

*Body of Stone:* Your body is made up of rock, either as a solid mass or broken up into gravel. Doesn't Breathe [20]; DR 5 [25]; Fragile (Brittle) [-15]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Homogenous; No Blood) [45]; Pressure Support 3 [15]; Sealed [15]; Vacuum Support [5]. *140 points.*

*Body of Water:* Your body is made up of water or a liquid that can be mixed with water. Amphibious [10]; Constriction Attack [15]; Doesn't Breathe [20]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse) [100]; Invertebrate [-20]; Pressure Support 3 [15]; Slippery 5 [10]; Vulnerability (Dehydration  $\times 2$ ) [-10]. *170 points.*

*Body of Wood:* Your body is made up of wood; this can apply to either a wooden figure or a living tree. DR 2 [10]; Injury Tolerance (Homogenous; No Blood) [45]. *Notes:* If not a living tree, add Doesn't Breathe [20]; Fragile (Combustible) [-5]; Immunity to Metabolic Hazards [30]; Pressure Support 2 [10]. *55 points (living) or 110 points (nonliving).*

## Energy

Beings made out of cohesive energy are basically a variant of elementals, but they're usually science fiction rather than fantasy (though it's hard to make the science rigorous). Often they're portrayed as evolutionarily advanced races and/or inhabitants of outer space, perhaps feeding on sunlight or cosmic radiation. They can be affected by conditions and technology that affect the energy that makes them up; for example, beings of light can be wounded by lasers, reflected by mirrors, or absorbed by dark materials (treated as entanglement). This adds the Elemental power modifier (**GURPS Powers**, p. 27) to Injury Tolerance (Diffuse).

*Body of Electricity:* ST 0 [-100]; HP+10 [20]; Affected by Magnetism [-1]; Cannot Speak [-15]; Doesn't Breathe [20]; Electrical [-20]; Flight [40]; Generator [1]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse; Elemental, -10%) [90]; No Legs (Aerial) [0]; No Manipulators [-50]; Pressure Support 3 [15]; Signals (Electrical Pulses) [15]; Taboo Trait (Fixed ST) [0]; Vibration Sense (Active Electroreception) [10]. *Notes:* For ST 0 beings with the Generator perk, sustained power output in watts is  $(HT \times HT)/5$ , and short-term exertions require a HT roll. *55 points.*

*Body of Light:* ST 0 [-100]; HP+10 [20]; Detect (Light; Analyzing, +100%; Reflexive, +40%) [24]; Doesn't Breathe [20]; Flight (Space Flight, +50%) [60]; Illumination [1]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse; Elemental, -10%) [90]; Mute [-25]; No Legs (Aerial) [0]; No Manipulators [-50]; Pressure Support 3 [15]; Signals (Blinker) [15]; Taboo Trait (Fixed ST) [0]; Vacuum Support [5]. *105 points.*

*Body of Sound:* ST 0 [-100]; HP+10 [20]; Doesn't Breathe [20]; Flight [40]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse; Elemental, -10%) [90]; Invisibility [40]; Mimicry [10]; No Legs (Aerial) [0]; No Manipulators [-50]; Pressure Support 3 [15]; Sonar (Extended Arc, 360°, +125%) [45]; Taboo Trait (Fixed ST) [0]. *160 points.*

## Postmortal

Several meta-traits reflect being a dead person who still walks the Earth, or haunts part of it. The existence and condition of the remains dictate which meta-trait to use. All omit

## Worked Example: Skeletal Bodies

Alice Fong, when alive, had ST 8, stood 5'3", and was Overweight at 150 lbs. After her death, she became a walking skeleton. Her corresponding average weight is 115 lbs. (150 lbs. divided by 1.30). Dividing this by 4 gives 29 lbs.; applying the 2/3 multiplier for Skinny gives 19 lbs. The corresponding HP score for an Unliving character is 11. The ST score is the same – but Alice has -2 to ST to resist knockback, for effective ST 9.

traits that might be expected but aren't universal – notably Doesn't Sleep, Fragile (Unnatural), Not Subject to Fatigue, and Unhealing.

Some remains weigh less than the living person: Divide weight by 4 for desiccated bodies or skeletons (skeletons are also Skinny), by 25 for ashes. Retain the original volume and SM (if compacted, ashes have -3 to SM). For skeletons and ashes, the original weight is the weight *before* applying Skinny, Overweight, Fat, or Very Fat.

*Ashen Undead:* The ashes of someone who was burned to death or cremated, in a semi-cohesive cloud. Doesn't Breathe [20]; Doesn't Eat or Drink [10]; High Pain Threshold [10]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse; No Eyes) [105]; Sterile [0]; Temperature Tolerance 10 [10]; Unaging [15]. *200 points.*

*Intact Undead:* A dead body that hasn't decayed significantly. Doesn't Breathe [20]; High Pain Threshold [10]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Unliving) [20]; Sterile [0]; Supernatural Features (No Body Heat; No Pulse; Pallor) [-20]; Temperature Tolerance 10 [10]; Unaging [15]. *Notes:* Doesn't Eat or Drink [10] and Injury Tolerance (No Blood) [5], though common, are absent in the archetype: the vampire. Potential Form (Rotting Undead) [0] is also widespread, but some entities are mystically preserved. *85 points.*

*Mummified Undead:* A body that has dried out rather than rotting. Appearance (Monstrous; Universal, +25%) [-25]; Doesn't Breathe [20]; Doesn't Eat or Drink [10]; Fragile (Combustible) [-5]; High Pain Threshold [10]; Immunity to Metabolic Hazards [30]; Injury Tolerance (No Blood; No Brain; No Vitals; Unliving) [35]; Social Stigma (Dead) [-20]; Sterile [0]; Temperature Tolerance 10 [10]; Unaging [15]. *80 points.*

*Rotting Undead:* A body that has been dead long enough to decay significantly. Appearance (Monstrous; Universal, +25%) [-25]; Bad Smell [-10]; Doesn't Breathe [20]; Doesn't Eat or Drink [10]; High Pain Threshold [10]; Immunity to Metabolic Hazards [30]; Injury Tolerance (No Blood; Unliving) [25]; No Sense of Smell/Taste [-5]; Potential Form (Skeletal Undead) [0]; Sexless [-1]; Social Stigma (Dead) [-20]; Temperature Tolerance 10 [10]; Unaging [15]. *59 points.*

*Skeletal Undead:* A body that has been reduced to bones, held together by dried tendons or magic. Basic Speed+1.00 [20]; Appearance (Monstrous; Universal, +25%) [-25]; Cannot Float [-1]; Doesn't Breathe [20]; Doesn't Eat or Drink [10]; DR 2 [10]; Fragile (Brittle) [-15]; High Pain Threshold [10]; Immunity to Metabolic Hazards [30]; Injury Tolerance (No Blood; No Brain; No Eyes; No Vitals; Unliving) [40]; No Sense of Smell/Taste [-5]; Sexless [-1]; Skinny [-5]; Social Stigma (Dead) [-20]; Temperature Tolerance 10 [10]; Unaging [15]; Vacuum Support [5]; Vulnerability (Crushing  $\times 2$ ) [-30]. *68 points.*

# CHAPTER THREE

# CHOOSING TRAITS

After making the initial choices, it's time for a full racial design. Just as with a new invention (pp. B473-474), this involves two steps: coming up with a concept and then creating a model – a racial template. Building the template includes figuring out all the point costs involved and summing them up. This chapter discusses the “how to”; for examples, see Appendix B.

Not all character traits work well in racial design. Traits such as Dwarfism and Lame are *defined* as individual rather than racial. Many social traits – especially those reflecting relationships to specific people, like Allies and Enemy – fit individuals rather than populations. Traits that alter the flow of the game – such as Extra Life, Luck, Serendipity, and Weirdness Magnet – are primarily designed to apply to individual characters, and it's also hard to rationalize their being inheritable.

## CONCEPTUAL DESIGN

For a race to make sense, it needs a unifying concept – a single theme that all of its traits reflect, so that they're consistent with each other. Usually, no one trait will capture this. Rather, it's a more abstract idea reinforced by *several* crucial traits without being fully defined by them.

It's important to make sure that secondary traits are consistent with the high-priority traits. But this is only a tool for making sure they're consistent with the basic concept. And it's best to be cautious in adding other traits, to avoid complicating the design and obscuring its basic idea.

### FITTING THE RACE TO THE CAMPAIGN

Even more basically, a *campaign* has a setting and a theme.

The setting mainly provides limits on what kinds of races are plausible. Some of these are physical: A campaign set in an asteroid belt mining community makes it hard to have plausible aquatic life forms or water spirits. Other limits stem from the way the world works. In a preindustrial setting, digital intelligences and cybershells don't fit (though there might be artificial beings such as Talos, the bronze giant who guarded Crete in Greek legend). In a near-future technothriller, there won't be spirits or magically created beings (though in a cyberpunk campaign, analogs of both might exist in cyberspace). Nonhuman races are part of the fantastic aspect of a world, and need to fit the premise that supports that.

The theme may make some kinds of races necessary. For example, in an apocalyptic campaign where advanced technology threatens human survival, robots will be designed for combat functions, and many are likely to be vehicular rather than humanoid. In a campaign about fear of the unnatural, subtler robots may impersonate people: technological doppelgangers

that outwardly appear human. In a campaign about civil rights and political oppression, robot workers might petition for self-ownership or seek protection from human mobs; they may be approximately human-shaped but visibly mechanical. Different robot “races” would fit these different campaigns.

In a tightly focused campaign, races may exist only to play roles that support the theme, and be narrowly limited to such roles. With a broader focus, races may appear in roles contrasting with the main theme, or exploring implications of the setting's premise, and only incidentally involved with the storyline. Some fictional worlds have both treatments. In Tolkien's Middle-Earth, elves and dwarves had business of their own with little relation to the troubles of men and hobbits, but orcs were purely an enemy race – though later in his life, Tolkien had doubts about this and speculated about whether orcs might be capable of moral choice and redemption. Deciding how narrow or broad a campaign's focus will be can help decide how many races to create, and what kinds.

### SETS OF RACES

Some campaigns will have only one nonhuman race: First-contact stories may have a single alien species, horror may have a single type of werewolf or zombie, and so on. But if one nonhuman race is possible, others may well be.

If a setting is to have multiple races, it works better if they form some sort of coherent scheme. Having arbitrary races with no relation to each other doesn't make for an easily grasped premise for the setting. Having races with overlapping abilities, appearances, and concerns means that any one race's role is hard to define. It's best if the different races divide up the possible roles in a systematic way.

## Ecological

Living organisms usually have traits that fit their means of survival. This reflects their habitat, which in **GURPS** terms is the *terrain* to which they're best adapted, as described for Survival skill (pp. B223-224). Terrains are defined for Earthlike worlds, but planets of other types can have analogous terrains inhabited by alien races. A suite of races can be distinguished by having one inhabit plains, another woodlands, another deserts, and so on.

The same principle can be applied to spirits associated with the natural world. The ancient Greeks, for example, distinguished *dryads* (spirits of trees, especially oak trees), *naiads* (spirits of springs and rivers),  *nereids* (spirits of the sea), *oreads* (mountain spirits), and other sorts of nymphs, each with their own characteristic habitat.

For life forms, but not often for spirits, distinctions can also be made for other biological traits. Size can differentiate otherwise similar races; for example, humanoid beings could be giants or dwarfs, or several different sizes of each with different SMs. (Don't give such races Gigantism or Dwarfism, which are for abnormally large or small members of a race, not for races that are *normally* large or small.) Races could also be distinguished by primary means of movement – such as running, climbing, flying, and swimming – probably with different morphologies (pp. 9-11). Day and night races – and perhaps crepuscular races active at dawn and dusk – might coexist. Yet another way to split things up is by means of sustenance: herbivores, omnivores, carnivores, specialized types such as filter feeders or nectarivores, and perhaps photosynthesizers – probably with different types of mouths and sense organs, and often with different behavior.

## Functional

Machines don't usually have to provide for their own survival; they're powered, maintained, and repaired by a technological infrastructure. They do have to be adapted to the planetary type and terrain where they're expected to operate, however. But multiple races may exist in a single habitat that they share with their human (or nonhuman) users. What distinguishes them is the job they're designed for. For example, both *Transhuman Space* and **GURPS Ultra-Tech** offer different types of robots engineered to play varied roles, from housework to surgery to battlefield combat. Potentially, there could be a huge number of machines in a suite, but it's usually convenient to define broader types, such as "ground combat robot," and assume that any machine that's treated as a character has enough flexibility to be adapted to varied tasks.

Similar logic can be applied to some biological organisms. Bioroids are often designed for specialized types of tasks; e.g., there might be attractive "social interface" models, or hazmat models with resistance to poisons, disease, radiation, or the like. Modified human races won't usually be as drastically engineered, but can have physical or mental enhancements that favor specific occupations, and personality traits to go with them.

## Thematic

In a campaign with supernatural elements, races might reflect archetypes or other abstractions. For example, Christian art depicts angels with birdlike wings and beautiful features, and devils (that is, fallen angels) with bat wings, horns, hooves, and barbed tails, as figures of Good and Evil. **GURPS Thaumatology** lists varied groups of archetypes, such as the four classical Western elements, the five Chinese elements, the seven astrological "planets" (the Sun, the Moon, Mars, Mercury, Jupiter, Venus, and Saturn), and the signs of the zodiac. Any of these might be the basis for a suite of spirits or embodied spirits; e.g., elemental spirits of earth, water, air, and fire.

## PERKS AND QUIRKS

Perks and quirks don't count for much points-wise, but they can be a helpful part of racial design. Full-blown advantages and disadvantages often have extreme effects on behavior, or confer abilities so potent that they're suited only to super-races. But a few traits worth  $\pm 1$  point can help make a race distinctive.

Exotic perks (**GURPS Power-Ups 2: Perks**, pp. 9-12) can add to a race's capabilities and make it clear that they're not just cosmetically modified humans. The various Accessory perks are a good fit to machine characters; many are close equivalents to other exotic perks that fit biological races. There aren't nearly as many exotic quirks (**GURPS Power-Ups 6: Quirks**, pp. 12-13), but they can help define a race more fully as well. See also Appendix A for a few new perks and quirks suited to racial templates.

Quirks also play a big part in defining racial mentalities. See *Motivation and Behavior* (pp. 31-33) for suggested mental quirks for races of various types.

## LENSES AND SUB-RACES

Some races have sub-races with distinctive traits. Domesticated animals have breeds, which may be as different as a greyhound and a bulldog; robots and other machines have variant models, whether for special purposes, or basic and advanced; aliens may have diversified into subspecies. Such things can be represented with *lenses*: specialized templates that aren't meant to be used by themselves, but to be added to other templates. The definition of lenses is a way to provide choices within a racial template (see *Character vs. Racial Templates*, p. 5).

Most lenses represent additional biological, mechanical, or supernatural traits. Players can choose lenses but don't normally get choices *within* a lens. However, a race may also have varied cultures, each with its own cultural lens, and such lenses might allow some choices; see *Cultural Templates* (**GURPS Template Toolkit 1: Characters**, p. 5).

Some biological races have sexual dimorphism extreme enough that males and females are effectively different races. In this case, each sex has its own template. This also applies to hive species with multiple castes, such as social insects with queens, drones, workers, and soldiers.



# ATTRIBUTES, SECONDARY CHARACTERISTICS, AND TALENTS

Every race has attribute and secondary characteristic modifiers – though these are noted only if nonzero. Talents are optional, but often useful. In brief:

- A race's ST, DX, IQ, and HT modifiers are based on the difference between its average attribute score and the human average of 10. Their cost is that of buying the average attribute. For example, if a race of 20'-tall sapient allosaurs has average ST 35, this is shown as ST+25 (Size, -30%) [175]. "As good as the average human" is a 0 modifier and costs 0 points.

- For secondary characteristics, figure the base value from racial attributes; there's no cost for this score. But if the secondary characteristic is higher or lower than the base value, that's shown as a racial modifier, with a cost equal to that of taking the modifier for an individual character. For example, the sapient allosaurs above would have a racial HP value of 35; if they were exceptionally hard to kill, with average HP 40, they would have racial HP+5 (Size, -30%) [7].

- Racial Talents are bought just like individual Talents, and at the same cost.

A race's ST and HP are based on its physical size and weight, as discussed in Chapter 2. They can be as high as is needed to fit these (the largest reported whale weighed 190 tons, giving it HP 145!). Some beings are too small to have meaningful ST or HP scores; an animal weighing 2 ounces would have exactly HP 1, and one weighing less than 0.25 ounce would have less than HP 0.5, which would round down to 0. (*Any* injury automatically kills a being with 0 HP.)

Most other attributes and secondary characteristics don't have straightforward physical interpretations that could require extraordinarily high values. Their main functions are as target values for success rolls on 3d, and in determining skill levels that also act as target values. **GURPS** limits characters other than godlike beings to an attribute range of 1 to 20 (see p. B14), corresponding to attribute modifiers from -9 to +10. For races whose members might be PCs, modifiers from 0 to +6 allow competence at the tasks they apply to; races comparable to humans should have modifiers between -2 and +2, indicating a marginally lower or higher capability.

Intelligence (IQ) is something of an exception. Sapient beings have IQ scores of 6 or higher, but lower IQ scores are possible for nonsapient animals or machines. As a guideline: IQ 1 fits reflex-guided animals, such as most invertebrates; IQ 2 fits fish and reptiles; IQ 3 fits most birds, and less intelligent mammals, such as many herbivores; IQ 4 fits more intelligent mammals, such as most carnivores; IQ 5 fits elephants, monkeys, some parrots and songbirds, and possibly octopuses; and IQ 6 may be appropriate to chimpanzees and gorillas. To cover tasks and challenges where such creatures aren't hopelessly handicapped, give them racial Per and Will bonuses that compensate for and perhaps exceed racial IQ penalties. For example, a tiger (p. B456) would have IQ-6 but also Per+8, for a net +2!

One secondary characteristic, Basic Move, *does* reflect a measurable physical trait: the speed of a race's movement (by land, water, or air). Information on this is often available for animals or vehicles. Vehicular top speeds don't usually translate directly into Basic Move. If the information is available, divide top speed in mph by the number of seconds of acceleration needed to reach it, to find an average mph increase per second; dividing this by 2 gives its Acceleration score, which is equivalent to its Move. (See *Movement*, pp. 27-28, for Enhanced Move.) Similar estimates may be possible for fast-moving animals, such as cheetahs and many birds; for others, assume that sprinting move is 120% of Move and paced running is half of that (see p. B354), and equate this with the recorded top speed or sustained movement speed, respectively. If this is different from Basic Speed, as estimated (usually) from DX and HT, treat the race as having a bonus or penalty to Basic Move.

*To have the proportionate strength of a spider, you need to have the proportionate **size** of a spider.*

Some races have advantages that are effectively specialized versions of attributes or secondary characteristics. Lifting ST suits beasts of burden, cargo vehicles, and other heavily built races; Striking ST is less common, but may be found in races that deliver rapid blows. Arm ST fits races that brachiate or burrow – but for races with relatively weak arms, such as some centauroids, apply *Modifying Beings With One or Two Arms* (p. B53) to the Weak limitation for Extra Arms (e.g., a centaur whose two arms have half the ST of their equine body would convert a -25% limitation to -5 points for two arms). Arm DX works similarly; for modifiers to hands or equivalent parts, see *Manipulation* (p. 28). Acute Senses are best treated as specialized variants of Per (in effect, they have One Sense Only, -60%), affecting the efficiency with which sensory data is processed more than the physics of the sense organs (for that, see *The Senses*, pp. 26-27).

Talents provide a different sort of specialization. In effect, a Talent is a midpoint between an attribute or secondary characteristic and a skill based on it; it raises multiple skills and usually costs less than increasing the underlying attribute. Races with specialized interests or functions can plausibly have a Talent; for example, artificial intelligences or scientifically advanced aliens might have racial Mathematical Ability. It's also possible to define a racial Talent that benefits a group of skills associated with that particular race; **GURPS Power-Ups 3: Talents** gives several examples. Racial Talents can encompass groups of skills that don't obviously fit together, as long as that makes sense for a specific race. Any such Talents *require* GM approval and should usually be GM-designed, even if players are allowed to create new races (*Player-Designed Races*, p. 37).

# PHYSICAL TRAITS

Most racial templates include physical traits. The exceptions are partial templates for infomorphs (p. 7) and animi (the mental part of embodied spirits, p. 8).

What traits count as “physical”? Human thought may be a physical process within the brain, and human intelligence and various personality traits are partly hereditary; robot thought would be a physical process within a computer. But if those are “physical” it’s hard to see what would be “mental”!

For humans, the body outside the brain is physical. So are the existence of the brain, its structural integrity, and its biochemical state – being asleep, drugged, or comatose from brain injury is a physical condition. For robots, the same is true, but with “computer” in place of brain; in particular, the Complexity (p. 7) that lets a computer run a particular digital mind or infomorph is physical. If a sapient being can occupy a new physical body (say, via some form of Possession), it acquires that body’s physical traits.

## SUSTENANCE

The most urgent need of most living organisms, and many machines, is oxygen (or other reactive molecules, for races from non-Earthlike planets). Without it, living organisms suffocate (pp. B436-437) and air-breathing engines lose power and stop running, as if reduced to 0 HP (p. B483). Suffocation can be delayed by Doesn’t Breathe (Oxygen Storage) (p. B49). Machines can’t normally “hold their breath,” and don’t use air in their interior as an oxygen source, but a similar ability can be bought as Doesn’t Breathe with a Nuisance Effect worth -5%: needing a second set of tanks to hold the oxygen, and needing to recharge oxygen at the same time as fuel (it doesn’t make sense mechanically to give a machine mismatched tanks).

Most animals breathe via lungs, gills, or other localized organs; internal combustion engines have devices such as carburetors. Steam engines can be treated as having Doesn’t Breathe (Oxygen Combustion). Animals smaller than SM -6 can breathe via Oxygen Absorption or Oxygen Combustion; so can plants, thanks to the surface area of their leaves. Microorganisms that break down complex molecules without using oxygen have Doesn’t Breathe (Anaerobic) (see *Atmosphere*, p. 15). Machines that don’t use fuel have unmodified Doesn’t Breathe.

Doesn’t Eat or Drink eliminates the need for food and water; Reduced Consumption decreases it; and Increased Consumption (obviously!) increases it. Reduced Consumption can be defined as either Food Only or Water Only, for -50%. The same limitations can be applied to the other two traits; for example, vegetative races should have Doesn’t Eat or Drink (Food Only), because plants still have to have water, as well as air and sunlight. As defined, these traits fit living races native to land habitats. Aquatic living races live *immersed* in water and would only take the Food Only versions; machine

races with Fuel Supply typically use fuel *in place of* both food and water, so neither limitation applies – they pay the full cost for using more, less, or no fuel.

A separate issue is the *kind* of food or fuel a race uses. Races with Universal Digestion can digest any plant or animal material, or oxidize any combustible substance as fuel (*Making Things Burn*, p. B433). Races with no advantage or disadvantage are omnivorous, or can burn a wide range of organic fuels, such as wood, peat, and coal. Restricted Diet limits a race to a narrower range of food or fuel, or to using non-rechargeable batteries (treated as Very Common). Rechargeable batteries require spending time connected to an electric power source, which is common enough not to count as Restricted Diet; a “meal” is time spent recharging. Taking Reduced or Increased Consumption with Cast-Iron Stomach (p. 45) doesn’t change the *range* of food, water, or fuel a race can use, but lets it use impure or contaminated forms without problems.

Some races get their energy from non-material sources that can’t be classed as “food” or “fuel.” The simplest way to represent this is as Doesn’t Eat or Drink with appropriate limitations:

- Plant races can take Accessibility, Only with daily sunlight -10%. Treat a full day without sunlight as three missed meals. For plants, this is Food Only; they still need to take in water. Solar-powered machines take the same modifier without the Food Only limitation.

## SCALE AND FOOD

For realistically scaled races, food or fuel consumption follows the square-cube law (*Realistic Scale*, p. 14). For example, a half-scale organism (SM -2) requires *one-fourth* as much food ( $0.5 \times 0.5$ , the square of scale); but its stomach holds *one-eighth* as much ( $0.5 \times 0.5 \times 0.5$ , the cube of scale), so it needs twice as many meals a day (six rather than three) – the average interval between meals is *one-half* as long (four hours rather than eight), in proportion to scale, while the number of meals is in inverse proportion to scale.

Increased and Reduced Consumption are defined in terms of the number of meals, not their size or total weight. Small races have to eat or refuel more often, so they have Increased Consumption; a half-scale race would have Increased Consumption 1. Allowing half-levels of Increased Consumption for -5 points provides a closer fit to racial scale. Reduced Consumption doesn’t fit as neatly; allowing one-half meal frequency for 1.5 levels, 10% for 2.5 levels, and 2.5% for 3.5 levels better represents intermediate larger sizes. For different-sized stomachs or fuel tanks, buy different levels of these traits. Being Cold-Blooded reduces food (but not water) consumption separately.

For cinematically scaled races, none of this applies; they eat three meals a day, scaled to their large or tiny stomachs, and don’t take Increased or Reduced Consumption. Exceptions can be made for exaggerated scaling; for example, tiny fairies who eat only once a day take Reduced Consumption 2.

- Electrically powered machines without batteries take the Elemental power modifier, worth -10% (**GURPS Powers**, p. 27). The mundane countermeasures include pulling the plug, throwing a main power switch, or shutting off a generator. As machines, they don't suffer from starvation; rather, they immediately stop running – but they can start again if power is restored.

- Magivores (living organisms that feed on magic) take the Magical power modifier, worth -10% (**GURPS Powers**, p. 27). Treat a full day in a no-mana zone as three missed meals, or one in a low-mana zone as one missed meal. In very high mana, all FP spent are immediately restored.

There are still other possible requirements for survival. A race might have Dependency – for example, on an exotic atmospheric chemical, mana, or radiation (or, more mundanely, on water for a machine powered by an open-cycle steam engine, such as a locomotive). Supernatural creatures or exotic machines may have Draining; e.g., without blood, vampires weaken and die faster than humans without food. And artificial beings such as machines and synthetic life forms sometimes have Maintenance, falling apart without external upkeep. These traits *might* accompany the need to eat and drink, burn fuel, or photosynthesize – but not necessarily! Doesn't Eat or Drink often occurs alongside Dependency (Mana) for magical constructs such as golems and zombies, or Maintenance for machines with long-term power sources.

Increased Life Support represents a race's need for large or inconvenient equipment to survive in the campaign setting. Most often, this applies to alien races visiting a planetary environment (usually an Earthlike one) very different from that of their native planet, and severely hostile to them (see *Habitats*, pp. 15-18), or traveling in a vehicle that provides such an environment for the benefit of its other occupants. This is over and above the traits that represent the physiological or mechanical issues. A race that can sustain itself with the contents of a pocket, or with an environment suit no more awkward than winter clothing, doesn't take Increased Life Support – meeting its needs isn't inconvenient enough.

## THE SENSES

A race's senses enable it to perceive the world, making it possible to move and act in an informed way. Races that lack senses either take no actions or carry out internally determined actions that aren't influenced by their surroundings.

Some vehicles are an exception to this: If they have IQ 0 and Compartmentalized Mind (Controls), they act as an operator decides, and the *operator's* senses inform the decision.

Human beings can detect light, with vision; sound, with hearing; solid objects and temperature, with touch; and chemical substances, with smell and taste. Humans and other races get these for free. The frequency ranges of sight and hearing can be shifted up or down at no cost, or expanded by buying various advantages: Hyperspectral Vision, Infravision, Subsonic Hearing, Ultrahearing, or Ultravision.

For more exotic options, take Detect (to notice a substance, signal, or condition); Scanning Sense (to emit energy and recognize objects from the reflections); Telecommunication, possibly with Receive Only (to detect and *understand* signals, similar to hearing); or Vibration Sense (to “feel” objects without touching them). Detect normally operates only after a second of concentration, and detects only the nearest relevant source; add Reflexive, +40% to avoid both issues, giving something more like a biological sense. Scanning Sense and some forms of Vibration Sense are “active,” emitting energy while in use, which others can detect.

Sapient races need to have a primary sense. For humans – and for many animals and aliens, and for robots and spirits that interact with humans – this is vision. Other human senses can be enhanced by taking the Discriminatory versions (or Sensitive Touch); this enables their use to identify specific objects, track their movements, or navigate the environment. There is no equivalent advantage for vision; the vision of primates, most birds, and cephalopods is *already* discriminatory, for 0 points. Other organisms may use Sonar or Vibration Sense (Active Electroreception) (p. 44) for the same purposes. Machines can have various forms of Scanning Sense, and spirits may have Detect (Analyzing). In a world with psionics, aliens or mutant humans may rely on abilities of the ESP power.

Hearing and touch are secondary senses for humans. Many species with camera eyes have vision as a secondary sense with poor resolution, such as typical “mammal vision”; see *Visual Impairment* (**GURPS Powers: Enhanced Senses**, p. 12). Detect (especially with Signal Detection), Telecommunication (often with Receive Only), and Vibration Sense can be secondary senses for other sorts of beings.

Minor human senses include smell, taste, awareness of temperature, and awareness of pain. Balance can also be considered a minor sense, though Perfect Balance mainly affects movement (pp. 27-28). Detect (Vague) and Telecommunication (Vague, often with Receive Only) can represent minor senses of other beings.

## COMPOUND EYES

Human and other primate eyes are much better than most camera eyes, but compound eyes – such as those of insects – are much worse. To represent this, give the race Blindness *and* Detect (Light) with the Precise enhancement. Treat light as Occasional, like radio *and* radar. This provides the ability to sense light sources, reflective patches, or spots of specific colors, and to tell the direction to them. This ability normally works in a 360° radius;

it can be narrowed using the Restricted Arc limitation, worth -30% for 240°, -60% for 120°, or -75% for 60°.

Further modifiers can be applied to better fit the capabilities of specific organisms or machines. For example, mantis shrimp, with 12 different visual pigments, have Analyzing (+100%), adding 10 points to the cost – comparable to taking Discriminatory Taste, and allowing recognition of very specific colors.



A variety of disadvantages exist for races that lack human senses: Blindness, Deafness (or Hard of Hearing, for partial deafness), No Sense of Smell/Taste, and Numb. The lack of exotic biological senses such as Infravision or Vibration Sense, or technological capabilities such as Imaging Radar, isn't a disadvantage – humans lack those senses – but if a race has Infravision, for example, an individual member of that race who lacks it can take No Infravision as a disadvantage (see *Modification*, p. 37).

For much more on the senses, see **GURPS Powers: Enhanced Senses**.

## COMMUNICATION

Communication can be either precise, as with speech or sign language, or vague, limited to simple codes or general concepts and emotions, as with animal sounds or gestures. Sapient races need precise communication, both to interact with other sapient beings and to give structure to their own thoughts.

Nonsapient races with IQ 1-5 (most animals) are capable only of vague communication. Races with IQ 0 (most vehicles) can't communicate at all, though they may have instruments that operators can read, or built-in telecommunications devices for operators to use.

Communication normally requires a physical channel. For human beings, this is primarily sound. Other races may have Mute if they can't make sounds at all, or Cannot Speak if they're limited to animal noises. Races that communicate on different frequencies may have Subsonic or Ultrasonic Speech; if they're *limited* to these frequencies, either is a 0-point feature.

It's possible to imagine races (typically alien) that use other channels based on the signaling mechanisms of animals, such as an octopus's color changes or a knife-fish's electrical signals. This is defined as the advantage Signals (pp. 44-45).

Robots and other machine races can take most varieties of Telecommunication (but probably not Telesend); a very common option here is Cable Jack (p. 44). A robot or computer can have a built-in speaker for free, or a video display screen as an Accessory perk. The ability to project a *convincing* holographic image is Illusion (Visual Only, -30%); see **GURPS Powers**, pp. 94-95.

Sapient races with fine manipulators can express themselves with the Gesture skill or learn true sign languages (p. B25). Whole body movements such as the *waggle dance* of honeybees can convey messages in stereotyped codes; sapient races can use IQ-based Dancing similarly to Gesture, though less conveniently. (For sapient swarms – *Swarms*, pp. 14-15 – IQ-based Dancing is *more* convenient, and is the normal skill for conveying simple concepts.) Understanding sign languages requires human-comparable vision, an equivalent Scanning Sense, or Sensitive Touch; simpler messages require any version of Scanning Sense, touch, or vision (including Detect (Light) with Precise).

Alien races, or races of advanced humanoids, may be able to communicate psionically (see *Races and Powers*, p. 35). Spirits don't usually do this; some of them can speak for themselves, and embodied characters with Channeling can lend their voices to others.

*Gummitch was a superkitten, as he knew very well, with an I.Q. of about 160. Of course, he didn't talk. But everybody knows that I.Q. tests based on language ability are very one-sided.*

– Fritz Leiber,  
“Space-Time for Springers”

## MOVEMENT

Most races have some means of moving from place to place. Members of races that might join parties of adventurers *need* a way to travel! Beings with No Legs (Sessile) might be Contacts, but aren't likely Allies – much less PCs.

Races that *can* move may be able to do so in or on a variety of media:

*Ground movement* normally takes the form of walking and running; races without special traits, and amphibious races, are capable of this. If their speed is the same, races without legs can have No Legs (Bounces, Rolls, or Slithers), for 0 points. Races that move *slowly* have their Basic Move bought down; they might also have Taboo Trait (Fixed Basic Move) as a feature. Machine races often have the No Legs

(Tracked or Wheeled) disadvantage. They may also have air cushions, like hovercraft; buy this as Flight with Low Ceiling (usually 5 or 10 feet), but it's effectively a form of ground movement – though it usually works over liquids, too. Races with No Legs (Semi-Aquatic) have reduced ground movement; those with No Legs (Aerial or Aquatic) have none.

*Above-ground movement* can be defined as climbing, and is often accompanied by Perfect Balance. This may be granted by a balancing organ such as a tail too small to count as an Extra Arm or Striker; such an appendage is targeted at -3 and takes injury as an extremity, and crippling it negates Perfect Balance. Clinging allows above-ground movement without Climbing rolls, and doesn't benefit from Perfect Balance. Buy faster movement as levels of Super Climbing. Brachiator allows a race with at least two arms to use them to swing from overhead handholds; this is considered aerial movement, and fast brachiation is bought as Enhanced Move (Air).

*Underground movement* can be bought as Tunneling – but only for super-races. Use the Burrower perk to represent realistic underground movement; this allows digging at a speed proportional to Basic Lift (see p. B350). Buy a *second* level of Burrower to allow breaking up hard soil or rock.

*Underwater movement* is possible without special traits, but at limited speeds (p. B18), and Swimming rolls are required. Races with Amphibious or No Legs (Semi-Aquatic or Aquatic) can swim at their Basic Move without these restrictions. For faster swimming, buy extra water Move (no more than two levels for races with restricted speeds) or Enhanced Move (Water). It's common for swimmers to rely on fins, webbed feet, paddlewheels, or propellers that can't be armored; this is a disadvantage (p. B145). Propulsion by pump jets, whether in squid or watercraft, is purely internal and can be bought as Enhanced Move. All these rules apply equally to living organisms with solvents other than water (see *Biochemicals*, pp. 19-20) swimming in bodies of those same solvents. Submersible machines are usually designed to have the same buoyancy as their fluid medium; high-density machines (or life forms!) sink to the bottom, but they can use ground movement there.

*Surface water movement* follows the same rules, but with the added disadvantage of inability to dive (p. B145). It's also possible for a race to be incapable of staying on the surface; this is the Cannot Float quirk. Vehicles or other machines that depend on sails for mobility – or life forms along the lines of a Portuguese man o' war – should have No Legs (Aquatic, Passive) (p. 46) and Sails (p. 45), which can't be armored. Sails as such don't prevent a race from diving, but if it has No Legs (Aquatic, Passive), it's at Move 0 when submerged. Walk on Liquid is an alternative – though only realistic for races small enough to have ST 0.

*Air movement* normally means Flight, fairly often alongside Enhanced Move. Highly maneuverable races are likely to improve air Move (p. B18); races that travel at high speeds on mostly straight courses should take Enhanced Move. Both living organisms and machines generally have Flight with Winged (a helicopter's rotors, for example, count as wings) and may also have Cannot Hover. Less fully aerial races might have the Gliding or Controlled Gliding modifier, often with enhanced jumping ability (see below) to assist takeoff. Machines or science-fictional races occasionally have Flight with Lighter Than Air. If a Nonautonomous lighter-than-air vehicle lacks a propulsion system, buy its air Move down to 0 and give it Taboo Trait (Fixed Air Move).

*Space movement* is Flight with Space Flight or Newtonian Space Flight – the latter, in most realistic campaigns. Races native to space often have Space Flight Only as well. Newtonian Space Flight suits races that rely on reaction mass; after their reaction mass is exhausted, they'll have to take on additional mass, perhaps from a gas cloud or a planet with microgravity. Space Flight suits races with light sails; these add Accessibility, Only in sunlight, -10% (sunlight is nearly omnipresent in space, at least in the inner solar system).

All of the preceding forms of movement are continuous, but many races are capable of discontinuous movement, or *jumping*. Basic jumping is possible for races without special traits; an average human can high jump 20 inches or broad jump 7 feet, or twice as far with a running start. Buy increased jumping capability as Super Jump; this usually represents propulsion by leg muscles, but Super Jump with Limited Use can represent built-in rocket thrust. Heavily built life forms or robots may be unable to jump; see *Cannot Jump* (p. 46).

Swimmers can't perform a standing jump out of water, but a fast swimmer can jump with a moving start, based on the number of yards it swims. This could also apply to a wheeled race that ascends a ramp. Fliers don't usually *need* to jump, but gliders can get into the air with a jumping start, taking off from either the ground or the water (like flying fish or some squid).

The ultimate in discontinuous movement is Warp, which is likely only for fantastic races.

## MANIPULATION

Manipulators can take a variety of forms. In living organisms, they've evolved from such varied body parts as limbs, tails, and noses. Aliens or psionically gifted humans may manipulate things using psychokinesis or other powers (*Races and Powers*, p. 35). Machines (and prosthetic devices) so far have largely been restricted to simple grippers, hooks, or

specialized tools – but the emergence of microprocessors has enabled much more sophisticated devices, and fictional robots may have humanlike hands or radically different and highly capable equipment.

Whatever its origins, in *GURPS*, a limb that supports manipulatory structures is an “arm.” The standard racial design includes two of these. A race with more can take Extra Arms (p. B53), which can have modifiers for being longer, shorter, more flexible, or weaker than the body; if they're stronger, take Arm ST (p. B40). The standard two arms can be modified, too, using *Modifying Beings With One or Two Arms* (p. B53). This can make racial templates look complicated; e.g., a being with three long arms would have Extra Arms 1 (Long, +1 SM, +100%) [20] and Long Arms 2 (+1 SM) [20], but all three arms would be identical! A race with *one* arm takes One Arm (p. B147) and pays for the cost of any modifications to that arm. A race with *no* arms takes No Fine Manipulators (p. B145) – or No Manipulators, if it has no limbs at all.

Some races have dual-purpose limbs that act as both arms and legs. For apelike creatures with prehensile toes on their feet, this is Extra Arms modified with Temporary Disadvantage, Legless, -30%; see *Foot Manipulators* (p. B53). Birds such as parrots with wings and clawed feet can be treated as having two modified arms bought as Foot Manipulators. Bat-like creatures with claws on their wings buy the Flight advantage with Temporary Disadvantage, No Fine Manipulators, -30%, and pay for the claws as two modified arms; see *Vespertilian* (p. 10).

Some arms didn't start out as limbs, such as an elephant's trunk or a monkey's prehensile tail. These are normally taken as Extra-Flexible. The same applies to the arms of invertebrates such as octopuses.

A separate set of traits applies to the capabilities of the *manipulators*. If a race has nothing better than a mammal's paws or an insect's unbranched legs, treat this as No Fine Manipulators. If its manipulators are clumsy, take Ham-Fisted: one level for a gorilla's hands, two for a crab's claws. Superior manipulators have High Manual Dexterity. A race such as Moravec's proposed “bush robots” – with fingers branching into second-order fingers that then branch into third-order fingers and so on – would have Accessory (Micro-manipulators) and should also have Sensitive Touch. A race can also have one or more levels of Bad Grip or Good Grip (p. 44). Don't give Bad Grip to a race that climbs habitually; the skill penalties are prohibitive!

There are two situations where a race without limbs shouldn't be treated as having No Manipulators. If a race has a mouth, as most biological races do, and its parts offer more extensibility, flexibility, and opposability than do human mouthparts (e.g., a parrot's beak and tongue), this can be pressed into service as an arm, usually Short and with No Physical Attack; if the creature has no other manipulators, treat this as One Arm. Mouths should usually have one level of Good Grip (with teeth or a beak), unless they have Weak Bite. A limbless race with Constriction Attack can use its entire body to grasp things; if it does, treat its body as a “limb” (giving it No Fine Manipulators rather than No Manipulators).

Mechanical races may be able to pick up ferrous objects magnetically, and the same may apply to some exotic alien races. Treat this as Telekinesis (Magnetic, -50%).



## ATTACK

The ability to attack is inherent in the possession of arms (punching), legs (kicking), or teeth (biting). These body parts can also grapple. And the *whole body* can be used as a weapon in a slam.

To enhance these “free” attacks, add Claws or Teeth. A race with DR 3+ *without* Flexible, Force Field, or Tough Skin (see *Defense*, below) can get +1 to crushing damage from the Striking Surface perk.

Larger bonuses require a Striker, which can represent horns, tusks, or the like. Wings that can inflict damage *must* be paid for as Strikers (often Long) in addition to Flight (Winged); they can be attacked (pp. B552-553), or damaged by a parry. A heavy tail, or one with spikes or a sting, can also be attacked and damaged (p. B553); to represent this, add both a suitable Striker (possibly with Clumsy, Limited Arc, or Long) and the Tail feature (p. 12). For a smaller, lighter tail, take Striker with Weak, and treat it as an extremity rather than a limb.

For enhanced grappling ability, buy Constriction Attack. And to discourage enemy grapples and enhance slams, get Spines.

At the GM’s option, races that lack some free attacks possessed by humans may substitute others. For example, an animal whose mouth lacks a biting surface (such as teeth or a beak) might instead have the ability to secrete digestive juices on its food, like a starfish, causing 1d-3 corrosion damage. An electrically powered machine might be able to inflict nonlethal electric shocks; a nuclear-powered one might emit low-level radiation (perhaps 1 rad/hour).

Buy any higher-powered attack as usual: as Affliction, Binding, or Innate Attack. Living organisms may use venom or electric shocks. Machines might have built-in firearms, liquid projectors, or – at higher TLs – energy weapons. For *many* worked examples, see **GURPS Powers**, pp. 136-145.

## DEFENSE

A race’s defense against direct physical attacks is often based on its structural support – that is, its skeleton. Possibilities here include:

**Complete External Skeleton:** The *entire body* is covered with a rigid material that encloses its muscles and organs, or its working mechanisms. To allow motion, it has built-in joints. Treat this as Damage Resistance: bone, chitin, or bark with DR 2-6 for living organisms, or structural materials that may be much stronger for machines. This works like the skull of a human being, whose DR 2 must be overcome before the brain can be damaged. If the race has a head, and its entire body has the same DR as its skull hit location, then reduce DR there to 0 as DR -2 (Partial, Skull, -70%; Tough Skin, -40%) [-2] – abbreviated “No Skull DR” – before buying whole-body DR. Armor like this usually has ports for sensors, electrical connections, and/or ingestion, respiration, and excretion; if not, add Sealed.

Such beings are usually Horizontal, but can’t be Invertebrate in the **GURPS** meaning of the word.

**Partial External Skeleton:** Part of the body is covered with rigid material that protects its vital organs, like a mollusk’s shell. This is Damage Resistance (Partial, Vitals, -30%). Such a race is Invertebrate, but can’t squeeze through small openings, adding a Nuisance Effect that *increases* disadvantage value by +5%, to -21 points.

**Internal Skeleton:** The body has a rigid internal skeleton, like a vertebrate, or a load-bearing frame, like a ship. This is the standard option in **GURPS**. If there’s a head, it has a skull with DR 2; the rest of the body gains no DR from its skeleton, but can add external armor. In organisms this is usually DR 1-4 (Tough Skin, -40%); shells can have DR 2-5, typically with Partial, Torso only. In machines it may be Flexible or Partial (for important hit locations), or the machine may have jointed external armor that isn’t load-bearing; much higher DR values are possible. Such a race cannot be Invertebrate.

**No Skeleton:** The body is made up of flexible, possibly elastic tissues, gaining rigidity from internal hydrostatic pressure. Any DR has Tough Skin (in living organisms) or Flexible (in machines), and there should be no separate skull armor; take No Skull DR [-2]. Such races are normally Invertebrate.

Other races have bodies without separate structural elements; the entire body acts both as a skeleton and as armor. Represent this using one of the elemental meta-traits under *Elementals* (pp. 20-21). Such races often have Injury Tolerance (Homogenous); this is also appropriate for undead beings that have no functional internal organs (like a vampire’s digestive system), but are simply masses of dead tissue. Beings made of

liquids, gases, or particulates may instead have Injury Tolerance (Diffuse), taking only minimal damage from physical attacks. Entities with Insubstantiality, such as unmaterialized spirits, take no damage at all from normal physical attacks, but are harmed by attacks with Affects Insubstantial; they can usually harm *each other*, too, and it’s perfectly possible for a spirit to have insubstantial armor.

Machines with complex structures have Injury Tolerance (Unliving) rather than Injury Tolerance (Homogenous). Those with power plants or batteries treat them as vital organs and won’t have No Vitals.

The bleeding rules can be used to represent leaks (letting in water or letting out air or gas), and machines that can leak shouldn’t have No Blood. For the equivalent of No Eyes, see No Windows (p. 43). Machines, especially vehicles, may have Accessory (Lock) (p. 45).

The other major class of harmful agents is those resisted by an attribute, normally HT. Defenses against these usually involve making a race Resistant, which gives bonuses to HT for such rolls. Most forms of Resistant protect against categories of things that affect living organisms, all the way up to the broad category of metabolic hazards (all diseases and poisons, plus altitude sickness, the bends, seasickness, and other physiological conditions). Total Immunity, other than the narrowest sort such as to specific poisons or diseases, is rare; it usually reflects being a different basic type of entity, such as a machine or spirit with Immunity to Metabolic Hazards.



Machines and spirits, in turn, often have the ability to be affected by an unfavorable condition as a disadvantage; e.g., machines may have Electrical, making them vulnerable to power drainage and surges, while computers, infomorphs, or spirits with “true names” may be Reprogrammable. The absence of such a trait could be considered an Immunity; rather than removing it entirely, a race or character might still have it, but be Resistant to its ill effects – for an example, see *Resistant* (p. 44) for a discussion of being hardened against power surges. In many cases, if being subject to a hazard has a negative point value, it’s fair to “flip the sign” and use that as the cost of Immunity to that hazard.

A more specialized trait of the same kind is Protected Sense, which can keep a ranged sense from being overwhelmed by intense stimuli. Versions of this trait can be applied to machines, organisms with exotic senses, and more unusual beings. It’s relatively rare in living creatures (though Nictitating Membrane, armoring the eyes, is common enough), but may be found in combat-hardened machines and some supernatural beings.

Both Resistant/Immunity and Protected Sense may occur in races that have to live in harsh, unpredictable environments. Such races may also have Radiation Tolerance (see *Radiation*, p. 17, for more on this).

Another important category of defensive traits is the ability to heal from damage. This applies to living organisms and to most spirits and their material forms; machines must be repaired, and the undead tend to have limited or no healing abilities (any of which is Unhealing). Regrowth – the capacity to grow back lost body parts – is the most biologically realistic healing trait. A race with Rapid Healing or a modest level of Regeneration *might* be justifiable; reserve high levels of Regeneration for supernatural beings and super-races.

Avoiding getting hurt in the first place can be an even better option! This is the main benefit of Combat Reflexes, which suits many wild animals (predators and elusive prey alike)

*Oh no! Another Laurie Anderson clone!*  
 – Laurie Anderson,  
*“Talk Normal”*

and races of warriors, and of Enhanced Time Sense, available to computer-based races. Enhanced Move is another good option for races with natural enemies.

## OUTWARD FORM

A race’s physical qualities include such things as its appearance and voice, which can give it reaction modifiers. Appearance is a matter of shape and surface texture, and can be perceived by vision, Scanning Sense, or touch; it ranges from Horrific to Transcendent. Voice can be perceived by hearing, and its extremes are Disturbing Voice and Voice; Stuttering is equivalent to Disturbing Voice, but applies only to beings that can use a language. Races that communicate non-acoustically might have analogous advantages and disadvantages, at the same point values, affecting those with the relevant senses (see *Signals*, pp. 44-45). Only a disadvantage, Bad Smell, is available for what a race smells like.

Normally, these traits affect one’s own race and closely similar races. Their main effect is to produce more or less favorable reactions. For example, typical humans have Average appearance, and their usual reactions to each other are “Poor” on a 9 or “Neutral” on a 10-12. If elves have Attractive appearance, giving +1 to reactions, their usual reactions to each other will be “Neutral” on a 10-12 or “Good” on a 13, making them naturally more cooperative; if orcs have Unattractive appearance, it will have the reverse effect. Don’t include these traits in a racial template unless you *want* such behavioral effects. Even then, be careful about the size of the total modifier – anything beyond  $\pm 2$  will have extreme effects.

The voice traits and Bad Smell affect other races with the relevant senses; so does appearance with the Universal modifier. Such effects don’t matter to social behavior within a race, but may affect a race’s reputation within a larger community of many races. An option for appearance is to limit its effects, not to members of the same race, but to members of the most common or most powerful race in the setting; this is particularly suitable for Horrific, Monstrous, or Hideous appearance, for monstrous beings, or for Transcendent appearance, for godlike ones, but can also apply to any appearance level with Impressive. Manufactured beings, such as robots or bioroids, could also have appearance levels aimed at the race of their makers; they might have the Off-the-Shelf Looks limitation, as might a race with little genetic diversity.

## MENTAL TRAITS

Partial templates for cybershells (see *Robots and Automata*, p. 7) and vessels (see *Embodied Spirits*, p. 8) omit mental traits. Vehicles with IQ 0 (p. 7) usually have Insensate and Nonautonomous; mental traits don’t apply to them and aren’t specified.

### CONSCIOUSNESS

Sleep-related traits are defined as physical, and sleep has a physical effect: restoration of lost FP (pp. B426-427). On the other hand, sleep amounts to loss of consciousness, and consciousness is a prerequisite for the exercise of nearly all mental traits. (A vehicle, without mental traits, doesn’t sleep – but

its operator probably does, so it doesn’t have to pay points for Doesn’t Sleep.) Thus, it makes sense to start the discussion of mental traits with sleep and consciousness.

The human baseline is eight hours of sleep per day. This can be increased (Extra Sleep) or decreased (Less Sleep). For human beings, no more than  $\pm 4$  hours are allowed, but non-human races can have different limits, or be conscious all the time (Doesn’t Sleep). A race that never woke up wouldn’t be suitable for character design, so a limit of 15 hours of Extra Sleep, or one waking hour per day, seems reasonable. Sleepy (p. B154) is equivalent to Extra Sleep in cost, and its comments on schedule apply here as well.

Some races can enter other altered states of consciousness. The Autotrance perk may be found in biological races that have close relations with spirits. A race that's naturally capable of lucid dreaming could have Dreaming as a racially learned skill (p. 33). Compartmentalized Mind represents a race's ability to carry on distinct mental tracks in parallel; this is most likely to be useful in races with psionic or magical abilities that let a secondary consciousness act independent of the body, or to computers or infomorphs that can be active in cyberspace.

Consciousness is tied up with the perception of time. Most races experience the passage of time approximately as humans do. However, some races have Enhanced Time Sense, letting them effectively step outside the flow of time, think about their actions at leisure, and then step back in; this is common in infomorphs and may also occur in AIs, intangible spirits, or superhumanly gifted biological races. Similar but lesser benefits can be gained from Altered Time Rate.

A more fundamental choice in racial design is whether to have Digital Mind. This is characteristic of infomorphs with Complexity-Limited IQ (p. 12), but can also appear in machines in general, and perhaps even in unusual organisms. It's a net advantage because it makes the race invulnerable to psionic or super powers that affect the mind, to magical powers or spells with similar effects, and to most biologically based mind-affecting abilities. However, it includes susceptibility to Computer Hacking and Computer Programming, to cybernetically based abilities with the Digital modifier, and to cyberpsi abilities, none of which can affect analog minds, whether in organic beings, spirits, or even unusual machines. Digital Mind can also justify such traits as Compartmentalized Mind, Enhanced Time Sense, Lightning Calculator, Modular Abilities, and Photographic Memory – and Reprogrammable.

## COGNITION

*Cognition* is awareness of the world, of oneself, and of abstract ideas. It provides the basis for making decisions and taking actions. In **GURPS**, cognitive abilities are mainly represented by IQ (*Attributes, Secondary Characteristics, and Talents*, p. 24). Some specialized aspects of cognition are covered by other traits, however.

Improvements in *memory* can take the form of Eidetic or Photographic Memory. Realistically, most living organisms should be limited to Eidetic Memory. Infomorphs and the majority of robots have the AI meta-trait (p. 9), which includes Photographic Memory. Discriminatory Senses (including Sensitive Touch) are equivalent to Eidetic Memory for their sensory modalities; adding the Profiling enhancement makes them equivalent to Photographic Memory in this realm.

Impaired *thinking* can take the form of Dyslexia, Innumerate, or Non-Iconographic, for inability to use written language, arithmetic, or abstract images, respectively; Innumerate in this case isn't simple lack of knowledge, but inability to acquire that knowledge. Quirk-level versions are Mild Dyslexia, Math-Shy, and Symbol-Shy. Represent enhanced abilities with Language Talent for words, or Lightning Calculator or Intuitive Mathematician (included in the AI meta-trait) for numbers. None of these traits apply to races with racial IQ 5 or less.

Remarkable *creativity* takes the form of Versatile – and its lack takes the form of Hidebound. Hidebound is included in the Automaton meta-trait (p. 9), found in some infomorphs, robots, golems, and undead. For more on these traits, see *Motivation and Behavior* (below).

## MOTIVATION AND BEHAVIOR

Different races can have a variety of traits (often disadvantages or quirks) that shape their thinking and behavior. Bear in mind that **GURPS** disadvantages, particularly those with self-control numbers, produce exaggerated behavior patterns; players may be reluctant to roleplay beings from such races, especially those with multiple disadvantages, or a self-control number of (9) or (6). More nuanced behavior – only modestly unusual in human terms – can be represented by quirks.

A detailed system for profiling racial “personality” appears on pp. 169-170 of **GURPS Space**. It's presented there as the last step in random racial creation, but with the suggestion that GMs can also start with desired personality traits and work backward to find compatible biological traits. The version presented here supports that approach; in particular, it omits *Space's* detailed rules for assigning trait values in favor of general guidelines. See *Behavior and Mentality* (pp. 40-41) for suggestions on how racial traits play into social patterns.

A race with the Automaton meta-trait (p. 9) – such as some robots, infomorphs, bioroids, and undead – has Curiosity -3, Empathy -3, Imagination -2, and Playfulness -2. Its other traits will usually be at 0, though it may have enhanced Concentration, especially if it also is Reprogrammable.

### Chauvinism

Awareness and protection of the boundaries of social groups, from clans or tribes up to entire races. High in races that depend on geographically localized resources or that form hives, and in spirits of place. Low in races that trade extensively.

Score	Traits
+3 or more	Chauvinistic (becomes racial Intolerance if Empathy is less than +1 or Suspicion greater than -1; becomes Xenophobia (12) if Suspicion is greater than +1)
+2	Chauvinistic (becomes racial Intolerance if Empathy is less than +1 or Suspicion greater than -1)
+1	Chauvinistic (becomes racial Intolerance if Empathy is less than 0 or Suspicion greater than 0)
0	Normal
-1	Broad-Minded
-2	Broad-Minded (becomes Xenophilia (15) if Suspicion is less than 0 and Empathy is greater than 0)
-3 or less	Delusion (quirk-level – “All sapient races are alike”) (becomes Xenophilia (12) if Suspicion is less than 0 or Empathy is greater than 0; Xenophilia (9) if both are true)



## Concentration

Ability and inclination to focus on long-term tasks. High in races that depend on resources that take a long time to find or harvest, and in elemental spirits of solid materials. Low in races that react opportunistically to sporadically available resources, and in elemental spirits of air and fire.

*The fox runs for his dinner; the rabbit runs for his life.*  
– Traditional proverb

Score	Traits
+3 or more	Single-Minded, and <i>either</i> High Pain Threshold <i>or</i> one 5-point Talent
+2	Single-Minded
+1	Attentive or Patience of Job
0	Normal
-1	Distractible
-2	Short Attention Span (12)
-3 or less	Short Attention Span (9)

## Curiosity

Level of attention paid to new things, and interest in finding them. High in omnivorous biological species, and in infomorphs. Low in herbivorous biological species; in spirits and the undead; and in races with no primary sense.

Score	Traits
+3 or more	Curious (9) (becomes Curious (6) if Concentration or Suspicion is 0 or less)
+2	Curious (12) (becomes Curious (9) if Concentration is 0 or less)
+1	Nosy (becomes Curious (12) if Concentration is 0 or less)
0	Normal
-1	Staid
-2	Incurious (12) (becomes Incurious (9) if Suspicion is less than 0)
-3 or less	Incurious (9)

## Egoism

Focus on personal gain or honor, and resistance to subordination. High in biological races that rarely form groups, in males in harem species, and in free-willed undead; low in races that form hives, and in free-willed robots and bioroids.

Score	Traits
+3 or more	Selfish (9)
+2	Selfish (12) (becomes Selfish (9) if Empathy is less than 0 or Suspicion is greater than 0)
+1	Proud (becomes Selfish (12) if Suspicion is greater than 0; becomes Selfish (9) if Empathy is -2 or less or if Suspicion is +2 or greater)
0	Normal
-1	Humble
-2	Selfless (12) (becomes Selfless (9) if Chauvinism is +2 or greater)
-3 or less	Selfless (6)

## Empathy

Awareness of the feelings of others; avoidance of giving offense. High in races that form small groups, and in carnivores that pursue intelligent prey; low in races that rarely form groups, and in free-willed robots and infomorphs.

Score	Traits
+3 or more	Empathy (add Charitable (12) if Gregariousness is greater than 0)
+2	Sensitive
+1	Responsive (becomes Sensitive if Gregariousness is greater than 0 and Suspicion is less than 0)
0	Normal
-1	Oblivious
-2	Callous
-3 or less	Low Empathy (add Bloodlust (12) for carnivores)

## Gregariousness

Sociability, need for the company of others. High in biological races that form herds or (especially) have hive societies; low in races that rarely form groups, particularly solitary hunters, and in the undead.

Score	Traits	Score	Traits
+3 or more	Gregarious	-1	Uncongenial
+2	Chummy	-2	Loner (12)
+1	Congenial	-3 or less	Loner (9)
0	Normal		

## Imagination

Ability to see patterns, invent new behavior, and come up with new ideas. High in biological races with flexible feeding strategies, and in infomorphs; low in races with stereotyped feeding strategies.

Score	Traits
+3 or more	Imaginative (becomes Versatile if Concentration is 0 or greater and Egoism is less than +2; if Empathy is less than +1, add Odious Racial Habit (Nonstop idea factory) [-5])
+2	Imaginative (becomes Versatile if Concentration is 0 or greater and Egoism is less than +2; if Concentration is less than +1 or if Egoism is greater than 0, add Dreamer)
+1	Imaginative (becomes Versatile if Concentration is 0 or greater and Egoism is less than +2)
0	Normal
-1	Dull
-2	Hidebound
-3 or less	Hidebound and reduce racial IQ by 1

## Playfulness

Willingness to engage in non-utilitarian behavior; playful animals are easier to train, and playful sapients have a sense of humor. High in biological races with long maturation (such as human beings) and in animals with species IQ 5; low in animals with species IQ 1 or 2 and in races that rarely form groups; very low if race has Cannot Learn.

Score	Trait
+3 or more	Compulsive Playfulness (12) [-5*] (becomes Trickster (15) if race has Overconfidence)
+2	Playful
+1	Normal†
0	Serious
-1	Odious Racial Habit (Wet blanket) [-5]
-2	No Sense of Humor
-3 or less	Intolerance (Any form of jokes or play)

† Humans are *not* the norm for this trait!

## Suspicion

Distrust and fearfulness toward new things or surprises. High in herbivores, in small races, and in races with no primary sense or a handicapped primary sense; low in carnivores, and in large races.

Score	Traits
+3 or more	Fearfulness 2 (add Cowardice for herbivorous races, or Paranoia for carnivorous races)
+2	Fearfulness 1 (becomes Careful if Curiosity is -3 or less)
+1	Careful (ignore if Curiosity is -2 or less)
0	Normal
-1	Fearlessness 1
-2	Fearlessness 2 (add Overconfidence (12) if Egoism is +2 or greater)
-3 or less	Fearlessness 3 (becomes Unfazeable if Chauvinism is -3 or less; add Overconfidence (12) if Egoism is +1 or greater)

## SKILLS

Skills must ordinarily be learned, and thus differ from one member of a race to another. This makes them suitable to include in character templates but not in racial templates. Yet there are exceptions to this rule.

### Racial Skills

In some cases, every member of a race learns a skill, in the way that every human being learns to speak a language. “Every” can’t be taken literally – some members may develop a different skill, as deaf humans often learn to *sign* a language, and some may not have it at all. See *Modification* (p. 37) for more about such cases. A skill may also be part of a race’s self-image, or other races’ image of it (see *Archetypal Skills*, p. 35).

In other cases, a race might not *need* to learn a skill – it could be inherent in their nature. Biological races may have

instincts; artificial intelligences may have programs; spirits may be spirits of something that implies a particular skill.

The price of a racial skill is the same as if an individual character were learning it (*Skill Cost Table*, p. B170). For example, a tiger with DX+3 and racial-average DX 13 has Stealth-13. This would be written under Racially Learned Skills (*Presentation*, p. 42) as Stealth (A) DX [2]-13.

Instincts, hardwired programs, and other inherent skills often cannot be modified by learning. This is Taboo Trait (Fixed Skill) (p. 12). With the GM’s permission, a racial template can be modified (p. 37) by removing an inherent skill; with *further* permission, a member of the race might also lack the taboo trait and be able to learn the skill. If so, the skill has no default and must be learned initially from a teacher or trainer.

A computer-based race is likely to have Modular Abilities (Computer Brain) – or in classic cyberpunk settings, Modular Abilities (Chip Slots). Treat skills gained in this way as inherent skills with Taboo Trait (Fixed Skill). The same applies to other types of races with other forms of Modular Abilities.



### Skill Bonuses and Penalties

A race may be exceptionally good or bad at a particular skill. If it’s exceptionally good, it gets a skill bonus that costs 2 points/level, to a maximum of three levels (+3); this is allowed only in a racial template. If it’s exceptionally bad, give it an Incompetence quirk as a racial trait.

A racial knack for a group of related skills is a Talent (*Attributes, Secondary Characteristics, and Talents*, p. 24). A race can also be incompetent at a group of related skills; treat this as a *negative* level of a Talent, with a negative point cost. No race can have more than one “group incompetence.” Talents can have up to four levels, positive or negative.

In creating a character of a race with skill bonuses or penalties, start out from the relevant attribute; determine the level of the skill relative to that attribute, based on the points spent on the skill; and *then* apply any racial bonus or penalty.

## MAGIC

In a fantasy campaign, a race can have the ability to work magic, often defined as Magery 0, or a talent for using magic, as levels of Magery. Taking levels of Magery with limitations can help give a race a distinctive “feel.” Magic is usually available only to living organisms or spirits, but machines or informorphs might be capable of it with a magical coprocessor or magical symbols, perhaps requiring an Unusual Background. Or a standard computer might be possessed by a spirit with magical abilities.

In settings where standard spell-based magic (pp. B234-253) is available, a spell may be *racially learned* or *inherent*, just like a racial skill. Racially learned spells are treated like any other skill; in particular, they can be studied or trained to a higher level. Inherent racial magic can’t be; it takes the form of fixed spells. Determine the cost of a fixed spell as follows:

- Take Magery 0 for 5 points.

- Take the highest level of Magery required for the spell or any of its prerequisites, with the modifier One Spell Only (-80%), for 2 points/level.

- Take the spell at a level relative to IQ + Magery, at the usual point cost.

- Add 1 point for each prerequisite spell.

For fixed spells, the maximum level of Magery can be as high as the GM wants. A nonsapient animal – or even a plant with IQ 0 – could have enough Magery to cast one innate spell at a reasonable level!

In other settings, magic is better treated as a set of abilities built from advantages. This approach lends itself well to inherent racial magic. Take whatever advantage is appropriate to represent a racial ability, and give it the power modifier Magical (-10%), along with any other modifiers that fit. The result is an ability that’s affected by the local mana level and can be countered or dispelled by magic. A race may have an inherent Talent for such an ability; characters of some sapient races can buy levels of Talent as a learned trait – sometimes even if they have the inherent Talent.

**GURPS Thaumatology** provides many other options for magic. Some forms of magic can be turned into racial traits along the same lines as spell-based magic.

# SOCIAL TRAITS

Social traits emerge from a being’s interaction with others, and depend on how those interactions go. Different members of a race can have different experiences that give them different identities. Because of this, most social traits are traits of individuals, not of races. This is especially true when members of a race interact mainly with each other – they won’t see a trait as distinctive if they all have it! Some races and some traits are exceptions, however.

*My mother was a test tube;  
my father was a knife.*

– Robert Heinlein,  
*Friday*

## THE REFERENCE CULTURE

Some character traits reflect, not a person’s inherent qualities, but how they stand in a particular society. For example, an American in 1900 with technological skills at TL6 has neither High TL nor Low TL. But in the TL1 world of Greek legend, a character with exactly the same skills would possess High TL 5. Traits such as High TL and Low TL define how an adventurer’s access to skills and equipment compares to what’s normal in the scene of their adventures.

It would be awkward if a Maori warrior had Low TL 5 relative to the English colonists while his friend the Scots explorer had High TL 5 relative to the local Maori village! And it would

be inconvenient if they both had to change traits when they traveled from New Zealand to the British Isles. Rather, the GM of a **GURPS** campaign needs to define a “reference society.” This is usually the society where most of the action is expected to take place. If a racial template includes social traits, these should be defined in relation to the reference society.

## CULTURES, LANGUAGES, AND SKILLS

Social traits include things learned as a result of being created or educated in a particular culture. In some cases, a racial template can include these.

### Cultural Lenses

Races are often divided into multiple cultures. It’s possible to represent a culture as a character template, as discussed in **GURPS Template Toolkit 1: Characters**. When used together with racial templates, these function as *lenses*: additional packages of traits that make a racial template more specific. If a culture’s traits are *distinctive* and *uniform*, it can make sense to treat them as rules rather than guidelines or suggestions – to treat the culture as a sub-race.

Several types of traits can be used to define a cultural lens:

- **Assets.** A race may have access to unusual material assets, such as High TL or above-average Wealth – or suffer from Low TL or below-average Wealth.

- **Beliefs and prejudices.** These are usually self-imposed mental disadvantages or Odious Personal Habits, but other mental traits are possible; e.g., a culture might share a Delusion or a Phobia.



- *Genetic traits* of a bloodline or closed breeding group such as a caste. These are typically attribute modifiers or physical advantages and disadvantages, but there are more exotic options, such as – in a fantasy setting – Charisma (in a royal lineage) or Magery 0 (in a sorcerer caste).

- *Physical modifications* to a race's body type, such as minor surgery or body art to create distinctive features, or refitting a machine for a new function.

- *Teachings* that define a culture. Cultural Familiarities and Languages are basic (and one of each is free!), but all members of a culture may have learnable advantage such as Eidetic Memory, or skills such as Spacer, Survival, or a weapon skill.

## Archetypal Skills

In some settings, races may be identified with *archetypes*, as discussed in *Sets of Races* (pp. 22-23). Such an archetype can include particular skills: Perhaps all dwarves are skilled with axes, or all Belters know how to navigate in space. Such archetypal skills often build on racial advantages, such as Arm ST or 3D Spatial Sense. In an epic or cinematic campaign, a race may have esoteric skills – for example, all elves might have Light Walk. All of these can be defined as racially learned skills (p. 33). The *ability* to learn a skill that's normally off limits, such as Light Walk, can be treated as a racial feature.

Archetypal skills aren't distinctive to a particular cultural group. Rather, every member of a race has them. Where including cultural lenses provides a way to distinguish members of a race from each other, archetypal skills provide a way to make each race's members play one main role in their world. To identify such skills for a race, look for things its members are always shown as doing in stories, or – for a newly created race – things it *will* be depicted as doing.

## REACTION MODIFIERS

The most truly *social* aspect of a race is the way members of other races regard it. Ideally, each individual would be judged for their own unique qualities, but it saves time and mental effort to form expectations about a race's typical behavior, and to react to its members accordingly. In relatively benign cases, these expectations and reactions will reflect the race's actual traits; often, they'll exaggerate those traits (e.g., Distractable may be thought of as Short Attention Span); and some societies will attribute entirely imaginary qualities to the race. Unusually objective (Broad-Minded) people, or those who know an individual well, can compensate for such perceptions, and an individual's Reputation can work against and even overcome the preconceptions; racially Intolerant individuals will cling to their prejudices despite all evidence to the contrary.

If the reference society in general views a race in a particular way, its template can include Social Regard (if it invites favorable reactions) or

Social Stigma (if it invites unfavorable ones). The difference is sometimes subtle! For example, Social Regard (Feared) produces favorable reactions similar to those from Intimidation; Social Stigma (Monster) also can involve being feared, and while it usually produces unfavorable reactions (up to being hunted on sight), it gives a large Intimidation bonus. Use the first for races that are still seen as people with some legal rights, and the second for races that aren't seen as people at all. Only traits that don't depend on individual acts or stages in the life cycle are suitable; among Social Stigmas, this can be Dead (p. 46), Minority Group, Monster, Second-Class Citizen, Subjugated, and Valuable Property; *possibly* Uneducated; and the *supernatural* form of Excommunicated for entities such as demons.

If only some people view a race in a certain way, give it a racial Reputation, or different racial Reputations with different groups. Do the same if reactions to a race take a specialized form, or are based on specialized traits, that don't easily fit any standard type of Social Regard or Social Stigma.

## CULTURALLY DEFINED TRAITS

Some traits are not necessarily specific to any one culture, but take on distinctive forms in particular cultures. These may be culturally flavored versions of standard variants of those traits, or newly defined variants for particular cultures. The obvious examples are self-imposed mental disadvantages – notably Code of Honor or Disciplines of Faith (but not Trademark or Vow, which are inherently individualized and don't have standard variants) – but other possibilities are Compulsive Behavior, Delusions, Phobias, or even a particular Addiction. Some of these may be suitable as elements in cultural lenses or even as archetypal traits.

## RACES AND POWERS

Belonging to a race, as such, can't be defined as a power. Powers of many types can be shut off – by mundane or technological countermeasures, anti-powers, or the disapproval of the being that grants them. What would it mean to “shut off” being a demon or a robot – or, for that matter, a human being? Your template is what you *are*; if you stop being that, *you stop being*, vanishing from the world. A high-end cosmic ability might conceivably be able to negate someone's very existence, but no ordinary force should be capable of that.

On the other hand, *becoming* a member of a race – through Shapeshifting, for instance – can be treated as the ability of a power. Ordinarily this means that having the power shut down restores your original form. If Shapeshifting has Once On, Stays On (*GURPS Powers*, pp. 75, 109), however, shutting it down *takes away* the ability to resume your original form, leaving you stuck in the assumed form.

It's also perfectly possible for races to *have* powers; magical powers are common in fantasy, and psionic powers in science fiction. Countermeasures against the power source can shut down specific racial abilities, but won't usually make the race unable to exist or function – a dragon in a no-mana zone might lose its fiery breath or be unable to fly, but would still be a huge creature with sharp teeth and an armored hide. Of course, if it lost the ability to fly at an altitude of 1,000 feet, the fall might easily kill it!

## CHAPTER FOUR

# RACES IN PLAY

Once a race has a template, characters who belong to it can be brought into play, by the GM and often by players. This raises the issue of how to use a template effectively in a campaign – and knowing how a race will be used can also help in designing its template in the first place.

*Let us therefore defeat the humans in one fell swoop, and create our own perfect AI world!!*

*– Fuchikoma, in **Ghost in the Shell***

## How Much Do They Cost?

Different races aren't all equal, and their point costs don't have to be the same.

The standard way to deal with this in **GURPS** is to give every character the same number of character points. Templates with positive point values are bought as advantages; templates with negative point values are taken as disadvantages.

Suppose a campaign allows 100 points for character design, and up to -50 points in disadvantages and quirks. A normal human can spend up to 150 points on desirable traits and take up to -50 points in undesirable ones. A member of a -25-point race can spend up to 150 points, but has free choice of only -25 points of undesirable traits; a member of a 75-point

race can take the full -50 points in undesirable traits, but can't have more than 75 points of desirable ones; a member of a 375-point race can't be played at all! Player-character races have a limited range of point values, and extreme values allow fewer choices for character design.

A way around this is to separate the choice of race from spending points. Players get some number of base points, and some maximum number of points from disadvantages. But they also get to choose a character's race, and that doesn't count toward these limits. This takes care in planning the campaign; races with positive costs have to be specialized enough that they don't overwhelm other races, while races with negative costs have to have merits that make playing them worthwhile. Maybe, for example, the -25-point race is small and good at hiding, making suitable thieves or scouts; maybe the 375-point race is highly intelligent, but has little understanding of emotions and social interaction. It's also possible to allow free choice of racial template, but within limits; e.g., "any race worth no less than -50 points and no more than 50."

A further step is to do away with point budgets. In the "build to concept" approach, players choose a race and a few other broad descriptions, such as "cultural background" and "profession," and choose traits to fit each of these. If the campaign uses character templates (see **GURPS Template Toolkit 1: Characters**), character design might involve choosing racial and character templates – though it's a good idea to allow a few points for skills, perks, and quirks outside of these, to make characters more interesting. The point cost of each character is whatever its traits add up to. The primary "balancing" mechanism is the requirement for each character to embody a coherent and limited concept. However, it's also vital that the GM design a suite of races (see *Sets of Races*, pp. 22-23) that can all play useful roles in a campaign, no matter how different their point values (disregarding the restrictions under *Races and Powers*, p. 35).

### SUPER-RACES

In most campaigns, racial cost is limited to a modest range of point values, whether positive or negative. But it's possible to create extremely powerful races. Angelic or demonic beings, natural or elemental spirits, fantasy races such as dragons, advanced aliens, or combat robots could be built on hundreds of points. These usually appear as NPCs – possibly Patrons or Enemies. But in a high-end campaign, such as epic fantasy or supers, PCs may have enough character points to belong to such races.

In the supers genre, a common character origin is as members of alien races, such as DC's Kryptonians and Martians and most of the Legion of Super-Heroes, or Marvel's Kree and Skrulls. Often, abilities of such races – like other "superpowers" – can be negated or stolen by advanced technology or special abilities based on Neutralize or Static. In this case, it makes sense *as a genre assumption* to apply the Super power modifier to any racial traits that are affected this way.

Such a campaign may also be a case for *Player-Designed Races* (p. 37).

# MODIFICATION

Not all humans are *typical*. A long list of **GURPS** traits are ways in which a human character can differ from the average human, and choosing among these is an important part of character creation. It's just as legitimate to create an atypical nonhuman character.

A character can have attributes or secondary characteristics different from the racial average, unless their race has a taboo trait fixing an attribute or secondary characteristic's level. Buy attributes up or down from 10, at the usual cost, and then add or subtract any racial bonus or penalty. Use the resulting values to figure secondary characteristics; buy these up or down from the figured values, at the usual cost and with the standard restrictions on how big a change is possible; and again add or subtract any racial bonus or penalty.

A character can lack capabilities that appear as advantages on its racial template. For example, just as a human can have Blindness or One Arm, a member of another race could have No Sonar or Missing Extra Arm as an individual trait. The negative point value of the lack should exactly cancel out the positive point value included in the template.

Approach *adding* capabilities with caution. For example, average mammalian vision compares to human vision as human smell compares to a dog's Discriminatory Smell; buying off Bad Sight (Low Resolution) should be treated as acquiring an exotic trait. However, some enhanced capabilities

may be within a race's normal range of variation. Ask the GM before adding such a trait.

If a race has a Talent, individual members of the race can *also* have levels of that Talent as an individual trait, up to the usual maximum – that is, if a race is naturally good at, say, mathematics or social interaction, some of its members may be gifted beyond human limits. It should also be possible, with most Talents, for an individual member of the race to buy down the Talent; the negative point value for the resulting “Anti-Talent” should exactly cancel the positive point value included in the template.

For behavioral traits, humans can vary in either direction from the (usually neutral) human average. A similar adjustment can be made around any racial norm; see *Behavior and Mentality* (pp. 40-41). Such reasoning can apply to other traits that can shift in two different directions. For example, an unusually homely elf might have Not Attractive to represent being no better looking than a human. In some cases, the description may take a different form: a playful member of a race with No Sense of Humor might have Sense of Humor [10], or a very timid member of a race with Fearlessness 1 might have Fearfulness 1 [-4] with a footnote: “Bought down from racial Fearlessness 1.”

Standard racial traits should be subsumed by the racial template. Differences should be listed as individual traits.

*The only noticeable effect garlic had on me was bad breath.*

– Nancy Collins, *Sunglasses after Dark*

## PLAYER-DESIGNED RACES

Some players may want to do more than modify a racial template – they might want to create a template for a race of their own creation, or have the GM do so.

Letting players do this can generate problems for a campaign. There's a chance of its leading them into temptation, inviting the creation of races as a form of wish fulfillment, or of excessively powerful races that make characters of other races irrelevant; or if several players take the opportunity, of turning the campaign into an arms race. Even players who don't feel such urges won't have as good a sense as the GM of what the game world is like, or how different races fit into it – especially if the campaign is intended to have a suite of races that fit together coherently (see *Sets of Races*, pp. 22-23). The fewer races a game world has, the more adding a new race will change it, and the more the campaign will revolve around that race; in the limit, if there's only one nonhuman race, as in an alien “first contact” situation, dealing with that race is likely to be the campaign's entire focus.

On the other hand, a campaign might allow the creation of individual characters with exotic or supernatural traits – as supers, for example. If a character template can have such

traits, a similar racial template would usually have no greater disruptive effect. And while a single new race is likely to be the main focus of a campaign, one new race among many, as in some outer space or “invented world” fantasy settings, may have little impact on a game world. So some GMs may choose to explore this option.

This *is* something the GM has to decide. A campaign's theme or setting may not admit nonhuman races. If it does, players' ideas for races still require GM approval as playable. It's generally a good idea to set limits on racial design, both prohibiting unsuitable traits (e.g., a hard science fiction campaign probably won't allow Magery) and setting limits on racial point cost (which should fit within the point totals allowed for PCs). Hugely powerful races might be a source of Patrons or Enemies, but players don't get to design these NPCs! It's often helpful to have players discuss ideas for races among themselves, to make sure whatever they come up with is enjoyable for everyone. Following on from this, if player-created races are allowed, they should all be created *before* anyone builds an individual character, and any player should have the right to play a member of any other player's invented race.



# INVENTING RACES

In some settings, new races can be created during the campaign. Existing races may be modified into new forms, such as parahumans or uplifted animals. Entirely new races may be invented, such as robots, infomorphs, golems, or tulpas.

In some campaigns, this is a long-term project for a large organization. Working on it is likely a job, calling for monthly job rolls against skills such as Alchemy (for homunculi), Bio-engineering (for life forms), Computer Programming (for infomorphs), Engineer (for computers, robots, or vehicles), or Ritual Magic or Thaumatology (for magical entities). Most of the actual work will take place offstage, but an occasional game session might be devoted to testing a prototype, fixing a bug, or containing catastrophic effects; the *New Inventions* rules (pp. B473-474) can provide inspiration.

The same skills can apply to actually creating a new race, if this is possible for PCs. This is an exception to the recommendation against player-designed races, as the PCs won't normally belong to the newly created race. Use *New Inventions* for realistic attempts, or *Gadgeteering* (pp. B475-477) for

cinematic ones. As with any invention, the GM assigns the difficulty. Guidelines for some types of races appear in ***GURPS Powers: The Weird***.

For this type of project, coming up with a racial template can represent the "Concept roll" step in design. If the players submit a racial template that's internally consistent and compatible with the setting's TL, treat this as a valid Concept roll. If there are questionable points, a roll against the invention skill can identify them; on a failure, the inventor needs to make another try. On a *critical* failure, the project moves forward – but at best the prototype will use up resources with no result, while at worst it will have a major physical or mental defect, which the GM should secretly add to the racial template. A Prototype roll will often also add minor or major defects. Testing a prototype may take a long time; for new biological species, for example, one testing roll a year is plausible! Testing a sapient race typically calls for Teaching rolls; for nonsapient life forms, use Animal Handling (or possibly Gardening!); for vehicles, use the relevant vehicle operation skill.

## SHAPESHIFTING

A common idea in fantastic genres, from mythology to science fiction, has been taking on a different form. In ***GURPS*** this is usually represented as Shapeshifting. By definition, Shapeshifting is reversible; shapeshifters can be regarded as having a new feature, Original Form, which represents their original racial template when they're shifted, as a latent trait.

Not all different shapes are represented as racial templates. With the Cosmetic limitation, Shapeshifting grants the ability to turn into one or more *different* members of one's own race, or beings with the same abilities. This is still an advantage, because the ability to disguise oneself as an entirely different person is useful in its own right!

Cosmetic changes of form mostly don't affect a character's point value. However, the Cosmetic limitation doesn't

include Retains Shape, so it's possible to assume a different morphology meta-trait (pp. 9-11) with a different point value: a humanoid could look like an octopod, or a ground vehicle like a boat. A character can also temporarily lose a body part, acquiring Blindness, Lameness, One Arm, or One Eye, for example. Appearance level (p. B21) can be *lowered*, but Horrific or Monstrous appearance requires GM approval, unless the character's usual appearance is Horrific or Monstrous. To raise appearance level, for either the primary form or a different form, pay the full point cost of the *highest* level available to any form.

Taking on a single different racial template is Alternate Form *without* the Cosmetic modifier. As a general rule, the choice of the other template is not unlimited: a living organism can't become a machine, an infomorph, or a spirit. However, it can have a different mass or morphology. Any of these rules can be changed as an assumption of a specific campaign, with no effect on point cost. For example, a comic-book super may assume an Alternate Form that includes Body of Fire or Body of Metal; or in a hard science-based campaign, all Alternate Forms may be required to have unchanged mass.

Creating a character with Alternate Form *includes* defining the racial template for that form. If a character has several Alternate Forms, each requires its own racial template. In contrast, a character with Morph has a wide range of possible forms; it isn't feasible to write up a template for every animal, or machine, or embodied spirit that a morphing character might become, or fair to limit such a character to forms that already have templates available. Instead, assume that most human-sized or smaller animals (or machines) cost 0 points or less and are freely available even if detailed templates haven't been written up.

*Gone! Gone! O form  
of man*

*And rise the demon –  
Etrigan.*

*– Jack Kirby,  
The Demon*

Large or dangerous races may have a higher cost, and it's a good idea to have templates for races that morphing adventurers are likely to encounter.

Morph allows taking on a potentially unlimited *number* of forms, but the *range* of forms is usually restricted. Every form must be copied from an existing race, though a race's mental disadvantages and its modifiers to IQ, Will, and Per can be omitted. A shapeshifter with Morph (Improved Forms, +100%) is free of this restriction, and can combine traits from different forms, *if* those traits exist in the campaign world.

Embodied beings can change *form* but not *substance*; for example, a water-based life form can't turn into an ammonia-based one, or an elemental with Body of Earth into one with Body of Metal. The Unlimited enhancement allows a change of substance, or a change from a substantial being to an insubstantial one such as a spirit. Races are divided into broad groups (as discussed in *What Are Races?* pp. 5-8), and taking on a form that belongs to a different group requires Unlimited whether or not there are differences of composition; e.g., a living human can't turn into a walking corpse without Unlimited. In effect, Unlimited is a form of Cosmic; it allows disregarding the normal rules for Morph. The broad groups are as follows:

*Organic:* Any naturally living being, artificially constructed living being, or spirit materialized in a biologically functioning body, such as a djinn in human form or an incubus.

*Mechanical:* Any unliving being whose functions depend on a technologically based structure, such as a computer, robot, or vehicle.

*Mass:* A material being without structural complexity, typically Homogenous, often controlled by the will of an embodied spirit, such as an elemental, golem, or skeleton.

*Insubstantial:* A spirit without a tangible body, but with a physical location and the ability to perceive the material world.

Various limitations can narrow the range of templates available through Morph. Mass Conservation prevents taking a form with a different weight; this should be required in a hard-science campaign. Retains Shape prevents taking a form with a different morphology meta-trait. Flawed prevents taking a form that exactly copies an individual member of one's own or another race; rather, you look like yourself as a tiger, yourself as a robot, or yourself as a demon. Cosmetic is the opposite of Flawed, and is as discussed for Alternate Form.

Either Alternate Form or Morph may be a trait of an entire race, rather than a special ability of an individual. This requires two layers of racial templates: Templates for the forms that members of the race can assume by changing shape, and a

## TRANSFORMATIONAL ABILITIES

Not all shapeshifting involves the eponymous advantage. Being able to alter SM is Growth or Shrinking – or Stretching, if only *part* of the body changes. For minor cosmetic alterations, Elastic Skin (below) suffices. Such abilities suit racial templates for toons (p. 6), fantasy and sci-fi “metamorphs,” and superscience nanotech beings of “living” plastic or metal. *Realistic* invertebrates and adaptable machines can't change mass or overall size, but may have a level or two of Stretching, sometimes limited to specific limbs or other body parts.

### *Under the Hood: Materialization*

Insubstantiality normally grants the ability to change freely between material and immaterial forms. However, with Always On (-50%), it doesn't; a race that has this is always immaterial. Gaining the ability to materialize raises the cost of Insubstantiality by 40 points. In comparison, adding Unlimited (+50%) to Morph increases its cost by 50 points. But the extra 10 points buy the ability to materialize in widely varied forms, human, mechanical, or vessel – so for a powerful spirit capable of shapeshifting, it can be a great bargain!

### *Under the Hood: Elastic Skin*

Elastic Skin allows changing one's skin and features to look like a different member of the same or a similar race. It doesn't actually grant a new racial template, and thus is similar to Morph with Cosmetic (-50%). There are two important differences. First, Elastic Skin is purely superficial, whereas Morph usually affects the entire body; this can be accounted for partly by Morph being Cosmetic, and partly by adding Retains Shape (-20%), which prevents changing the shapeshifter's morphology. Second, Elastic Skin requires a Disguise roll for impersonation; Flawed (-10%) can't be combined with Cosmetic, but if it could, the flaws might be concealable with a Disguise roll. Applying all these limitations gives a cost of 20 points, the same as that of Elastic Skin.

further racial template that includes at least the Shapeshifting ability. The latter may be otherwise identical to the template of a non-shapeshifting race (for example, a human-based race might have a template consisting only of a single Alternate Form); it may include minor visible marks or behavioral traits related to shapeshifting; or shapeshifters may be an entirely distinct race whose primary form is different from that of any non-shapeshifting race.

Shapeshifting can be a disadvantage if the other shape is actively destructive or hostile; see *Disadvantageous Alternate Form* (p. 46). The assumed form is not under the control of the character or the player, so that trait doesn't include the ability to choose a shape that goes with Morph; it's a variant on Alternate Form.

A different form can also be inflicted on someone by an enemy. If this is treated as an ability of the foe, build it as Affliction with Advantage; if the target fails a HT roll, their form changes (over 10 seconds, unless the advantage is enhanced to work faster), and they stay in the changed form for one minute per point of failure (unless the Affliction has Extended Duration). The template for the Alternate Form replaces the character's usual racial template. The same replacement may be achievable by casting a spell in a campaign where magic works.

# PERMANENT TRANSFORMATION

Not all changes of shape are reversible. Sometimes it's impossible to change back; the original form is lost when a new racial template is acquired.

Permanent transformation can be natural to a race. Living organisms may have a life cycle that includes changes of form, like a caterpillar's metamorphosis into a butterfly; some corporeal undead are destined to take on new forms as their tissues decay, going from intact to rotting to skeletal (p. 21). Any such tendency is represented by the feature Potential Form (p. 12). Each form has its own template; if the template for the later form has a higher point value, the cost of Potential Form is half the difference, rounded up. The other half must be paid when the change occurs. (Potential Form is not required for a race such as humans that grows and learns, but only for one that undergoes a significant change in form, such as caterpillar to butterfly or tadpole to frog.)

Such changes are often a matter of time. But they may be triggered by specific events: the occurrence of environmental conditions favorable to the new form; general stress (e.g., injury that requires a HT roll to avoid death); or injury that makes the old form nonfunctional (treat as Extra Life 1 together with Potential Form).

Permanent transformation can also be imposed from outside. This may involve any of the processes discussed under *Shapeshifting* (pp. 38-39), but with Extended Duration, Permanent (the +300% version that

can't be undone). It can also be brought about by surgery or genetic engineering on living beings, or by engineering or computer programming on technological beings; turning a biological sapient into a cyborg would require skills from *both* groups. Such changes are often Gadgeteering (**GURPS Powers: The Weird** discusses this process for living beings), usually as modification of an existing invention (p. B477).

Another way to do this is by imposing *one's own* racial template on a member of another race (normally a very similar one), an ability found in some lycanthropes and undead, for example. If the newly created being becomes a loyal servant of the original, this is Dominance; in addition to the racial template, the servitor acquires Slave Mentality. If it doesn't restrict the behavior of the recipient, leaving them free to attack their creator, it's Infectious Attack – and for reasons of game balance, it's a good idea to have the recipient pay the point cost of a more powerful template. It's also possible to have this capability as a feature, Carrier (p. 12), if the change erases the recipient's memory (treat as total Amnesia), or if they become your Dependent (and have an appropriate point value after

the change), or if your race is non-sapient; in this case, you simply have an unusual form of reproduction. The standard definition of these traits assumes a supernatural condition, but they can also be used to represent natural agents such as a virus, a computer program, or a runaway meme.

*If you strike me down,  
I shall become more powerful  
than you can possibly imagine.*  
– Obi-Wan Kenobi,  
in *Star Wars: A New Hope*

## BEHAVIOR AND MENTALITY

Most races think and behave in characteristic ways. Differences in racial mentality will affect both the characters and the setting.

### ROLEPLAYING

Racial behavior is largely shaped by the traits discussed in *Motivation and Behavior* (pp. 31-33). Mental disadvantages or quirks from racial templates should be roleplayed exactly like any other mental disadvantages or quirks. Obviously, this is something to take into account before deciding to play a character of a particular race! Conversely, in designing a racial template, it's useful to have a particular sort of personality in mind, and to choose traits that fit and support that personality.

Individual members of a race need not all be the same, though (as discussed in *Modification*, p. 37). For instance, humans as a race fall in between Attentive (sticking to long tasks until done) and Distractible (having difficulty staying focused), but some people fall to either side. In exactly the same way, some members of a naturally Distractible race (such as ravens, p. 49) may be no more distractible than the average human; others may have full-scale Short Attention Span, constantly losing track of tasks that take more than a few minutes.

Behavior can also be shaped by capabilities. Members of a race with the Artificer Talent, for example, will tend to solve problems by devising clever gadgets or tools; if they're inclined to playfulness, their hobbies, games, and sports may involve making and modifying things. A member of the race who's exceptionally capable will be admired; one who's bad at one of its main activities may lack self-confidence (even if they're better than the average human!); and one whose gifts lie elsewhere might be a bit of a loner, or be thought of as eccentric.

### WORLDBUILDING

Racial behavior also shapes a game world's societies and cultures. Each of the traits that make up a racial personality profile (*Motivation and Behavior*, pp. 31-33) can influence the race's social patterns:

*Chauvinism:* High Chauvinism reflects strong awareness of differences between groups – from families to species – and a tendency to value loyalty. Low Chauvinism shows ease in dealing with strangers, or even assimilation to their customs. A high-Chauvinism community acts like a city under siege; a low-Chauvinism one, like a mercantile fair eager for customers.