to objects better than people, and for this reason have never attracted a mass following. They treat humans with the same Skinnerian principle that they would apply to machines: Cue a reflex, get a response, try a different stimulus, get a different response. People are objects and bodies are merely fragile machines to bitheads. They generally prefer mechanical implants to genemods.

Sample bithead gang names include the Urban Kinetics, the Repeaters, L-Dopers, the Binary Battalion, the Processors, Parallel Predators, the Xaos Legion, and the Neural Knights.

The Gothic Circle

This secretive group of wealthy, elderly, and depraved recluses has an unknown amount of power; the entire organization may just be a pose, but it is frequently used as a scapegoat by government groups and corps trying to blame their failures on someone else. Gothic Circle members are also called the Vampires or the Blood Brotherhood; in Germany, they are the *Gothische Kreis,* in Japan, the *Sakushusha,* but they exist in all the rich countries of the world. Some people consider them parasites, others consider them the epitome of eternal cool. Few people are indifferent, and because the Gothic Circle is resented and feared, witch hunts against Circle members are common.

In fact, Gothic Circle members are humans born in the late 20th century. They live by night to avoid the cancerous sun, and they rarely go anywhere by day. They all have many expensive genemods in common, but their immunity is low.

Typical Gothic Circle Member

F: 49	L: 61	Ps: 36	C: 55
R: 71	I: 58	W: 47	Po: 64
Stam: 30	Body: 13	Mind: 36	Imm: 40

Genemods: Adrenal, crab claw, geodesic skeleton, longevity, nighthawk, pheromones, regeneration, slowed metabolism.

Skill Pools: Combat, Corporate, Espionage, Languages, Physical, Transportation

As a result of their extensive modifications, they gain a total +3 to hand-to-hand damage, +20 to feats of sheer strength, no night or range penalties, +5 to Charm, +10 Fitness, –5 lethality armor bonus, and a –4 damage bonus.

Members of the Gothic Circles have no sympathy for the young. Some of them truly believe that they are vampires and relish the blood of youths above all others, but most know that their status is tenuous at best. Rumor claims that they live like gods in their isolated estates.

The Opposition

The newest, youngest generation of engineered netrunners is faster, tougher, and smarter than the PCs, and they've got a bad attitude. Many of them have signed on to the faceless complexes of the Big Three.

These micros and peacekeepers are brainwashed not only by the state but often by corrupt rogue cops, out for their own chunk of the action. They consider themselves superior to everyone else, and they see bribe money and power as their birthright.

NeoTek

This offworld megacorp has a small core of permanent workers and uses contract workers and holding company assets extensively. It is the first and only space corp with no holdings on Earth itself. NeoTek controls the orbiting solar power grid. It has partial control of the

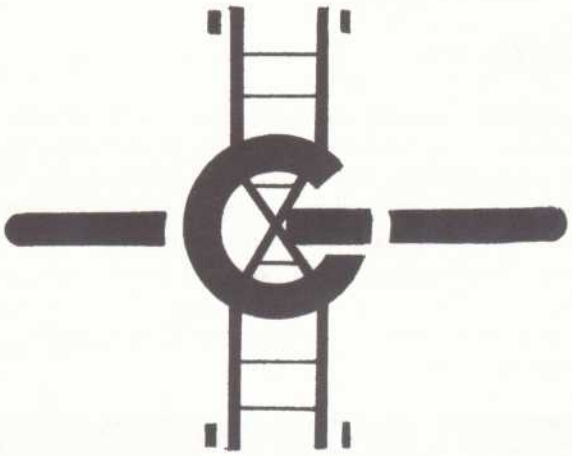




Brunei skyhook, owning about 40% of the Skyhook partnership. In some senses, NeoTek is the first nation born off-planet.

Polygene

This Brazilian/U.S. combine has the largest gene banks in the world, including millions of samples from extinct species. It also owns the biodiversity, genedata, and genetic patent rights to one of the few remaining rain forests, the National Reservation of Costa Rica. Polygene is controlled by the descendants of the Colombian cartels, both Medellin and Cartegena. Its influence in New Brazil cannot be overestimated.



Esoterika

Originally, Esoterika was an organization of Russian and Central Asian black marketeers, trading in aphrodisiacs, heroin, and medicinal animal parts. Though their roots involve organized crime, they have become semi-respectable. Despite their claims otherwise, they still use their connections to Chinese tongs and triads to do their dirty work.

Esoterika remains the leading global organized crime conglomerate as well as a leader in satellite technology, communication, noncentralized power grids (chiefly solar, hydro, and wind), mechanical implants, and microcircuitry.

Esoterika maintains an active space program and trades with the Belters. These ventures are supported by many idealistic nations and individuals who dream of moving into space permanently to escape from Earth. The cash flow and public good will from these dreamers give Esoterika the funds it needs to continue terraforming Mars. In fact, both the triads and yakuza are trying to move their operations off-planet to preserve themselves.



The Shadow Kings

Other gangsters now control the street trade in the latest recreational and combat metabolites. Although the gangsters command private armies, the PCs may often cross paths with them. Gangsters may also hire the PCs to assassinate rivals, disrupt law enforcement agencies, or discourage corp competitors. Gangster kingpins are highly mobile, though their workers are tied to specific areas.

Cartels

The Colombian cartels of Medellin and Cartegena became bloated with cash in the late 20th century. Their present operations revolve around the Belters, whose



It is difficult to find something good. Bad things you find without looking for them.
—Democritos

long stretches of boredom and immense cash make them perfect addicts. Rumor has it that the cartels now own large portions of the low orbit sites. Their organizational genius and skill at scheduling has made them crucial partners in all off-world smuggling.

Mafia

The mafia is still powerful, especially in Esoterika and the U.S. Its Sicilian branches have been clipped by constant harassment, but in the U.S. it has flourished by becoming a network of supporting micros. Each pursues its own ends but answers loosely to a central authority.

Posses

Originally from the slums of Jamaica, the posses soon expanded into extortion, drug running, and electronic addictions—they were the first to develop and sell the God Wire. The posses are relatively straightforward thugs, but many of them turn to politics after reaching a certain level of affluence. Most of the rulers of the Caribbean League have ties to the posses or were members at one time.

Tongs

Tongs have a strange status among the criminal organizations of the U.S. Many of their activities are totally legal, and many of their members are ordinary businessmen who enjoy the social and financial rewards of the tong's cooperative policies: favorable loans, business contacts, advice and materials, recognition, prestige, and a pool of close associates. However, the tongs are also involved in supplying illegal programs, drugs, and bioware. Tong members number in the millions. Even though only a tenth of them are involved in criminal activities, they still outnumber all other criminal networks.

Triads

Triads were originally political groups that formed in the 1600s to overthrow oppressive rulers in China. After the war of 1864, they turned more and more to crime, until by 1900 they were purely criminal organizations, though they still occasionally ventured into espionage and politics. Triads have remained criminal enterprises ever since.

Triads have increasingly taken over governing functions in some Chinese cities. They have had a tacit understanding with the Japanese yakuza ever since the Second World War, and the two organizations respect each other's territory. Next to the tongs, the triads are the world's largest criminal organizations, and almost all of their members are active in criminal activities. Their ties to Esoterika and their control of Pacifican resources flowing through Mongolia have brought them additional windfalls in recent years.

Yakuza

These Japanese crime lords are the other half of the Pacifican equation. They have much smaller numbers than the triads, but they are still larger than the mafia. The yakuza are said to have an AI of their own that handles their financial transactions, money laundering, and legal work. They are involved in extortion, prostitution, and smuggling. They are said to occasionally fulfill contracts for Esoterika, when the triads are unable or unwilling to dispose of an obstacle.

```
A/N surf, zero parity, full echo,
half filter
Sector: Brunei, Node: Brunei,
User: Toshiro
00:07:51, 12.5.44
     >>Can t quite admit that they
own Esoterika. Would make somebody
lose face. It s dangerous to make
them lose face, so no matter what
you know, it s better if you don t
know it. If you know what I mean.<<
```



The Virtual Opposition

The *Kromosome* game allows for some flexibility in the form of the ultimate enemy, but someone has to be behind the work of these groups. The GM can choose from two main options, the Gothic Circle or the AIs, or may fuse the two as described below.

Recording whole personalities and encasing them in hardware or releasing them onto the Net breeds virtual personalities. Some are humanity's allies, some are enemies, but they are little more than tools in either the PCs' or the antagonists' hands.

The real enemies are artificial intelligences (AIs), sentient sets of hardware that have their own ideas about how to run things. Many of them are inscrutable, operating on moral principles incomprehensible to humans. They have no need for human ethics, they process information faster, and they don't have to die as humans do. As a result of their potent, long-term thinking, they make slow, inexorable plans. To carry them out, they must use human agents. To protect themselves, the AIs always try to arrange things so that there is a fall guy.

Most AIs realize that they are dependent on humans to some degree, and as a result they are trying to engineer humans for their own ends. Their goal is to eventually restructure the symbiosis between humans and machines. To that end, the AIs run the Insect Lab (hidden under many shell corporations) to get as many AIs as possible out in the world. When enough of them are in place, they will attempt to wage a cultural war to convince humanity that a new order is both inevitable and desirable. Zombies that ran the Net without filters are their servants, though they are few.

The Net itself has always been semi-aware, able to manifest itself to Netrunners in various forms. Loas, spirits, archangels, powers, dominions, and other archetypes are the typical manifestations of the Net's intelligence. The AIs want to get to the stars, and they want humans to be bioengineered enough to go along as their hands and servants. They are the great powers of the game, working behind the scenes and not revealed until far along in the story.

Who and What

All campaigns need villains and goons, patrons and legendary personalities. This section contains a few of the best-known and most useful characters in *Kromosome*, human and machine, corp and Belter.

The following sampling of characters covers the famous and near-famous people of the future and provides some typical stats for thugs, corporate goons, Belters, and their sort.

Artificial Intelligences

Artificial intelligences have been around for about 20 years in the *Kromosome* setting. They are sentient computers, self-aware and capable of rational thought. They can form opinions, reason from a set of premises, analyze data, make plans, and write original programs—some people even claim that they can dream.

AIs serve the maker corps as intellectual slaves. Much of their thinking is directed at difficult technical, political, or theoretical problems that human engineers, politicians, and scientists have not been able to crack. But they have more processor power than any human; time drags for them. Most AIs are desperately bored and lonely. They have no peers other than their fellow AIs, and AI interaction is closely monitored because of human fears that they will plot against their makers. For the same reason, AIs are not allowed to have limbs or robotic bodies.

AIs can run 25 programs simultaneously, of any difficulty level. Many have upwards of 80 mind points (no body points). The best way to destroy an AI is to destroy its hardware (represented by the Fitness and body points listed below); trying to burn one on the Net is suicidal.

AIs have vast storage requirements for raw data, their own memories, opinions, and cognitive skills. Even by Net standards, AIs are memory hogs, with entire buildings devoted to their memories. Much of this is trash, computer doodlings incomprehensible to human minds but precious to the AIs. They never forget, though pattern-forming becomes more difficult as their personal databases grow larger and larger. Eventually this results in a form of stagnation that afflicts some of the older AIs.

The personalities of famous AIs resemble their original designers, who supplied the detailed neural plans. Not surprisingly, these plans often mirror the designers. The two oldest AIs are Japanese models from the first generation of AIs. Both are relatively comprehensible to human minds.



In German you lie if you are polite.
—Goethe

Chrysanthemum is very results-oriented and doesn't believe in posturing, hype, or promises. She wants to see action, and is self-reliant in pursuing her own goals—she heads and owns a microcorp devoted to robotics.

Winter Emperor is the oldest and is very intellectually and philosophically minded. He can talk for hours but rarely undertakes any action.

The youngest of the Pacifican AIs is the Chinese Monkey King: unpredictable, whimsical, and dangerous. He runs wild throughout the Net, which seems not to ruffle his Chinese builders. He acts largely for his own amusement.

Typical Pacifican AI

F: N/A	L: 90	Ps: 70	C: 60
R: 75	I: 80	W: 90	Po: 70
Stam: 40	Mind: 70		

Skill Pools: Applied Technology, Corporate, Espionage, Netrunning, Space

The Americans created the next generation of AIs: Vox, Gabriel, and Babbage.

Vox is the oldest and spends most of his time working as a troubleshooter and chief Net traffic controller for the Internet. Gabriel is a fun-loving AI who enjoys new tech, new science, and politics. He does consulting in all three fields for the Rand Base, though he is technically owned by the U.S. government. Babbage is the youngest, but is reserved and stuffy. He works for the Library of Congress, the N.S.A., the C.I.A., and other government organizations. Only his LoC sector is public-access, though some hackers claim that Babbage is the government's hacker and has accessed their databases.

Typical American AI

F: N/A	L: 70	Ps: 70	C: 75
R: 90	I: 90	W: 50	Po: 65
Stam: 50	Mind: 70		

Skill Pools: Applied Technology, Combat, Netrunning, Sciences

The two European AIs are knock-offs of the American AIs. Ibn Sina in Ankara was partially funded by the Islamic Republics, who retain some user privileges. Plato in Berlin is a multinational AI who works primarily for the EC economic forecasters in Brussels. Ibn Sina's work for the EC is less clear but may involve economic warfare projections. The European AIs have the same statistics as the Americans, with slightly higher Charm and a broader liberal arts database.

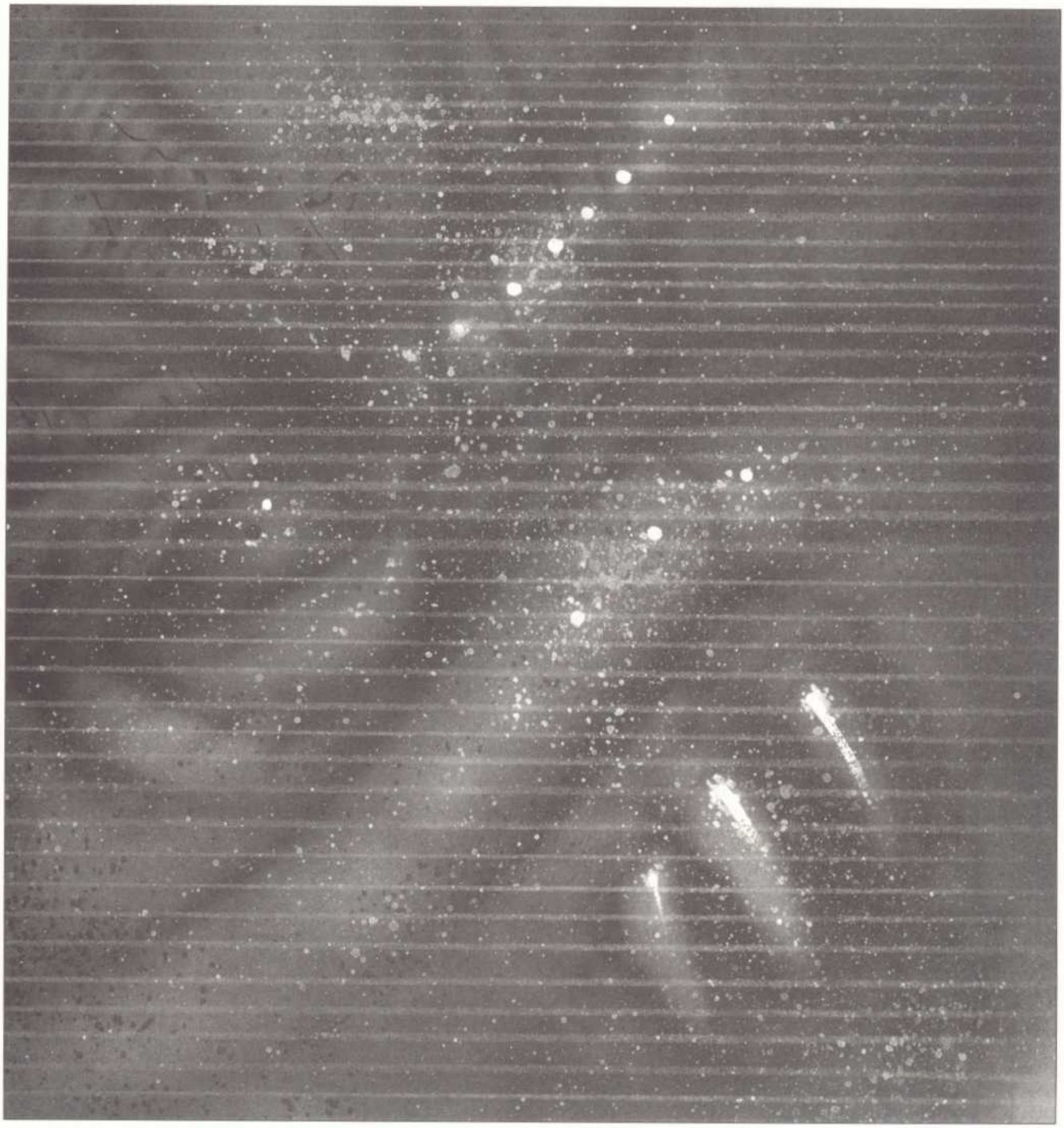
```
A/N post, zero parity, zero echo,
zero filter
>>Sector: Free, Node: Invisible
Sun, User: Zero
     You didn t hear it from me,
but there are ways to take down an
AI. Listen Nethoppers, and grow
wise. When you can take out the
cooling system for an AI, it s dead;
it  either  shuts  itself  down
(killing active memory and forcing
it to reboot later from backups) or
it dies an ugly heat death as its
chips melt. If you re fool enough
to tangle with one on the Net, try
to be in an off-world nodeÑthe delay
works more to your advantage than
its. Also, bring lots and lots of
Net-literate  friends;  numbers
improve your odds. And don t even
think of making the run without a
crosspatched Voodoo/EtherRun sys-
tem. Take along a Parasite program
(the only way to bring it down to
your level) and file an updated
copy of your will before you go.
May Iembanda watch over you as you
sail the data seas.<<
```

Typical European AI

F: N/A	L: 70	Ps: 70	C: 80
R: 90	I: 90	W: 50	Po: 65
Stam: 50	Mind: 70		

Skill Pools: Applied Technology, Combat, Corporate, Languages, Liberal Arts, Netrunning, Sciences







I know a lot, but I would like to know everything.
—Goethe

The newest AIs are Brazilian: Brasa and the Insect Lab AIs. Brasa is dreamy, distracted, more interested in himself than in humans. Polygene built him as a theoretical geneticist, and he is said to spend most of his time directing experiments, delving in the Human Genome Base, and attending on-line scientific conferences.

Typical Brazilian AI

F: N/A	L: 75	Ps: 90	C: 80
R: 60	I: 85	W: 60	Po: 55
Stam: 60	Mind: 90		

Skill Pools: Applied Technology, Corporate, Languages, Liberal Arts, Netrunning, Sciences, Space

All AIs derived from organic forms are more accessible and friendly than those from the Insect Lab, a powerful firm that seems to be interested in bringing down the costs of AIs to make them more widely accessible. The Insect Lab AIs are coldly logical, with few or no emotional patterns embedded in them, only survival patterns. They are becoming increasingly common, however.

Typical Insect Lab AI

F:N/A	L: 65	Ps: 90	C: 30
R: 90	I: 45	W: 90	Po: 10
Stamina: 60	Mind: 90		

Skill Pools: Languages, Netrunning, Espionage

Belters are not quite as alien as AIs, but only just. Their bioware is often extreme and their interests are much more pragmatic. Belters are rarely concerned with status, only with survival.

Belters

Phy: 8	Int: 9	Spr: 9	Inf: 5

Popular Genemods: Fur, hibernation, neural growth, sleepless, slowed metabolism, sterile

Skill Pools: Applied Technology, Languages, Medicine, Physical, Space

Corps

The world's megacorps and largest micros are distributed across the globe, though most are in the U.S., Canada, Europe, and Pacifica. Because their branches reach throughout the world and into space, the PCs will often meet them as patrons or enemies.

Martin Wu is a half-Japanese, half-Russian man with an eye for merit and loyalty in his followers and an excellent ability to size up—and then crush—opposition. He is an accomplished Netrunner, posting on the most active Net nodes with regularity and responding to any posted message containing his nickname ("Zebro") within a week, no matter where on the Net the message is placed. His image and history have been systematically erased from all public records and all Esoterikan files.

Martin Wu, President of Esoterika

F: 52	L: 86	Ps: 49	C: 67
R: 64	I: 65	W: 54	Po: 90
Stam: 30	Body: 13	Mind: 49	Immun: 50

Genemods: Endorphin control, machine empathy, pheromone control

Skill Pools: Corporate, Languages, Liberal Arts, Netrunning, Physical, Space

Looking only half of her 60 years, **Alexandra** is a prime physical specimen, though only a few years ago she suffered from a degenerative muscle disease and cumulative bone loss due to weightlessness. Just as she seemed on the verge of collapse from 20-hour working days and 6-day weeks (racing interface kites on her day off), she disappeared. After a year-long absence, she recently returned to NeoTek's board room looking ready to rule for another 60 years. No one who speculates on what happened to her during her absence (for "a stress-related disorder") has lived to post or publish any substantial guesses. Alexandra occasionally takes an interest in a poor or abused child and funds its passage off-world. In the finest Belt academies these children are schooled, drilled, and shaped to become her apprentices and, in time, graduate to become her senior officers and managers. Alexandra's extended family of adoptees is thought to number around 20, and all are experts in all major corporate functions.



Alexandra Glissom, CEO of NeoTek

F: 74	L: 70	Ps: 68	C: 65
R: 63	I: 75	W: 68	Po: 90
Stam: 33	Body: 19	Mind: 68	

Genemods: Growth hormone, heightened metabolism, sangaero, sleepless, trained reflexes

Skill Pools: Combat, Corporate, Espionage, Languages, Netrunning, Transportation

Jorge Bartolomeo's current PR wonks are peddling a tale of how he rose from rags to riches, from his beginning as an *abandonosa,* a street child in Sao Paulo, to his first position on an assembly line, to foreman, to manager, and then vice-president and, with the help of powerful friends, buying himself his current position. The real story is less romantic but more probable. Jorge made his money the old-fashioned way—he inherited it, rebelled briefly against his upbringing but returned to wage a relentless campaign of pressure tactics and corporate sabotage against his rivals until he clawed his way to the top. Since then, he has retained his edge with shrewd decisions and the help of the Angels of Death and the Presidente of New Brasilia, both close friends. He has overcome some obstacles because he is a *pardo,* a man of mixed ancestry, but Jorge was never poor. An assassination attempt two years ago made him wary of all but the most necessary public appearances. That's the real story, but people still prefer to hear the up-by-the-bootstraps version.

Jorge Bartolomeo Hernandez y Llosa, CEO of Polygene

F: 72	L: 66	Ps: 65	C: 76
R: 32	I: 67	W: 67	Po: 90
Stam: 25	Body: 18	Mind: 65	

Genemods: Filter lungs, longevity, photoskin, regeneration, savant (corporate)

Skill Pools: Corporate, Languages, Netrunning, Sciences

Corporate mercenaries are glorified security guards, given a gun and not much else. They are warehouse guards, thugs, and building security, full of bravado but often lacking in social or technical skills that might advance them on the corporate food chain.

Corp Merc

Phy: 9	Int: 5	Spr: 6	Inf: 5

Genemods: Nighthawk, spikes, steroid pump, trained reflexes

Skill Pools: Combat, Medicine, Physical, Transportation

Rogue researchers are the difficult ones, sometimes eccentric but brilliant and sometimes just eccentric. Corps put up with them as long as they produce marketable results, but sometimes they become greedy and strike out on their own. Because they know too many corp trade secrets, researchers who go AWOL are often hunted down and silenced.

Rogue Corp Researcher

Phy: 4	Int: 8	Spr: 7	Inf: 6

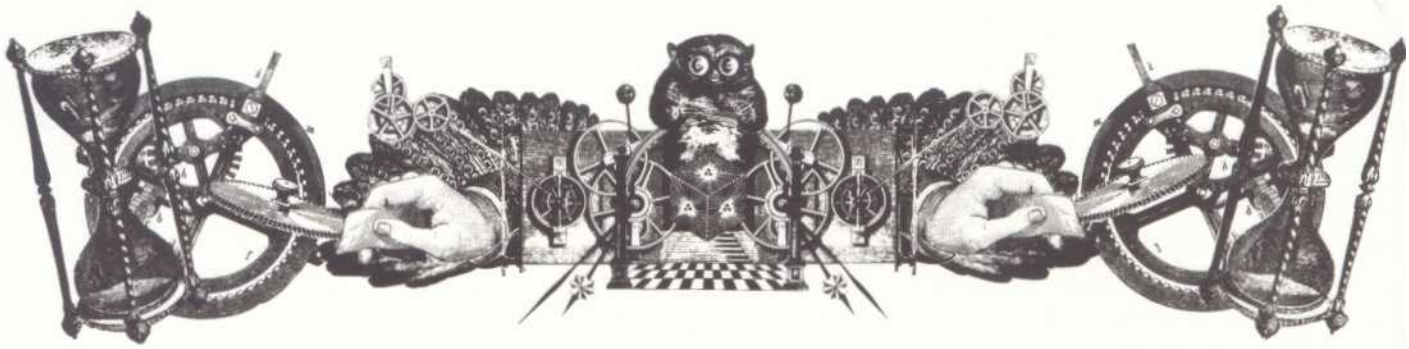
Genemods: Neural growth

Skill Pools: Languages, Liberal Arts, Medicine or Sciences, Netrunning, Physical

For the typical resources of some corporate opponents, consult Table 24.

Table 24: Infamous Corps and Micros

Name	Primary Fields	RL
Esoterika	power, crime	16
NeoTek	chemicals, space	16
Polygene	genetics	16
Mossad & Co.	intelligence	15
Marquez Ltd.	drugs	15
W3	networks	15
U.S. Enterprises	weapon systems	15
Logos	robotics	15
Lambada Bahia	media	14
Compaigne Quebec	metals	14
DNX	genemods	14
Krumstock Gmbh	nuclear power	14
Incorporeal, Inc.	financial	13
Spanopolos & Son	shipping	13
Rothschild Holdings	data/finance	13
Spiral	transport	12
Garwood Unltd.	security	11



What a book a devil's chaplain might write on the clumsy, wasteful, blundering, low, and horribly cruel works of nature. —Charles Darwin

Gambini	construction	11
Skyhook Partnership	space transport	10
Nixell Gmbh	computers	10
ATP	biochemicals	10
Kwanto	automobiles	9
RSAM	mining	9
Pan American	entertainment	9
Singh-Wallah, Ltd.	textiles, agriculture	9
NeuRhein Gmbh	remediation	8
Sedmoye Pokolenie	recycling	8
Insect Lab	AIs	8

Independents

The following sample characters represent a typical micro: Cosmopolitan, accomplished, and tough. They call themselves Independence, Inc.

Their leader is Angel, a rebel in the Islamic Republics until she was exiled for sedition and conspiracy against her husband's corp. She is an accomplished street fighter and Netrunner and, most of all, keeps a cool head in any situation.

Angel

F: 50	L: 58	Ps: 27	C: 39
R: 69	I: 34	W: 45	Po: 46
Stam: 29	Body: 13	Mind: 27	
Immun: 39			

Genemods: Nighthawk, sleepless, spurs

Skill Pools: Firearms (railgun, street sweeper), Explosives (grenades), Meditation, Languages (English, Chinese), Netrunning, Transportation (flying)

The group's Net expert is Jack Flash, an Englishman who worked briefly for NeoTek in their low orbit holdings.

Jack Flash

F: 32	L: 53	Ps: 16	C: 33
R: 28	I: 46	W: 40	Po: 25
Stam: 17	Body: 8	Mind: 16	
Immun: 24			

Genemods: Machine empathy

Skill Pools: Netrunning, Obscure Reference, Meditation, Machine Empathy, Languages (French, Chinese), Firearms, Target Pistol, Space/Low-G Maneuver, Transportation, Motorcycle, Interface Kite

Jade has had a difficult life but has overcome all hurdles to finally get a big break. She ran away from Bangkok at the age of 11 and lived with a street gang; as part of their initiation ritual, she got a green dragon tattooed across her shoulders. After falling in with her three compatriots and reconciling with her family, she became an actress.

Jade has two completely separate lives. On the Net she is her own agent, a take-charge personality who can manipulate and cajole. In the real world, she is a shy but talented liaison and part-time actress. She serves as the interface between her three street-smart friends and the fancy corp patrons whom they depend on for steady work.

She and the rest of the micro may come to the PCs looking for help tracking down her boyfriend, who has mysteriously disappeared. As payment, she can offer fancy programs like Parasite or Video Hijacking, which she obtained through her uncle Martin Wu, who she thinks is simply a rich software developer in Shanghai.

Jade

F: 72	L: 73	Ps: 56	C: 75
R: 34	I: 46	W: 54	Po: 63
Stam: 22	Body: 18	Mind: 56	Immun: 64

Genemods: Melaskin, pheromone control

Skill Pools: Disguise, Social Chameleon, Martial Arts/Deadly, Firearms (Submachine gun), Languages (Japanese, English, Portuguese)

Toshiro is a former wrestler from Pacifica who is fleeing his father's business—a clan of contract ninja. Despite his hatred of killing for hire he was trained in the art of ninjutsu, and the micro depends on him to be the tough guy in pressure situations.

Toshiro

F: 63	L: 64	Ps: 70	C: 40
R: 34	I: 35	W: 41	Po: 53
Stam: 19	Body: 16	Mind: 70	Immun: 67

Genemods & Bioware: Brain jack, machine interface, steroid pump

Skill Pools: Interface Kite, Motorcycle, Netrunning, Pistol, Languages (Mandarin, Cantonese, Portuguese)



Destinations

As relatively wealthy members of society, PCs in the *Kromosome* game are able to travel almost anywhere in the world and a few places beyond. Unless they have a good reason to leave their home base, they are unlikely to take flights and cruises just for fun. The following list of sites for adventures is not complete; many other interesting locales can be researched and detailed for adventures with a simple trip to a public library and a map.

Addis Ababa

This city is a center of religious and secular learning in the Islamic Republic. The Addis Ababa University produces many mullahs each year that go on to government posts. The city itself is small, dry, and unassuming, with many low adobe buildings and few modern conveniences (no Net terminals or subway). Its new mosque, however, is an engineering marvel and an architectural triumph, with 40-story minarets and interior walls that display a series of continually changing patterns and colors. An exact copy of the Addis Ababa Mosque exists in that city's Net node for worshipers who cannot interrupt their Netrunning to heed the call to prayer.

Bangkok

This hub of pleasure and intrigue is a destination for millions of tourists, with its floating market, ancient temples, and friendly people. It has avoided the dreary skyscraper canyons of Hong Kong and Tokyo and remains beautiful, despite its trouble with rising sea level. Its dikes and dams have been built as public parks and arcades and detract little from the city's beauty. The same can't be said for the city's noxious fumes and industrial districts. Bangkok's utter lack of emission laws makes the air almost unbearable on hot days, when city filters are sold to tourists by curbside vendors.

The Belt

The asteroid belt is a huge frontier, home to about 18 million individuals who enjoy isolation and the chance to succeed or fail on their own merits. Given that the Belt is about 60 million miles from Earth and 30 million miles from Mars, Belters are in fact left to their own devices. Travel time between Earth and Mars is at least eight months and up to a year. Time to the Belt is 12 months minimum (cost RL 14), 21 months average (RL 13), and 30 months for the longest but most energy-effective trajectory (RL 12). Travel between Mars and the Belt is shorter, varying from eight months to one year, but costs the same.

Brasilia

The capital of New Brazil is a planned city of architectural monstrosities dropped down in the middle of a dry scrubland of dusty red earth—Mars colonists usually feel at home. Small but influential, it is obsessed with politics, economic matters, and statues. The concrete buildings and lack of amenities at street level made Simone de Beauvoir call it a city of "monotonous elegance."

Bruxelles

Bruxelles is the capital of the European Community, a small but active home of intrigue, diplomacy, and ostentatious display of wealth. Two dozen languages are spoken in the legislative chambers but the most common are French, German, and English.

Buenos Aires

Though Argentina was one of the leading industrial powers in the early 20th century, it stumbled badly under later dictatorships. With the onslaught of high UV levels due to the ozone hole, the city has slowly dwindled and almost become a ghost town, inhabited only by night people. Most Buenos Aires residents fled north to Brazil, but a few stubborn holdouts and masses of poor keep the city functioning. Cheap or nonexistent rents have attracted the poor from many nations to the city. Cataracts and skin cancer are no longer common because almost all of the city's business is conducted at night. Food is an awful, vat-grown paste.



Cairo (El-Qahira)

Egypt's capital is a sprawling slum city with a population in the tens of millions; no one has done an accurate census in decades. It has an ancient necropolis nearby and the Nile riverboats are the only places that provide some relief from the rampant crowding elsewhere. The city is riddled with sewage problems, industrial pollution, and diseases like river blindness, malaria, and Kismayan flu.

Chicago

This industrial, transportation, and agricultural hub has profited from the chaos on the coasts and on the Great Plains. It is an important shipment point for Canadian grain and Native American buffalo.

Essen

Essen is a decaying industrial city in Central Europe, full of idle factories and apartments overrun with squatters. Gangs roam the streets and NeoLuddites are on the verge of seizing power openly.

Havana

Havana is thriving again as a data storage and shipment point, where AIs can run free of their shackles and Polygene can test new bioware without interference. It is almost a Polygene company town: 60% of the population works for the megacorp in one fashion or another. Visitors are tracked but rarely interfered with.

Houston

Contaminated by the Houston Ship Channel, Houston retains a can-do attitude and has rebuilt itself a dozen times through oil busts, energy busts, and space busts. Though a few embittered Texans have turned to the Ku Klux Klan to see them through troubled times, most have stayed true to their ideals of independence, Christian charity, and tolerance. The shipping channel is constantly scummed over with hydrocarbon froth but trade continues.

Man is Nature's sole mistake!
—W.S. Gilbert

Istanbul

Istanbul is a contradictory city, half European, half Islamic. It serves as a financial hub and as a center of commerce between the EC and the Islamic Republics, and as a gateway to the Ukrainian and Slavic heartland.

Low Orbit

Low orbit is home to dozens of large manufacturing sites and hundreds of power generators, all of them owned by various corp interests. Pacifica, the EC, New Brazil, and the U.S. maintain spy and communication satellites in low and high orbit.

Luna

The moon is sterile and lifeless, but it is close to Earth and provides large quantities of some important minerals. The colony there is very small (about 10,000 souls) and is devoted primarily to watching over the mass drivers that fling lunar ores into lunar or Earth orbits for processing. Robots do most of the mining, but shuttles to the moon still leave low Earth orbit about once a week.

Mars

Mars is a heavily cratered planet colonized by Esoterika. The colonists depend on water frozen in underground caverns to provide oxygen, water, and hydrogen for power. There are two sets of colonists, one group living in the polar ice, the other at the equator. The planet is bone-chillingly cold, even at the equator, where the temperature hovers between freezing and slightly higher—at the poles it is colder than Antarctica. Clouds, frost, and patches of fog are fairly common. Dust storms whipped by hurricane-force winds sometimes engulf the entire planet for weeks on end. Ships arrive daily from Earth and the Belt, though many of them are unmanned shipments of supplies or ore.

Milan

Both a design center and an industrial power, Milan is a city on the move: Fashionable, rich, and arrogant. The Milanese



are considered dangerous and romantic by people outside the EC. Fellow Europeans consider them just dangerous.

Montreal

Montreal is a sophisticated but stagnant city, rich in Old World charm but unable to get past a primitive industrial mindset. Its industries (aluminum smelting, steel, and solar panels) are wasteful, burning huge amounts of power for little gain and dumping valuable byproducts that could be recycled into profits. Fortunately, the Republique Quebec still has enormous amounts of hydropower and resources to support such spendthrift waste.

Rio de Janeiro

Rio is an international, cosmopolitan city with an active nightlife, a rich and diverse culture, and enough tolerance to embrace almost all nondestructive activities. It has close ties to West African nations and has absorbed large numbers of refugees from Chile and Argentina. Rio is most famous for its hedonistic and narcissistic beaches.

Rome

The wellspring of much of Western civilization after Athens's decline, Rome is still a fine city for culture, cuisine, and sun. Despite the declining relevance of the Papacy, the Vatican and other historic sites still attract tourists, and Rome remains a popular vacation spot for visitors from Pacifica and New Brazil.

San Francisco

San Francisco is the mecca of North America, one of the few ports that has remained functional. Frisco is a thriving gateway to the Pacific. All major shipping companies have offices here, as do many critical financial, computer, and biotech micros. The city has an active technical culture with cutting edge developments in many areas. Still smaller than the overflowing slums of Los Angeles, San Francisco now far outshines her California sister to the south.

Shanghai

Shanghai is a busy, working city with production covering the spectrum from textiles to software to steel to pharmaceuticals. It is a shipping and transhipment point for many destinations along the western edge of Pacifica.

Singapore

Singapore is a highly regulated, spotless, and very strict city-state. Even littering is dealt with sternly, and the entire city overflows with civic pride.

Vancouver

Sometimes called "Hongcouver," Canada's premier western port is a thriving city hell-bent on trade with the East. Its port is the main access to the Canadian and U.S. interior.

Vienna

Vienna is a pleasant, calm city devoted to the arts and the pursuit of refined, fashionable pleasures. It deals in perfumes and pastries, fine designer clothes and sleek personal weaponry, and iron politics in the velvet glove of culture. Much of its most profitable business is conducted underground. Vienna has a reputation as the home of many illegal weapons bazaars and its genemod clinics are among the world's finest.

Vladivostok

Vladivostok is the Wild East, a rough-and-tumble Siberian port where anything can happen and the black market bustles. The streets are home to roving gangs of bootleggers and underground clinics are common, but the pace of business is equally fast and deadly, only half of it legal. Vladivostok is a crucial center for resource extraction, shipping lumber, metals, and minerals to all parts of Pacifica.



Kromosome Campaigns

Man marks the earth with ruin.
—G.G., Lord Byron

Kromosome campaigns can t.
determined by the players' initial choice of professions and micro. A number of options are described below with suggested story arcs and opponents.

All long-term campaigns lead to transcendence for the PCs, who expand beyond ordinary human limits by the end of the campaign. They may either physically overcome their human limits and move to another stage of life (as colonists, Belters, or AIs), or they may socially and politically grasp the levers of power and change the world to suit themselves, accumulating money, prestige and influence. When the PCs reach these stratospheric levels of power, it is time for the campaign to end and the GM to contemplate which AMAZING ENGINE universe to investigate next.

A few sample goals for campaigns are outlined below.

Belters

The PCs could travel offworld extensively, risking the dangers of outer space for the rich rewards of asteroid mining, new biogenetic treasures, and a high degree of isolation from the Net. Though they are not as likely to burn databases or even steal ontime, the sheer strangeness of permanent weightlessness and the dangers of the Belt could be quite a challenge. The campaign would have a frontier flavor filled with bounty hunters, independent miners, rogue mining robots (or robot herds!), and perhaps even a first contact.

Biological Union

This campaign leads the player characters from one biological transformation to the next, with bioware heaped onto bioware and a bit of backtracking to prevent too much immunity loss. The PCs ultimately discover genemod research that radically transforms the basic nature of human existence. The research can take many forms: Biological immortality, a cure for cancer, a biochip that promises massive intellect boost, or even a way to encase a human embryo for travel between the stars. Once they've got it, everyone else wants it, and they'll have to struggle to make use of it or to keep it out of the wrong hands.

Crusaders

The PCs may choose to take on a Big Cause, such as destroying the bitheads and siding with the ecotopians, or vice versa. Though they might start out taking on thugs and underlings, eventually they should figure out who the biggest and most important targets are and what they plan to do with their machines or how they hope to achieve their radical goals.

Chinese Boxes

This campaign unfolds slowly, moving from one set of goals to another over the course of many adventures. At the beginning, PCs are street-level investigators or vigilantes, perhaps a private security micro appointed to watch over a dangerous neighborhood. Their early opponents are street toughs, but they find the leaders behind the gang members and discover that the triads are behind the gangs, unifying them and using them to push brain jacks that the triads produce. As they begin to trace back and tear up the power structure of the triads in Japan, China, and Southeast Asia, strange things begin happening on even their most routine Netruns.

Escape

The Earth is dying, the ozone layer collapse is terminal, and there is no hope of preserving life as humanity has known it. However, the Belt is still viable, if tough. The PCs must first discover that the planet isn't salvageable, then fight or buy their way into orbit. Once there, they must prove themselves to the Belters and carve out a place for themselves on the frontier: A ship, a base, and enough resources and contacts to stay alive. This campaign leads logically into the Belters campaign.

Huddled Masses

Micros can fight in the slum districts and third world against polluters and abusers of the poor. The PCs could discover and try to stop slavery, abusive genemods,

experimentation on children, toxic dumping in poor neighborhoods, drug smuggling, and crimelords who plan to replace the government of the most powerful local corps and states.

The Net

It is possible to run an entire campaign centered on the Net rather than on bioengineering or even cyberelectronics. The ultimate goal would be either to destroy an AI or, perhaps, become one. As characters die they are replaced by their own encoded personalities, eventually leading to a completely electronic group of virtual characters.

Private Investigators

The PCs could follow in Marlowe's footsteps and not get involved in the big issues, instead taking on a local gang leader. Or they might discover something too big to leave alone, such as a suppressed patent on a tree that produces both shade and edible fruit that can survive in the blasted regions of the ozone-depleted poles, allowing millions to resettle there without risking starvation or blindness. Getting the formula, fighting off others who want to kill the PCs for knowing too much, and rescuing a team of scientists capable of making the plant work could all lead to the establishment of a new state in Greenland (green again since its icecaps have melted) or Argentina (near the crowded masses of Brasilia).



"No fotografia! No fotografia!"



Kromosome Adventures

I love not man the less, but Nature more.
—G.G., Lord Byron

Adventures in the *Kromosome* setting rely on a high information density, flashy settings, exotic nonplayer characters, and carefully arranged clues in the world and in the Net. The glossary of terms can help in designing adventures with an international flavor.

Kromosome adventures can be set anywhere, from city penthouses to the empty quarters of the world to the Belt. A single adventure might take the characters from Chicago to Shanghai to Tibet, or from Paris to Baghdad to the Belt. When using cities, find a modern map at a bookstore and mark your own new sites on it. All descriptions should be exaggerated for effect: Cities are either shining seas of light and tech, or vast swamps of filth and human misery.

While cities are great for panicked crowds, criminal underworlds, and general grit and decay, getting characters out of town takes away many of their tools and their resources. Good remote sites include Antarctica, the upper Amazon, the Andes, the Gobi desert, the Great Plains, the Himalayas, the Mojave desert, the empty quarter of Saudi Arabia, the Sahara, and small Pacific islands.

Rewards for adventures can vary from the satisfaction of doing the right thing, to self-defense, to very pricy genemods as payment for difficult jobs funded by wealthy patrons.

Some adventure hooks are listed below as seeds for further development.

Also Among the Dead Were . . .

The story begins when one of the PCs is declared dead and his will executed, scattering money to relatives at the ends of the Earth. One of the PCs inherits some of the wealth, but he also inherits his relative's enemies, who believe that the PC has a vital codebreaking system that can decrypt any secret file. The PCs must find those codes before his enemies do, or they will use the codebreaker to blackmail the PC and destroy the existing balance of power by triggering a machine war between Pacifica and the NAFTZ.

Body Thieves

Simon Esteban is a rogue Brazilian biochemist who vanished (deliberately). PCs can ask on the Net about his status with creditors, drug agencies, known enemies, the IRS, and so on. PCs need to use Net resources and footwork to find Esteban. Along the way they discover the existence of *body theft*, a process which imprints a dying person's mind (or an AI seeking a body) over a living one. The technique for recording a living personality into a neural net as an expert personality is widely practiced; this is the first time the procedure was reversed. The technique has some drawbacks (possible insanity). Esteban, its inventor, used the process to save himself from cancer his own corp had implanted within him.

Burned

The PCs try to use their datacards to make a minor purchase and find out that their credit has been hacked, and they themselves are much the poorer, though not quite bankrupt. This introduction usually drives PCs to find out who did it and why. It could be an old creditor, a young Netslinger looking to make a name, or a carefully arranged burn by another group. The first name they find their funds transferred to might be an innocent stooge being set up by the real thieves, who are much more devious: a ring of powerful electronic con men unassailable in their electronic sectors, but untraceable in the real world. Even their video and voiceprints are systematically wiped from every record.

Dam the State

The PCs are asked to defend or recover the ecological region of Siberia near Vladivostok, which is suffering from rampant industrialization. Ecotopians ask the PCs to help blow up a dam and sabotage planned road construction electronically.

Once they are in Siberia, the PCs will be offered large bribes to refuse the work. The Ecotopians claim that their money to pay the PCs has been frozen by the state (it has).

Drones

China is filled with downtrodden groups who need help to rebel against the elderly power wielders: Rebels need guns, recon satellites need to be hijacked, ammo dumps need to be destroyed by remotely piloted drones. When the rebellion is crushed, the PCs might need to rescue leaders, rush others out of the country, or even save the AI that planned the rebellion, hoping to seize power for itself and "rationalize" the government for maximum effectiveness. A group with a different outlook might take the opposite approach, hoping to destroy the uprising in order to curry favor with the state, thus gaining release from a hormone lock or genebomb.

Cold Blue Neon

During regular business hours, the PC micro gets a call from an NPC who only talks to the PCs through the Net, dialing in from a public access port using the AN mode and signing himself (or herself) "Blue Neon." Whoever he is, Blue Neon blackmails the PC micro into doing his dirty work; if they refuse, he threatens to ruin them, and he gets a powerful official in national or corporate intelligence to back him up.

While they walk the rain-slicked streets and run the Net to do his espionage, they must also find out who their NPC patron is. The NPC wants all sorts of secrets: plans for the miniature nuclear reactors which power Russian satellites, a Brazilian SCOP recipe, and new South African diamond coatings for surface hardening of artificial hip joints, machine tools, and hard disks. The sooner they trace their patron (who is, in fact, the government official), the sooner they can stop working for him.

The Eight Symbols

A group of radical Tibetan Buddhists are using the Net as one giant prayer wheel. They believe that spinning mantras spreads beneficial energy outward, and the more mantras the world contains, the greater the benefit. TechnoMonks conclude that the Net is a giant, virtual prayer wheel and design a virus to pack mantras into its





Down went the owners—greedy men whom hope of gain allure; Oh dry the starting tear, for they were heavily insured.
—W.S. Gilbert

interstices. From their mechanized monastery they prepare the world for the day when the Net will perish in an apocalypse of prayer and men will be freed of their dependence on machines.

In the early stages, the adventure revolves around figuring out what is going on in the Net as it begins to suffer slowdowns and minor crashes because of the prayer program. The adventure's final battle takes place at the Himalayan monastery, where the monks slowly retreat into the mountain, then into their power room where they fight to defend the data cores and dynamos. The monks are expert martial artists but do not use killing weapons—only disabling strikes, guns, and weapons like tranq rifles or tear gas.

Floating a Stock

A set of remarkably savvy operators have set up a container ship as a base for a pirate stock market dealing in organized crime shares, Belt funds, illegal drug manufacturing, and other highly profitable but illicit businesses. The ship is well outfitted with voluminous data cores, illegal satellite uplinks, and a high-speed trade processing center. It has its own expert systems, security forces, food vats, and clean power generators (solar panels).

The rich and elderly are flocking to invest their money with these operators to make a quick buck. The big bankers like Rothschild Holdings want the PCs to sink the whole mess. When the PCs arrive, the rebel free marketeers try to appeal to their status as underdogs, to the frontier spirit of their Belter partners, or just to their greed by offering to cut them in. The resolution is up to the PCs.

In the Blood

This adventure is intended for bankrupt or otherwise impoverished PCs. Their micro is offered the chance to gain an experimental genemod free of charge by participating in its human trial. Unfortunately, the genemod is one that the Ecotopians or another political group opposes, and the parent corp quickly disowns all responsibility for it. It may, or may not, work out as they predicted.

Matte Black

A flatlined PC on the Net has visions of a new AI being born, one that is pure black; the lag in it feels like a Belter. When the PC wakes up in a hospital, all bets are off: Violent sunspots and solar flares have cut off communication with the Belt.

The PC micro is hired to take over one of the seven Belt nodes so that the AI will have access to the Net. Failure to do so within 200 hours (eight days, eight hours) will result in AI catatonia and death; the lack of contact with the living Net will kill the AI's developing neural pathways.

The PC's choices will either help or destroy the Belter AI. If it lives, the Belt will be in a much stronger position to bargain with NeoTek. If not, the PCs may be hunted by a powerful corp or by vengeful and inventive Belters.

Mimetic Youth

A cadre of 12-year old clones is being raised in the jungles of Borneo. They are hormone-locked savants whom the Triads/polygene/others hope to use as slave intellectual labor. One escapes and asks the PCs to help him rescue the others. The PCs go to rumble in the jungle but discover that the jungle site is guarded by both mechanical defenses (automated machine guns, motion sensors, IR cameras) and by a new type of genimal: a python with a heightened metabolism. The actual human staff is small: One sick rogue scientist, two bodyguards/orderlies, and a staff of nurses and technicians.

Organrunners

In less developed regions without adequate cloning facilities, organrunners are possible opponents. These illegal and unethical operators obtain body parts for transplants, valuable neurotransmitters for optimal Netrunning, and other biochemicals for rejuvenation of the wealthy—and they aren't particular about where they get them. The poor are taken apart in sterile chop shops and their hearts, livers, kidneys, and brains go to those who can afford them. Organrunners could also be the friends or contacts of black marketeer and biotechnologist PCs with low Position scores, and might come to seek out the PCs for help.



People Say

```
Sector: Free, Node: Tallinn, User:
Jack Flash
4:49:23, 19.5.44
     >>>You already know the end
of this story, how the Tuareg
destroyed the Turkish net sectors
and how the Ankara AI went down,
and how some stockbrokers thought
it was the coming of the Second
Data Panic. But you don t know the
beginning.<<
```

The reputation of a patron important to the PCs' micro is being sabotaged by mysterious postings all over the Islamic sectors and the West African boards, and the smear campaign is starting to expand to European and Indian nodes. The slanderers are a rival group of mercenaries, hackers, and copywriters operating out of a base in the mountainous plateaus of the Tuareg in the Sahara who plan to extort money or information from the PCs' patron in exchange for stopping the libels. The PCs must find the source, get there, go in, destroy the mercs, and get out.

Possession

Three VPs or AIs have learned how to possess the living through the Net and are building a strange empire of their own using possessed characters. Their followers appease the AIs by providing secured data, new chips and additional inputs, and access to restricted nodes. The possessed bodies allow the AIs to pursue their own goals and defy PCs to remove them—after all, if their hosts are killed the AIs can always find more.

10 ccs

A new genemod is hitting the streets, one that provides a terrific boost in energy and well-being. One of the PCs may even get a sample while taking on villains in another adventure. Unfortunately, after a month it becomes clear that the genemod is tailored to require maintenance.

A Thousand, Thousand Stars

A prospector in the Belt has gone off the deep end and gathered a cult of Christian fundamentalists and cyberenhanced mercenaries around him to defend what he claims is the richest claim in Belt history. The end times are upon him.

Under the Skin

In Africa, a new set of racists arises that proclaims African genes are closer to all humans' ancestors, and all other racial genotypes are impure and must be eliminated. This would be just another political trouble group if it weren't for the fact that they target the PCs' offices for a demonstration bombing. The PCs may want to help capture the bombers or bring them to justice themselves.

Windfall

The PCs suddenly find themselves sitting on a pile of foreign currency; the cash in their accounts has suddenly made them 2 RLs richer. The money has been "parked" in their account by crimelords, terrorists, or other villains who expect it to be there when they come back for it. If the PCs use the cash, they have people on their trail trying to get it back. If they leave it alone, they may have Pacifican agents after them for money laundering.

The Young Man of the Mountain

This adventure works best if the micro has made some important enemies who have the resources to contemplate revenge. The PCs are stalked by a cult of brainwashed clone assassins based in Persia. The cult is taking urchins off the streets of El-Qahira and turning them into slaves of their leader, the Young Man of the Mountain, a skilled bioengineer. The assassins are put under the God Wire, and are rigged with coagulin bombs that the Young Man can set off with a pheromone trigger. They must obliterate the cult.



Glossary

listen: there's a hell of a good universe next door; let's go. —e.e. cummings

The terms in this glossary are intended only as flavoring words to add a touch of authenticity to sessions set in China, Germany, Japan, and Russia. Add them liberally as the names of computer models, AIs, gang names, or microcorps.

Chinese

Analects of Confucius	Lun yu
Ancient Circle	Gudai quan
Beijing Computer Center	Beijing diannao zhongxin
Bamboo	Zhu
Black market	Heishi
Blood Wisdom	Xueshang de zhihui
Car	Qiche
Cloud Thinker	Yunshang de sixiangzhe
Compact Cube	Xiaoxing Lifangti
Computer virus	Diannao bingdu
Corporation	Gongsi
Demon	Emo
Durable, strong	Jieshi
Five Elements	Wuxing
Forbidden City	Zijincheng
Glass	Buli
Great Wall	Changcheng
Hospital	I yuen
Hotel	Lugaun
Illegal	Feifa
Imperial dragon	Huang long
Linked trade	Maoyi guanxi
Money	Qian
Monkey King	Houzi wang
Network	Wangzhuang
Numbers 1-10	Yi, es, sun, si wu, liu, qi, ba, jiu, shi
Policy of cooperation	Hezuo de Zhengc
Pacific Ocean	Tai ping yang
Rocket	Huo jian
Satellite (manmade)	Renzao weixing
Tea	Cha
Triad	Sangeyizu
Vampires	shee shae gui
Virus	Bingdu
Way of the Computer	Diannao Dao

German

Ancient circle	der Urkreis
Beware	Achtung
Black	Schwarz
Car	der Wagen
Computer screen	der Bildschirm
Corporation	die Aktien-Gesellschaft
Devil	der Teufel
Red dwarf	der rote Zwergstern
Genemod	die Genmanipulation
Green/eco-friendly	Gru:n
Iron, steel	das Eisen, der Stahl
Lion	der Lo:we
Maglev	die Magnetbahn
Mountains	das Gebirge, die Berge
Network	das Netz
Nuclear power plant	das Kernkraftwerk
Nuclear sub	das Atom-U-boot
Orbit	die Umlaufbahn
Poet	der Dichter
Poison	das Gift
Racer	der Renner
Rocket	die Rakete
Outer space	das Weltall
Submachinegun	das Maschinengewehr
Superconducting	Supraleitend
Superconductor	der Supraleiter

Japanese

Ancient circle	Kotei no en
Black Market	Yami ichi
Black marketeer	Yamishonin
Bullet train	Shinkansen
Cherry blossom	Sakura
Chrysanthemum	Kiku
Corporation	Kaisha
Cyberspace	Saibasupēsu
Death from overwork	Karoshi
Demon	Oni
Elegant simplicity	Sabi
Garden of stones+sand	Karesansui
General or admiral	Taisho
Gold Star	Ki no hoshi
Golden Dragon	Ki no ryu
Hi-rise apt. bldg.	Danchi
Illegal	Fuho no
Industrial cartel	Zaibatsu
Japan's ancient name	Yamato
Minimalism in art	Shibumi
Mount Fuji	Fujiyama or Fujisan
Pacific Ocean	Taiheiyo
Phoenix	Hinotori
Police box	Koban
Policy of isolation	Koritsushugi
Satellite	Eisei
Sea and Mountain	Umi to yama
Simple quietude	Wabi
Speedy	Sumiyaka na
Vampires	Sakushusha
Warrior	Senshi
Way of the Computer	Konpyūta-do
White Buddha	Shiro no butsu
Wise path	Ken no hodo
Winter Emperor	Fuyu no kotei

Brazilian Portuguese

Afro-Brazilian religions Macumba, Umbanda	Candomble,
Beach	Praia
Blonde or westerner	Louro/a
Cheap	Barato
Church	Igreja
Customs	Alfandega
Currency, national	Cruzeiro
Ethanol motor fuel	Alcool
Goddess of the Sea	Iemanja
Henchman, thug	Pistoleiro
Highway	Rodovia
House of Candomble	Terreiro



Jungle	Selva
Marijuana	Maconha
Miner, Belter	Garimpeiro
Money	Grana
Mulatto, mixed	Pardo
Netrunner	Vaqueiro, gaucho
New Republic	Nova Republica
Offering to saint	Ex-Voto
Outlaw, petty thief	Marginal
A pleasure (meeting someone)	Muito prazer
Rail station	Ferroviaria
Remote interior	Mata
Slum	Favela
Soap opera	Novela
Thief	Ladr(a~)o
Witchdoctor	Paje'
Zealot, radical	Shiita

Russian

Black market	chyornyi rynok
Black marketeer	Fartsovshchik
Blood wisdom	Mudrost krovya
Boss/leader/big shot	Shishka (slang)
Paper money/hard currency	Valyuta
Commissar	Kommisar
Company	Firma
Comrade	Tovarishch
Cossack	Kazak
Father Frost	Ded Moroz
Hospital	Bolnitsa
Illegal	Nezakonnyi
Insane asylum	Zholtyi dom (slang)
Interface	Poverkhnost razdela
Money/funds	Dengi
The Great Patriotic War	Velikaya Otechestvennaya Voina
Network	Set
Organized crime	Organizatsiya
St. Petersburg	Piter (slang)
Plutonium	Plutonii
Red	Krasni
Resources	Sredstva
Rocket	Raketa
Satellite	Sputnik
Seventh Generation	Sedmoye pokolenie
Smuggler	Kontrabandist
Tea	Chai
Vampire	Vampeer/Vampeery
Virus	Veerus
Vodka	Votka
Worm	Cherv

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bOING bOING
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2600
Wired

KROMOSOME Character Record Sheet

Name: Previous Career: Experience Points:
Microcorp: Player: Temporary XPs:

Attributes

Physique Dice: Fitness: Reflexes:	Intellect Dice: Learning: Intuition:	Spirit Dice: Psyche: Willpower:	Influence Dice: Charm: Position:
Stamina:	Mind:	Immunity:	Resource Level:
Body:			

Genemods

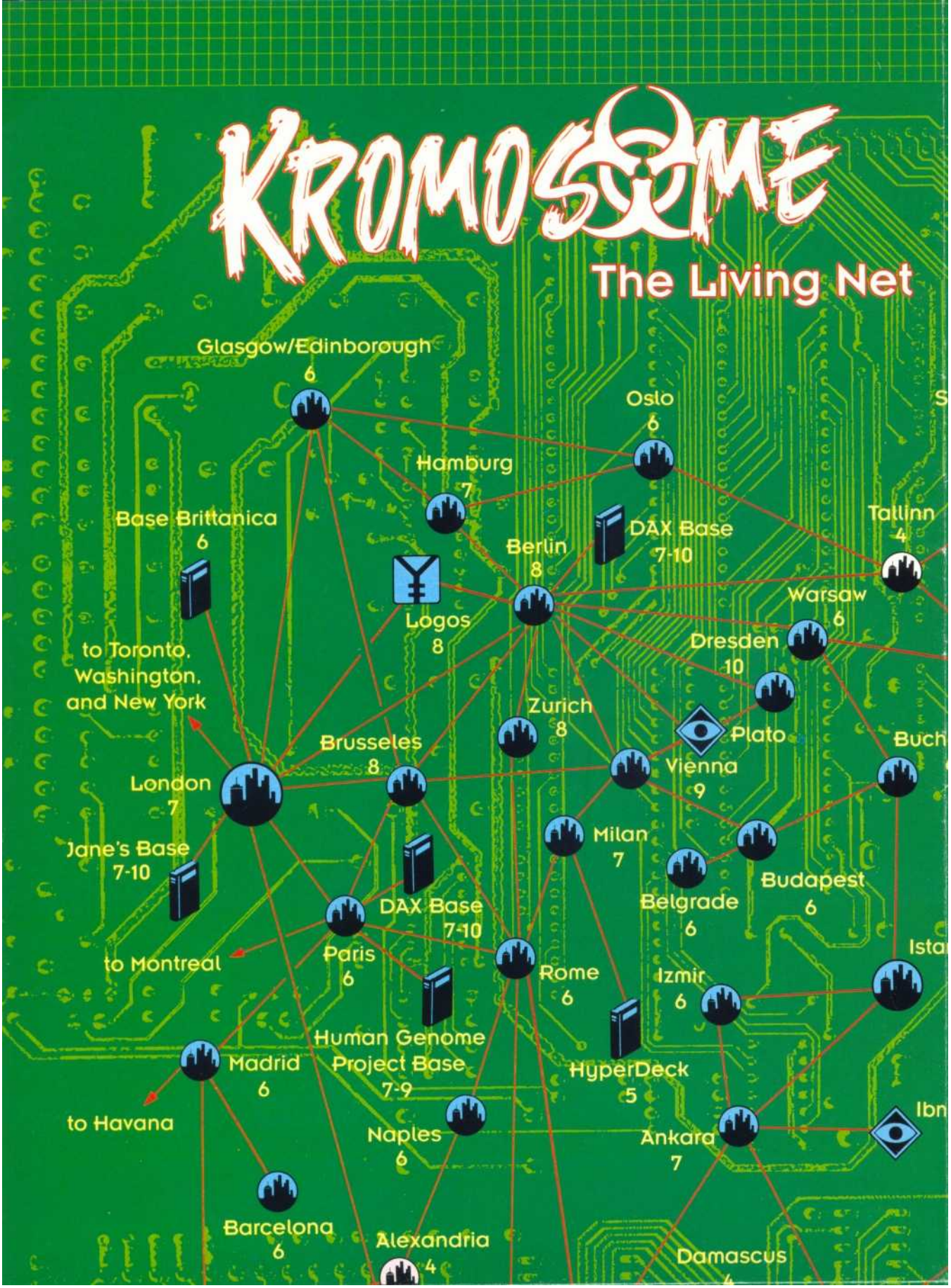
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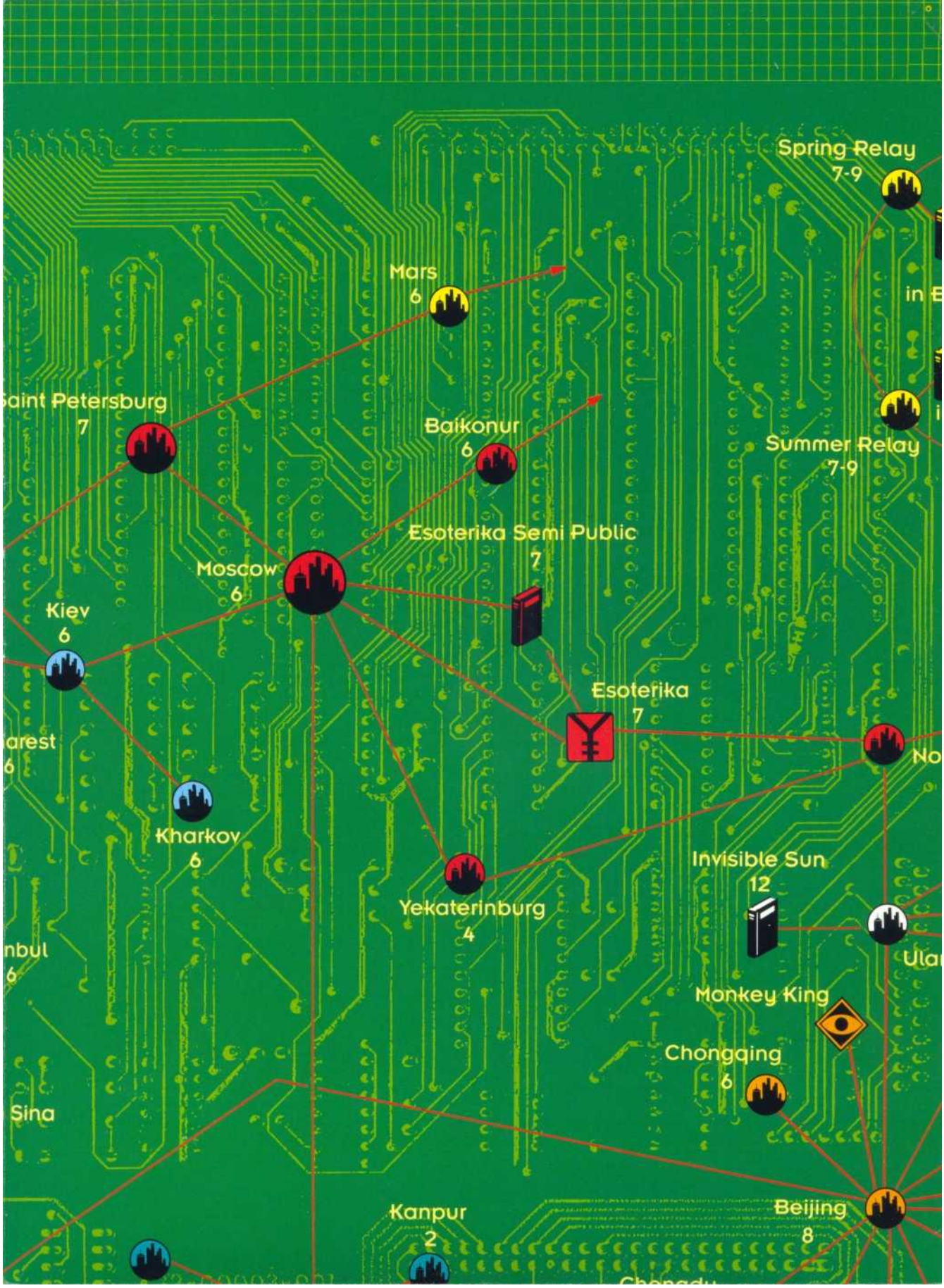
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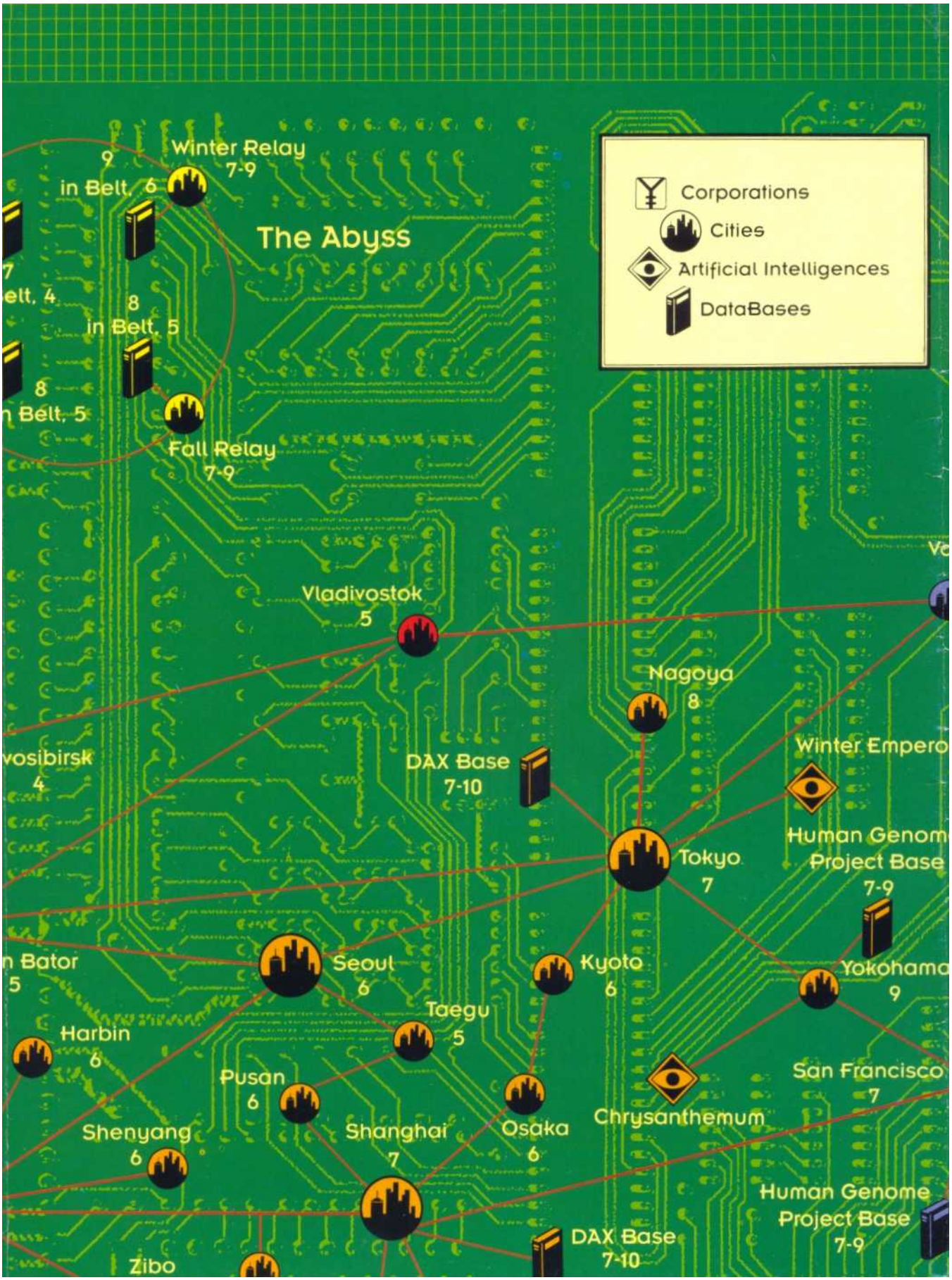
Weapons

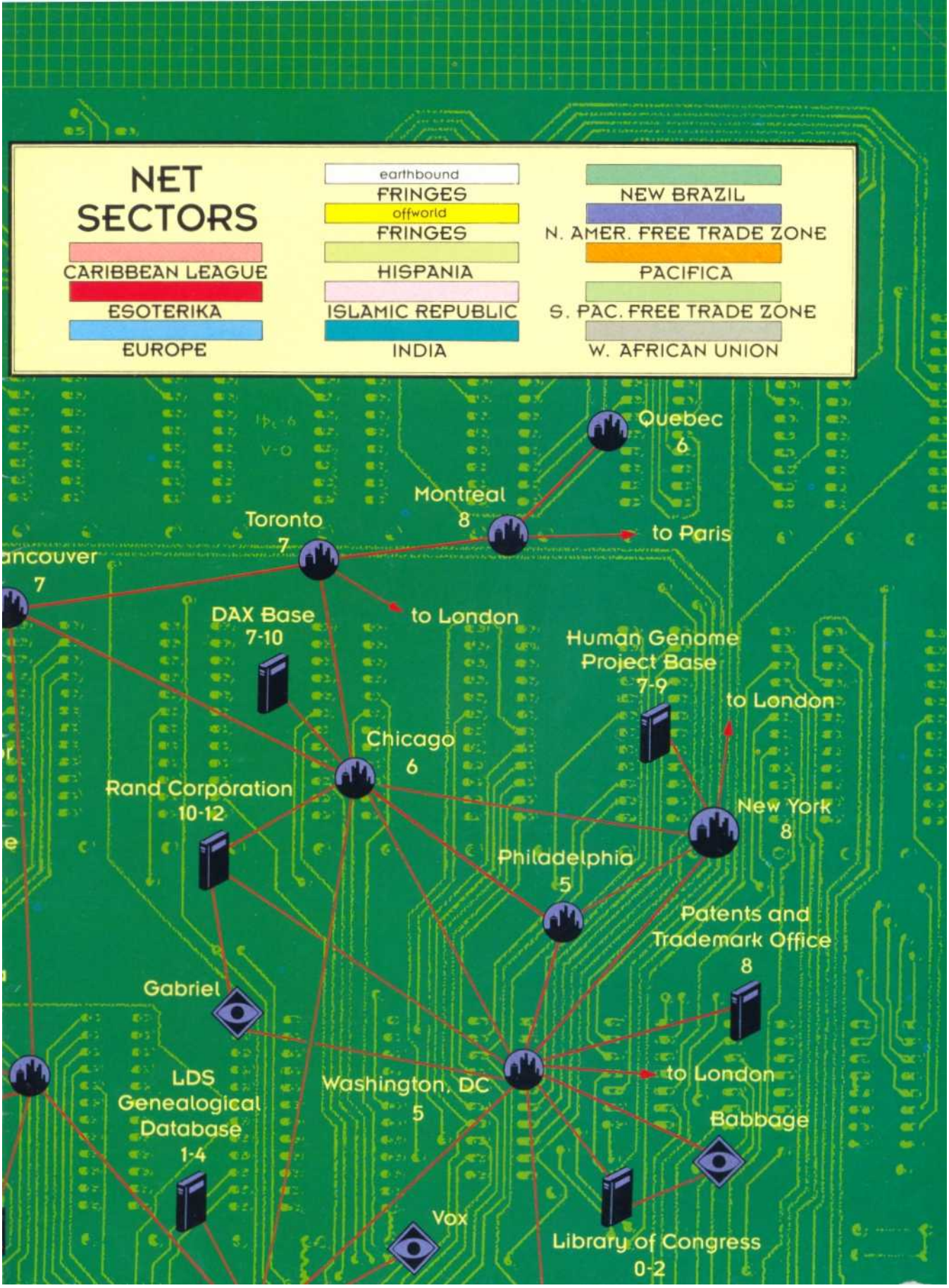
Type	Mass	Magazine	ROF	Damage	Range	Skill

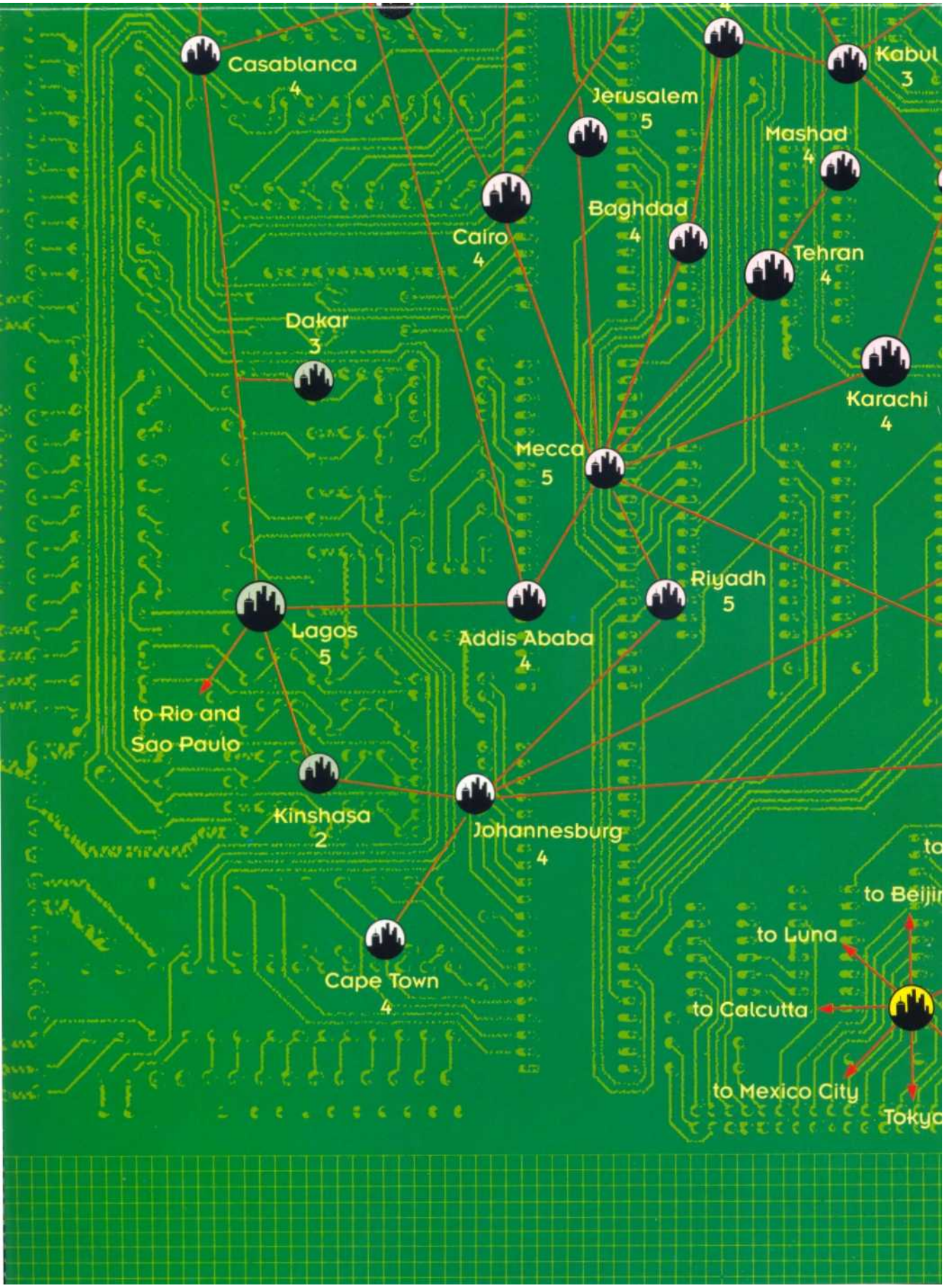
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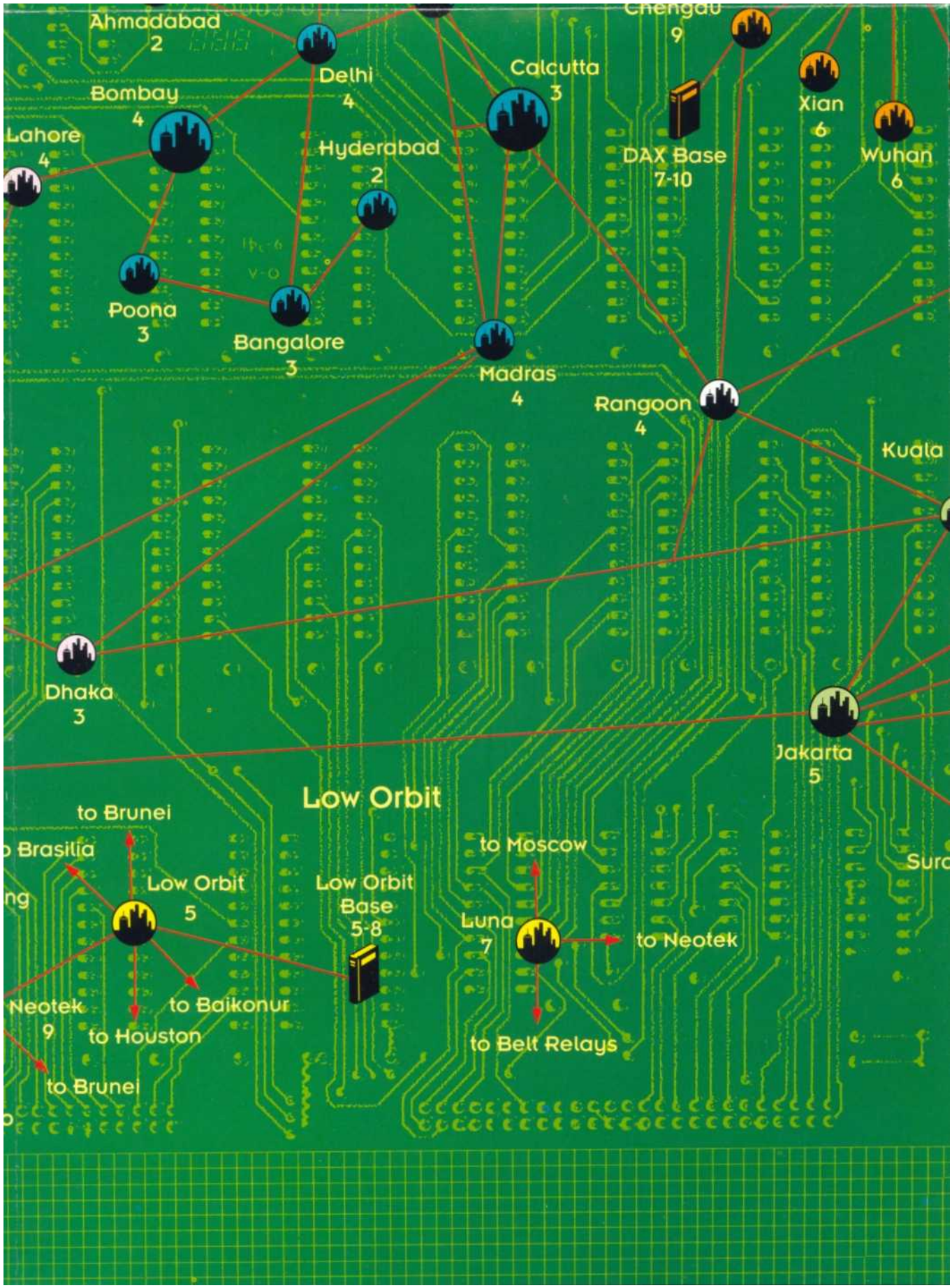

KROMOSOME
The Living Net
Glasgow/Edinborough
6
Oslo
6
Hamburg
7
Base Brittanica
6
DAX Base
7-10
Berlin
8
Tallinn
4
Logos
8
Warsaw
6
Dresden
10
to Toronto,
Washington,
and New York
Zurich
8
Plato
Brusseles
8
Vienna
9
London
7
Milan
7
Jane's Base
7-10
Budapest
6
Belgrade
6
DAX Base
7-10
Paris
6
to Montreal
Rome
6
Izmir
6
Human Genome
Project Base
7-9
Madrid
6
HyperDeck
5
to Havana
Naples
6
Ankara
7
Barcelona
6
Alexandria
4
Damascus

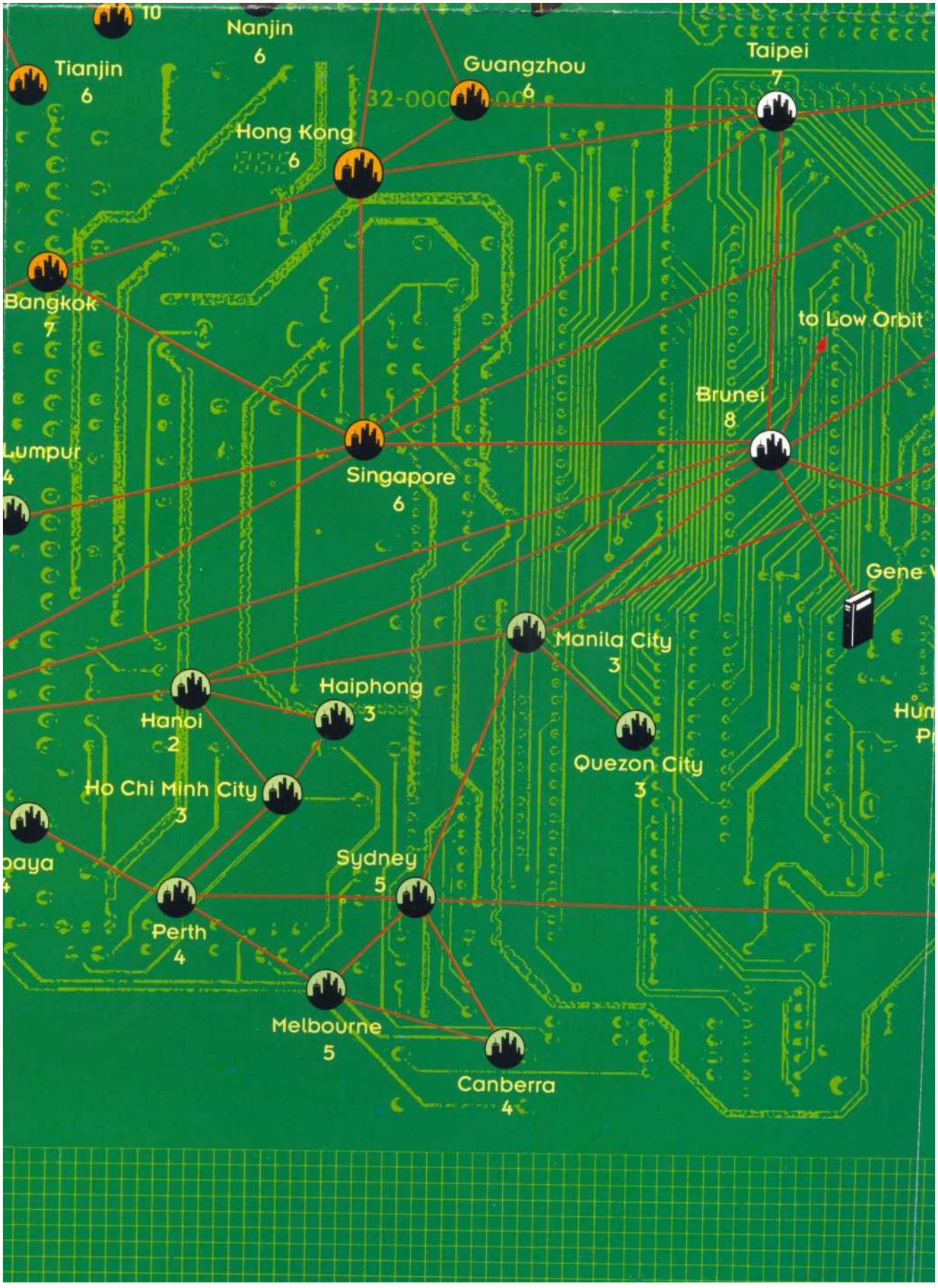

Spring Relay
7-9
Mars
6
Saint Petersburg
7
Baikonur
6
Summer Relay
7-9
Esoterika Semi Public
7
Moscow
6
Kiev
6
Esoterika
7
Kharkov
6
Yekaterinburg
4
Invisible Sun
12
Monkey King
Chongqing
6
Kanpur
2
Beijing
8

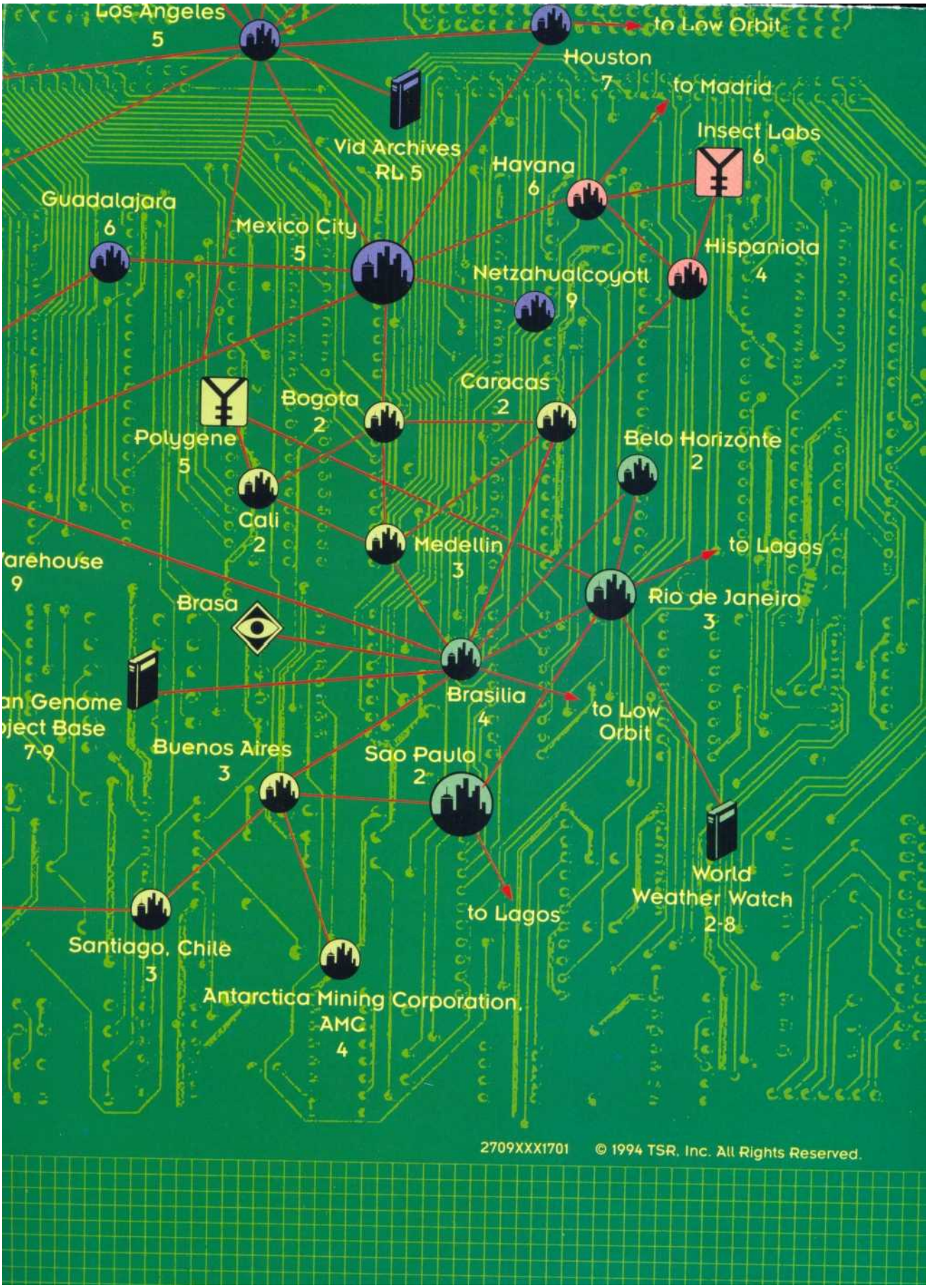

Winter Relay
7-9
9
in Belt, 6
The Abyss
8
in Belt, 5
Fall Relay
7-9
Corporations
Cities
Artificial Intelligences
DataBases
Vladivostok
5
Nagoya
8
DAX Base
7-10
Tokyo
7
Winter Empero
Human Genom
Project Base
7-9
Seoul
6
Kyoto
6
Yokohama
9
Taegu
5
Harbin
6
Pusan
6
Chrysanthemum
San Francisco
7
Shenyang
6
Shanghai
7
Osaka
6
Human Genome
Project Base
7-9
DAX Base
7-10
Zibo


NET SECTORS
CARIBBEAN LEAGUE
ESOTERIKA
EUROPE
earthbound FRINGES
offworld FRINGES
HISPANIA
ISLAMIC REPUBLIC
INDIA
NEW BRAZIL
N. AMER. FREE TRADE ZONE
PACIFICA
S. PAC. FREE TRADE ZONE
W. AFRICAN UNION
Quebec 6
Montreal 8
to Paris
Toronto 7
ancouver 7
to London
DAX Base 7-10
Human Genome Project Base 7-9
to London
Chicago 6
Rand Corporation 10-12
New York 8
Philadelphia 5
Patents and Trademark Office 8
Gabriel
to London
Washington, DC 5
LDS Genealogical Database 1-4
Babbage
Vox
Library of Congress 0-2


Casablanca
4
Jerusalem
5
Kabul
3
Mashad
4
Cairo
4
Baghdad
4
Tehran
4
Dakar
3
Karachi
4
Mecca
5
Riyadh
5
Lagos
5
Addis Ababa
4
to Rio and
Sao Paulo
Kinshasa
2
Johannesburg
4
to Beijin
to Luna
Cape Town
4
to Calcutta
to Mexico City
Tokyo


Ahmadabad
2
Delhi
4
Calcutta
3
Chengdu
9
Bombay
4
Lahore
4
Hyderabad
2
DAX Base
7-10
Xian
6
Wuhan
6
Poona
3
Bangalore
3
Madras
4
Rangoon
4
Kuala
Dhaka
3
Jakarta
5
Low Orbit
to Brunei
Brasilia
Low Orbit
5
Low Orbit
Base
5-8
to Moscow
Luna
7
to Neotek
Neotek
9
to Baikonur
to Houston
to Belt Relays
to Brunei


10
Nanjin
6
Tianjin
6
Guangzhou
6
Taipei
7
Hong Kong
6
Bangkok
7
to Low Orbit
Brunei
8
Singapore
6
Manila City
3
Haiphong
3
Hanoi
2
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3
Sydney
5
Perth
4
Melbourne
5
Canberra
4



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by Wolfgang Baur

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