The **Traveller** universe is filled with non-human sophonts. Many of these can be created using the **Traveller** Sophont Creation System. The result is a completed Sophont Creation Card: by which a player can generate sophont characters (both player-characters and non-player characters).

Sophont Creation is based on two far-reaching assumptions:
Intelligent Non-Humans. This system generates sophonts: intelligent races who exist in roughly the same planetary environments as humans. They breathe atmospheric gases (or water) normally found on human-inhabited worlds and they can live in roughly the same environments.
In Interstellar Society. Sophonts created by this system live within the greater social and economic structure of interstellar society; they compete with everyone else (including humans) for jobs and positions in that society. Members of the created race can pursue careers in the same way that any human character does. Members of the race can be player characters.

THE PURPOSE OF THE SOPHONT CREATION SYSTEM

The purpose of the **Traveller** sophont creation system is to provide a variety of non-human characters to populate the Traveller universe. Explorers visiting a world find it populated with non-humans unlike those on neighboring worlds; merchants trading with a world encounter unique non-humans to deal with; passengers on a starship find a variety of strange and fascinating fellow passengers.

Each use of the Traveller **Sophont Creation System** creates a unique intelligent race for **Traveller**. The results are recorded on a **Sophont Creation Card** (this process does not create a character: it records the information needed to later create one or more characters for this specific race).

The **Traveller Sophont Creation System** is expressed as a dice-driven random process, but it can also be used an a deliberate system, with the use selecting elements from each procedure to achieve specific results.

All of the details of Sophont Creation are allow the creation of characters which use the same rules as apply to humans (more or less) in **Traveller.**

Other Information. This Traveller Sophont Creation Process necessarily refers to other information, rules and charts from **Traveller**. Worlds are more fully created and defined elsewhere. Character generation is more fully detailed elsewhere. While this process strives to be complete, this chapter cannot contain all relevant information, and other chapters may need to be consulted.

WHAT SCS DOES NOT DO

The Traveller Sophont Creations System cannot create all possible sophonts or address all possible situations. Clearly, a referee can imagine and implement an alien lifeform which falls outside the range of sophonts created here.

The TSCS does not create non-physical bodies, fantasy creatures, or beings well outside the environment tolerable to humans, and this list is not exhaustive.

THE WISE MAN'S GUIDE TO SOPHONTS
IISS, Encyclopediapolis, 1107

The preferred guide to the intelligent species of the Imperium is published by the Imperial Interstellar Scout Service as a continually updated database with a hardcopy option. The text includes sophisticated search options and is routinely consulted by naval and civilian crew before contact with an unfamiliar race.

The following are standard concepts for the Imperial Interstellar Scout Service and its classification of sophonts.

Sentient. Endowed with feeling and unstructured consciousness; generally aware and capable of action and reaction, but guided more by instinct and desire than by structured thought or planning. Able to adapt effectively to the environment, either by making a change in oneself or by changing the environment or finding a new one. Sentience is often called animal intelligence. A tiger, a groat, and a gazelle are all sentient. From the Latin for *feeling*.

Sapient. Possessing intelligence: the mental ability to reason, think abstractly, comprehend ideas, and learn. Generally capable of being educated and achieving insights. Sapient and sophont are synonyms, but sapient generally has a lower threshold. The traditional usage: sapients are (still) bound to their original homeworld. Sapients are intelligent. From the Latin for *wise*.

Sophont. Possessing intelligence: the mental ability to reason, think abstractly, comprehend ideas, and learn. Generally capable of being educated and achieving insights. Sapient and sophont are synonyms, but sophont generally covers a broader range. The traditional usage: sophonts have traveled to the stars and have presences on other worlds. Sophonts are intelligent. From the Greek for *wise*.

TERMINOLOGY

The following terms are used.

Species is a biological classification of beings which share the same genetic and biological structures. Dog (*Canis lupis*) is a species. Humanity (*homo sapiens*) is a species.

Race is a sometimes used term for an intelligent species. Humanity is a race. Aslan is a race. Less frequently, race refers to subdivisions within an intelligent species (for non-intelligent species, the equivalent is breed or subspecies (poodle and spaniel are breeds or subspecies within the dog species).

Alien (from the human point of view) is any **non-human** intelligent species. However, because non-humans consider humans aliens, a less point-of-view term is required: we use the term **sophont**.

Sophont is any intelligent species. If the species has never ventured beyond its homeworld, the alternative Sentient is often used.

The Major Races

Interstellar society applies the term Major Race to sophont civilizations which have independently invented/ developed/ discovered jump drive. Because such civilizations also become prominent over large regions, Major Race also refers to the relative power or importance of the species.

The Minor Races. By default, any sophont civilization which is not Major is Minor. Minor races most likely do not venture far from their homeworld; they are typically encountered on their homeworlds, a few neighbor worlds, and in other systems within 10 parsecs of their homeworld.

HOW DO WE IDENTIFY A SOPHONT?

It's easy to create a name for a race of Sophonts (really no more than random words), but the standard reference to any specific Sophont is the LongName: the racial name of the Sophont accompanied by the homeworld name and its homestar and orbital data.

For example,

The Urdushkha of Irdi (Irluush 5 [F4 V])
The Solomani of Terra (Sol 3 [G2 V])
The Aslan of Kusyu (Tyeyo-3 [G4 V])

Non-Natives. Some worlds have a substantial population of non-native sophonts. Where they live as a group on a world, they are referred to as "from" if they are not on their current homeworld.

For example, there is a substantial Terran settlement on a world orbiting Vega: They are referred to as

The Solomani <u>from</u> Terra (Sol 3 [G2 V])

AN OVERVIEW

The SCS process proceeds through several pages of charts:

Introduction. This introduction is an overview of the Traveller Sophont Creation Process.

01. The Sophont Creation Checklist recapitulates the steps necessary to create a Sophont race.

02. The Sophont Creation Card records the information needed to generate a **Traveller** character from the created race.

03. The Sophont Creation FillForm is a worksheet for recording and calculating in the details of a Sophont. Ultimately, this information is transferred to the Sophont Creation Card.

1 unit = 44 cm. 1 unit = 595 px. 1 mm = 1.35 px. 1 cm = 13.5 px
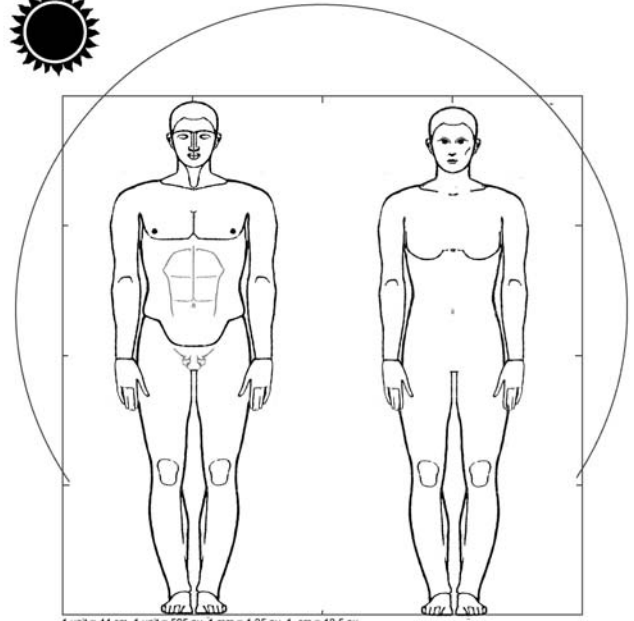
The Solomani of Terra (Sol-3 [G2 V])

04. Basics. The process selects or creates a plausible homeworld and determines the environment in which the race evolved.

05. Environment. The process selects the homeworld terrain and environmental conditions in which the sophont evolved.

06. Characteristics. The process determines the six personal characteristics for the race.

07. Caste. If the race has Caste as its social characteristic, then the process determines the details of the racial caste structure. This page is skipped if the race does not have Caste.

08. Gender. The process determines the gender structure of the race.

09. Life Stages and Aging. The process determines the stages of life through which race members pass: from infancy to retirement. This information is used to determine the lifespan and the effects of aging.

10. The Senses. Races may have the same senses as humans, or they may be different. The process determines which senses the race has and how the senses function.

11. Sophont Body Structure. The process determines the basic physical structure (symmetry, number of limb groups, location of the brain case, and location of the senses) of the race. It also determines details of appearance (armor, skin appearance, natural weapons, and body fluids) of the race. These details may or may not be of any use in most play. Many are for background.

12. Special Abilities. Tables determine the presence or absence of special abilities, with availability to the race as a whole, to members of genders, and to members of castes. This page also contains the skill lists for Skill-based Caste.

13. Manipulators. Images illustrate the abilities of the manipulators assigned under Body Structure.

14. Uniques. The process suggests structures for those rare sophonts who have unique or non standard abilities.

15. Size. Formulae calculate the average or expected size for the sophont based on characteristics, and against a standard of Human =100.

16. Example Sophont Description. A sample description for a sophont shows in detail how characters may encounter data entries on a sophont.

17. Example NIL Description. The NIL Native Intelligent life short format for describing sophonts is described.

18. Example Sophonts. A (non-exhaustive) list of sophonts in the Traveller universe is provided.

THE SOPHONT CREATION CARD

Centralized record keeping for Sophont Creation is provided by the Sophont Creation Card. The two-sided card records the details of the Sophont, and serves as the reference tables for creating sophont characters.

The Fillform. The Fillform is a worksheet designed to make Sophont creation a smooth process.

04. HOMEWORLDS

The Homeworlds Page details the creation of the native star system and world for the Sophont.

Pre-Existing Information. If information on the homeworld and homestar is available, it may be used. It should conform in structure to the information generated here.

Plausible Homeworlds. A homeworld is plausible if it has Atmosphere 2 through 9 and a Population of 7+.

Stars

Stars are identified by their Spectral type and Size in the format G2 V, where G is the Spectral Type (taken from OBAFGKM), 2 is the Spectral Decimal (in the sequence 0123456789), and V is the Size (in the sequence Ia-Ib-II-III-IV-V-VI-D).

This creation page ignores multiple stars. If present, they are lesser than the HomeStar and of no real importance in the Sophont Creation process.

Naming and Identifying Stars. A star is typically named and identified. For example,

Sol (G2 V)

Worlds and Orbits

The location of the homeworld in the system is important. Worlds may be planets (orbiting the star) OR satellites (orbiting a planet).

Worlds are identified by their name or by their starname and orbit. Planet orbits are numbered in the sequence 0-1-2-3-4-5-6-7-8-9-10-11-12.

For example,

Terra (Sol 3)

Satellites are identified by their name, or by their starname plus the orbit of their planet and the satellite orbit. Satellite orbits are identified by letters in the sequence: Ay-Bee-Cee-Dee-Ee-Eff-Gee-Aitch-Eye-Jay-Kay-Ell-Em-En-Oh-Pee-Que-Arr-Ess-Tee-Yu-Vee-Dub-Ex-Wye-Zee.

For example,

Luna (Sol 3 Em)

The Habitable Zone HZ. The Habitable Zone Orbit Table shows the orbit number for the Habitable Zone, which is the orbital distance at which a typical world experiences temperatures and climate hospitable to humans and similar sophonts.
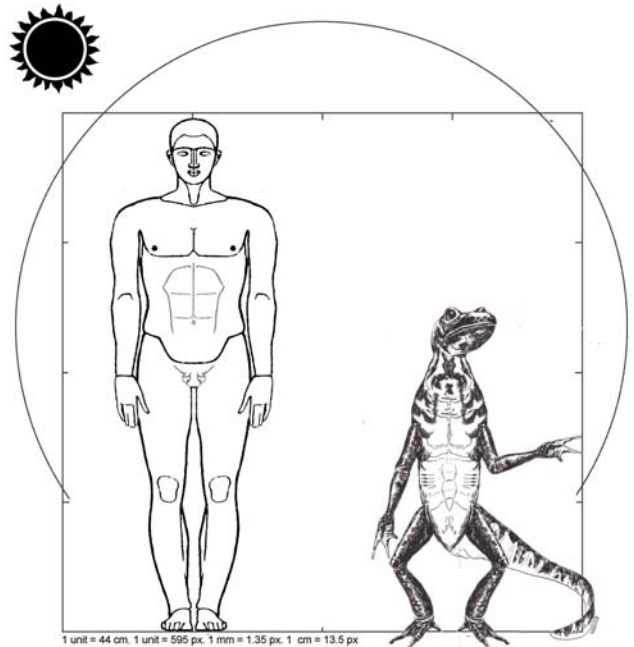
The Bwaps (Newts) of Maharaban

A world which is in the HZ (noted as HZ=0 or simply HZ) is **Temperate.** It has a range of temperatures, but the world is generally hospitable or habitable.

A world which is one orbit closer to the star (HZ= -1) is **Hot**; circumstances such as albedo and greenhouse effect lessen the heat effects to allow the world to be habitable, although it is at the upper temperature limits of human habitability.

A world which is one orbit farther from the star (HZ= +1) is **Cold**; albedo and greenhouse effects may lessen cold effects to allow the world to be habitable, but it is at the lower temperature limits of human habitability.

A world closer than HZ= -1 is too hot for routine occupation. Such worlds however, in Orbit 0 or 1 have a habitable **Twilight Zone.**

A world farther than HZ= +1 is too cold for routine occupation.

Satellites are classified for habitability based on the orbit their planet or gas giant occupies.

Natives

If a world has Population 7 or higher and Atmosphere 2 through 9, it has a Native population and is suitable for Sophont Creation.

Extinct Natives. If a world has Atmosphere 2 through 9 and Population 0, then a Native Population can be created, but it is Extinct. There may be ruins of the extinct sophonts scattered about the world.

Exotic Natives. If a world has Atmosphere A+ and Population 7+, its Natives are Exotic. They breathe exotic atmospheric gases and require protective suits and breathing gases in human friendly environments.

Special Cases. There is also always the chance that the native population is in decline (less than Pop=7), or undiscovered (probably less than Pop=7) in remote terrain.

Non-Natives

Sophont inhabitants of a world may be non-native, including Transients, Settlers, Colonists, Corporate, and Transplants.

05. NATIVE ENVIRONMENT

The Native Environment page details the evolutionary origins of the Sophonts: the terrain in which they evolved, and the type of locomotion they use, and the ecological niche their forebears occupied.

Native Terrain and Locomotion

The native terrain for the Sophonts provides insights into the origins of the species, and influences the type of locomotion it uses.

Terrain. Eleven general terrain types are specified. If the world has a Twilight Zone, special terrain types are allowed.

Locomotion. The system of movement for the Sophont is detailed, and further influences the physical structure of the Sophont.

Ecological Niche

The ecological niche and subniche shows what position in the food chain the Sophont occupies.

06. CHARACTERISTICS

The Characteristics page details the assignment of the physical, mental, and social characteristics for the Sophont. Separately, the number of dice rolled for each Characteristic is determined.

Humans. Humans have characteristics Strength, Dexterity, Endurance, Intelligence, Education, and Social Standing. 2D is rolled for each characteristic.

Big Sophonts

The extreme upper reaches of the Characteristic Values Table produces Characteristics with values 4D 5D or 6D. Because the lower range of these rolls produces abnormally low values, the first two dice of each roll are automatically 6 each.

For example, for a sophont rolling C1 Str = 4D, the actual roll is 12 + 2D.

07. CASTES

The Castes page details the structure of Castes for the sophont. If Characteristic C6 does not equal Caste, this page is skipped.

The Central Concept. The Caste Creation process creates a Caste Generation Table with entries 02 through 12; when the SCC is used to create individual characters, this table is used when determining individual Caste for a character. For example, in the process of creating four different Sophonts (we'll call them the Ay, Bee, Cee, and Dee), each with Body Caste Structure. For each, the creator rolls Flux for each entry. He will need nine rolls for each Sophont. The (example) rolls are

EXAMPLE ROLLS

	02	03	04	05	06	07	08	09	10	11	12
Ay	0	0	0	0	0	x	0	0	0	0	x
Bee	-5	-4	-3	-2	-1	x	0	+1	+2	+3	x
Cee	+5	+4	+3	+2	+1	x	0	-1	-2	-3	x
Dee	0	+1	-1	+2	-2	x	+3	-3	+4	-4	x

(This is a table of example die rolls to help understand Sophont Caste Creation. Each row is a pregenerated set of Flux rolls used in the example. The first row [Ay] is a constant roll of zero [column 7 does not need a roll]. Row Bee starts at -5 and works its way up; Row Cee works its way down. Row Dee is random.) The rolls create the results below:
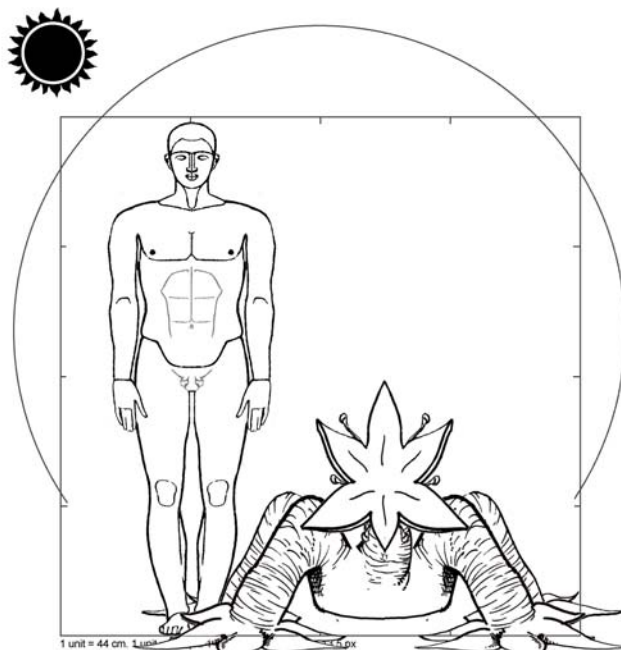
The Hivers of Guaran (Primary- 2 [K1 V]) A667800-F

Specimen Caste for the Ay, Bee, Cee, and Dee

F	Entry	Ay	Bee	Cee	Dee
1	K02	Muscle	Healer	Claw	Muscle
2	K03	Muscle	=Gender	=Special	Muscle
3	K04	Muscle	Antibody	Voice	Memory
4	K05	Muscle	Sensor	Muscle	Muscle
5	K06	Muscle	Memory	Muscle	Sensor
6	K07	Muscle*	Muscle*	Muscle*	Muscle*
5	K08	Muscle	Muscle	Muscle	Voice
4	K09	Muscle	Muscle	Memory	Antibody
3	K10	Muscle	Muscle	Sensor	=Special
2	K11	Muscle	Voice	Antibody	=Gender
1	K12	Brain*	Brain*	Brain*	Brain*

F= Frequency: the number of times this entry is expected to occur out of 36 rolls. * Automatic Entry.

These tables are used in Character Generation; a player creating an individual sophont character for the Ay Bee Cee or Dee would use this table to determine the Caste for the character:

Ay caste characters are almost all Muscles. One in 36 is a Brain.

Bee caste characters have a one in 36 chance (entry 02) of being a Healer. They have a dedicated gender member.

Cee caste characters have a one in 36 chance of being a Claw (some sort of warrior) (entry 02). Note that they have Special caste (which is then determined from the Special column).

Dee caste characters have a 12 in 36 (1 in 3) chance of being a Muscle (entries 02, 03, 05, 07). They have both a special and a gender entry.

08. GENDER

The Gender page details the structure of Genders for the sophont. Information about Gender is recorded on the back of the SCC.

The term Gender is used to convey a combination of social, cultural, and reproductive concepts not fully conveyed by the term Sex.

The Central Concept. The Gender Creation process

creates a Gender Generation Table with entries 02 through 12; when the SCC is used to create individual characters, the Gender Generation Table is used when determining individual Gender for a character. For example, in the process of creating four different Sophonts (we'll call them the Ay, Bee, Cee, and Dee), each with Dual Gender Structure. For each, the creator rolls Flux for each entry. He will need nine rolls for each Sophont.

The (example) rolls are

	02	03	04	05	06	07	08	09	10	11	12
Ay	x	x	0	0	0	0	0	0	0	0	0
Bee	x	x	-5	-4	-3	-2	-1	0	+1	+2	+3
Cee	x	x	+5	+4	+3	+2	+1	0	-1	-2	-3
Dee	x	x	0	+1	-1	+2	-2	+3	-3	+4	-4

Specimen Gender for the Ay, Bee, Cee, and Dee

F	Entry	Ay	Bee	Cee	Dee
1	K02	Female*	Female*	Female*	Female*
2	K03	Male*	Male*	Male*	Male*
3	K04	Female	Female	Male	Female
4	K05	Female	Female	Female	Male
5	K06	Female	Female	Male	Male
6	K07	Female	Female	Male	Male
5	K08	Female	Male	Male	Female
4	K09	Female	Female	Female	Male
3	K10	Female	Male	Male	Female
2	K11	Female	Male	Female	Female
1	K12	Female	Male	Female	Female

F= Frequency: the number of times this entry is expected to occur out of 36 rolls. * Automatic Entry.

These tables are used in Character Generation; a player creating an individual sophont character for the Ay Bee Cee or Dee would use this table to determine the Caste for the character:

Ay gender characters are predominately Female (out of 36, 3= Male; 33= Female).

Bee gender characters (out of 36, Male= 13; Female= 23).
Cee gender characters (out of 36, Male = 24; Female= 12).
Dee characters (out of 36, Male = 21; Female = 15).

09. LIFE STAGES

The Life Stages page recounts the various developmental periods in the life of a Sophont. Life Stages are reckoned in Terms.

Humans. Humans begin life with a two year infancy (a half Term) followed by nine Life Stages of two Terms each (=74 years.

Non-Humans. Different sophonts can have Life Stages of different lengths. Each Life Stage (after Infancy) may be as short as zero Terms (effectively skipped) and as long as four Terms.

For example, a very-long-lived (and very rare) Sophont could have all Life Stages four Terms (16 years) long. After its two-year Infancy, nine 16-year Terms gives the Sophont a life expectancy of 146 years or more. On the other hand, a

very-short-lived (and also very rare) Sophont could roll ones on the Life Stage Duration table: for a two-year infancy, a one Term childhood, and a one Term Peak: giving a Life Expectancy of 10 years.

10. THE SENSES

The Senses page determines the possible senses and their parameters for the Sophont. The senses are more specifically detailed in the Sense chapter.

Senses are identified by Strings of applicable digits that control precisely how a sense works.

Vision. The vision string includes a constant that controls Vision Actions and the three specific wavelengths (sometimes called **colors**, and ranging from the ultra-violet to the infra-red) which can be seen.

Hearing. The Hearing String includes a constant that controls Hearing Actions. It also shows the central sound frequency (and what frequencies on either side) that can be heard; and the central sound frequency (and side frequencies) use by the voice.

Smell. The Smell String includes a constant that controls smelling, and evaluates its sharpness. The characteristic scent for the Sophont is also created.

Touch. The Touch String includes a constant that controls the sense of touch, and evaluates it sensitivity.

Awareness. The Awareness String includes a constant that controls Awareness, and evaluates its acuity.

Perception. The Perception String includes a constant that controls Perception, evaluates its acuity, and gives strength to the ability express oneself in Perception Voice.

Language Medium or Type

The Language used by a Sophont is dependent on the senses available. The tables determine the primary Language form for the sophont.

11. BODY STRUCTURE

The Body Structure page determines the essential structure of the sophont, including the location of the brain and senses, the number and types of limbs, and a variety of body features.

12. SPECIAL ABILITIES

The Special abilities page determines special abilities available to the race as a whole, or to members of genders or castes.

13. MANIPULATORS

The manipulators assigned under Body Structure are illustrated.

14. UNIQUES

In order to take into account non-standard or unusual abilities, body structures, or body processes, the Uniques chart shows several possible concepts.

15. SIZE

The Size chart shows formulae for calculating body size (based on Human=100) for the Sophonts.

Why Aren't These Races Called Aliens?

Humans see non-humans as *aliens*; but non-humans see humans as *aliens*. We need a word that conveys the idea of an intelligent species. Aliens doesn't work. Extra-terrestrial (besides being too long) excludes those who live on Terra, and most humans don't live on Terra anyway. Xeno (Greek for stranger) is basically a synonym for alien.

Sophont (originated by Karen Anderson, and appearing first in works by Poul Anderson about 1966) fits the requirements: "an intelligent being more or less equivalent in reasoning power with humans." Accepted usage excludes machines unless they have true artificial intelligence (and not just great processing power).

AN UNCONVENTIONAL OVERVIEW OF HUMANITY

It is possible to describe a Sophont in alternate ways, each of which has its own validity. A conventional, egalitarian view of humanity produces the WGTS entry below.

From Page 6 of
  Wiseman's Guide To Sophonts (Solomani Rim edition).

The Solomani of Terra (Sol 3 [G2 V]

HomeWorld Profile: Terra A877B99-D
Terra (Sol 3) is a temperate world orbiting a G2 V primary.

System Details

The Sol system contains 4 worlds (plus various minor planets and satellites), four gas giants, and one planetoid belt.

Body Structure

Solomani are bilateral bipeds (classified HBS-T-AN-LN-N). The Solomani body structure consists of a head with brain and senses and a torso with two limbgroups. Limbgroup one has arms with hands. Limbgroup three has legs. Under the LG4 FN-FN standard classification system, LG2 LG4 are omitted. The Solomani body is characterized by a bony interior skeleton covered by skin. Interior body fluids are blood.

The Solomani are Plains Walkers: generally adapted to and most comfortable in plains terrain. These sophonts originally occupied the Omnivore Hunter/Gatherer ecological niche. Solomani breathe Air-8.

The genetic profile is SDEIES. The Solomani have an average life expectancy of 74 years. On the standard Imperial Size spectrum (where humans are 100), the Solomani are size ranked 100 .

Gender Structure

The Solomani have a Dual (technically FM) gender structure. The reported gender census (IISS Survey Report: 420-892R) is Female: 51, Male: 49. (shown as percentages).

Gender Based Differences. Observed differences between genders roles include: none significant.

Caste Structure

The Solomani have no apparent caste; any differences within the species appear to be cultural in nature.

Sensory Abilities

The Solomani have a range of senses which includes Vision, Hearing, Smell, and Touch.

The sense of vision is generally Standard; Solomani eyes are sensitive to the band: RGB.

The sense of hearing is generally standard.
The sense of smell is generally inferior.
The sense of touch is generally standard.
The Solomani sense of Vision is dominant.
The racial scent is HUM-7FV (based on an IISS survey).

Special Abilities. Talents.

There is no indication of special abilities or talents.

From Page 6 of
  Sophontology Rethought (Solomani Rim edition).

[Only alternative texts shown.]

Gender Structure

The Solomani have a Group (technically 1234) gender structure. The reported gender census (IISS Survey Report: 420-892R) is One: 46, Two: 44, Three: 5, Four: 5 (shown as percentages).

Gender Based Differences. Observed differences between genders roles include:

The One (corresponds to Female) is the baseline.

The Two (corresponds to Male) is generally slightly stronger; slightly less dexterous; slightly less endurant.

The Three (corresponds to Neuter [non-breeding; Male pattern. Gay] is generally equivalent to Male.

The Four (corresponds to Neuter [non-breeding; Female pattern. Lesb] is generally equivalent to Female.

Special Abilities. Talents.

There are reports that individuals are capable of Psionics at low levels (approximately 10% of the population).

There are reports of individuals capable of Perception.

Supporting materials for this entry are on file at Encyclopediopolis on Reference, and at AAB data repositories throughout the Imperium.
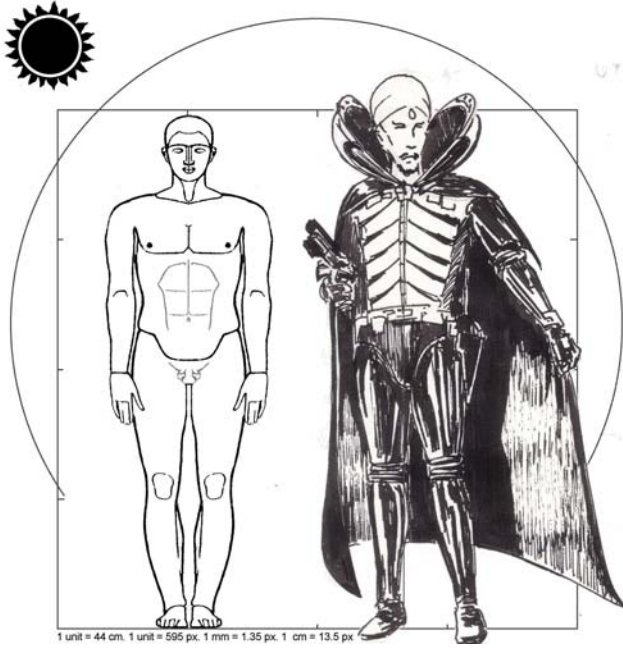
The Zhodani of Zhdant (Pliebr-2 [K0 V] A6549C8-F
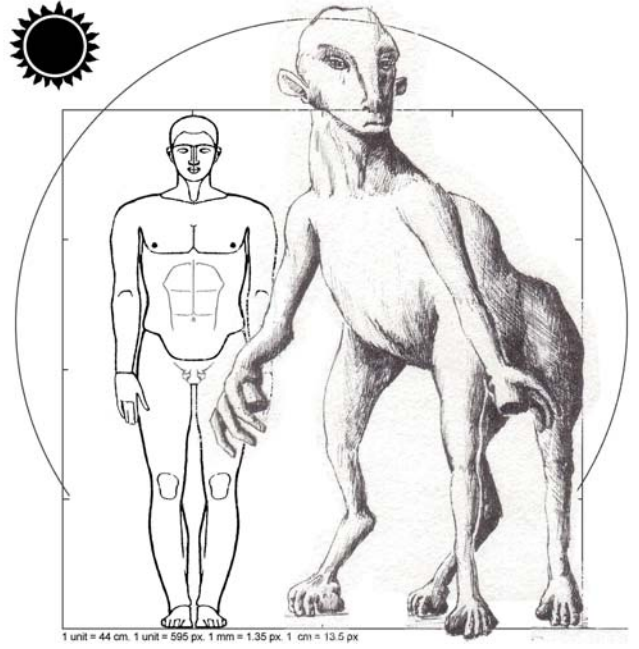
The K'kree of Kirur (Gzang-5 [F1 V]) B863A03-F
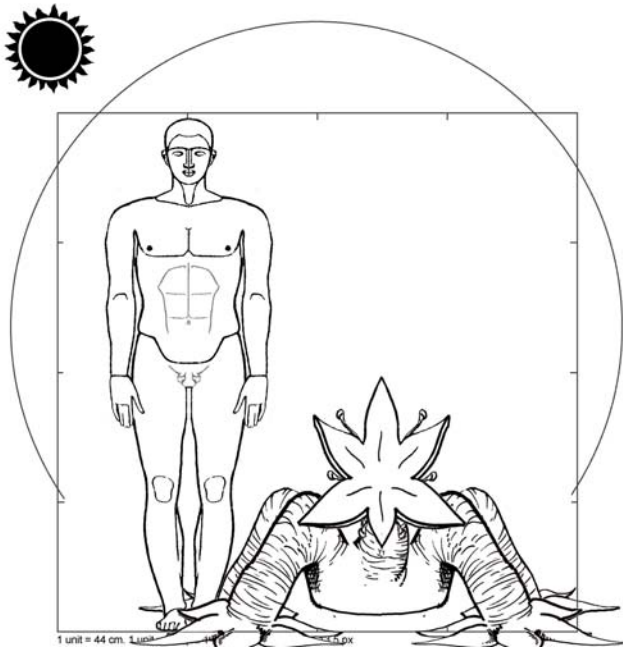
The Hivers of Guaran (Primary- 2 [K1 V]) A667800-F
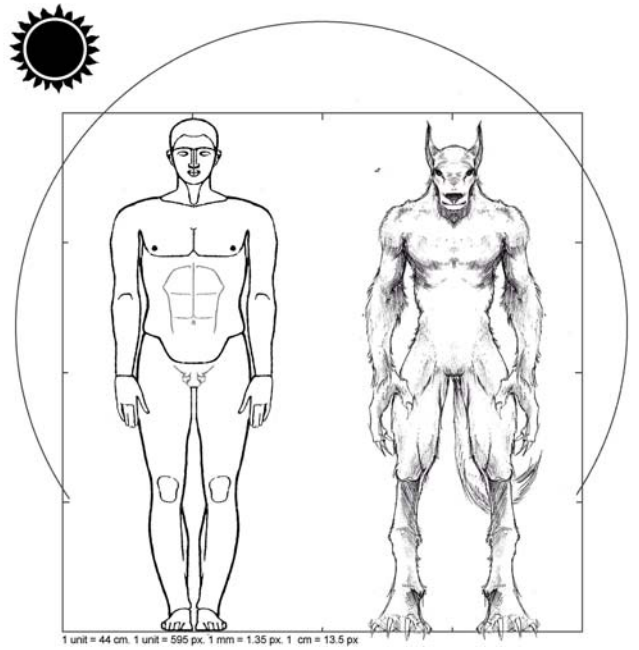
The Vargr of Lair (Kneng-3 [G5 V]) A8859B9-F
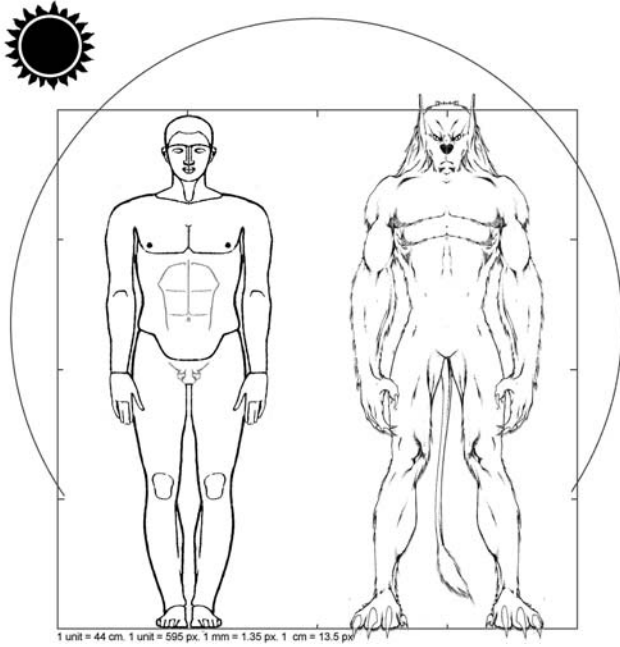
The Aslan of Kusyu (Tyeyo-3 [G4 V]) A876986-E

1 unit = 44 cm. 1 unit = 595 px. 1 mm = 1.35 px. 1 cm = 13.5 px
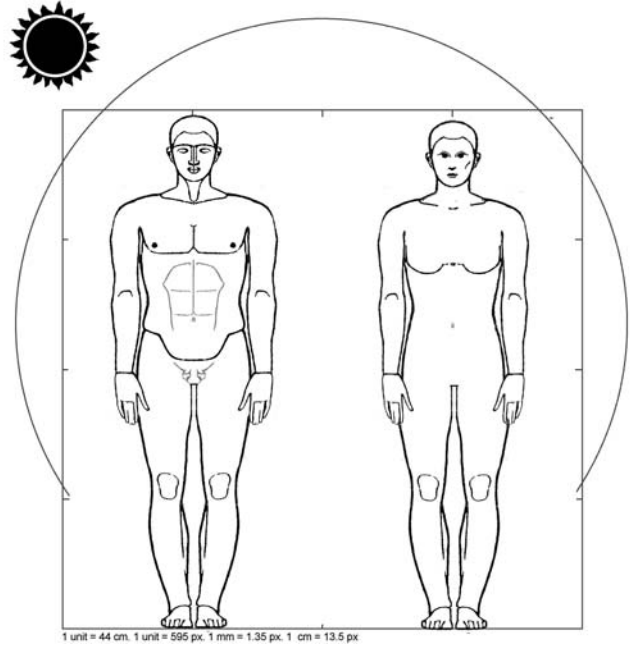
The Humans of Terra (Sol-3 [G2 V])

1 unit = 44 cm. 1 unit = 595 px. 1 mm = 1.35 px. 1 cm = 13.5 px
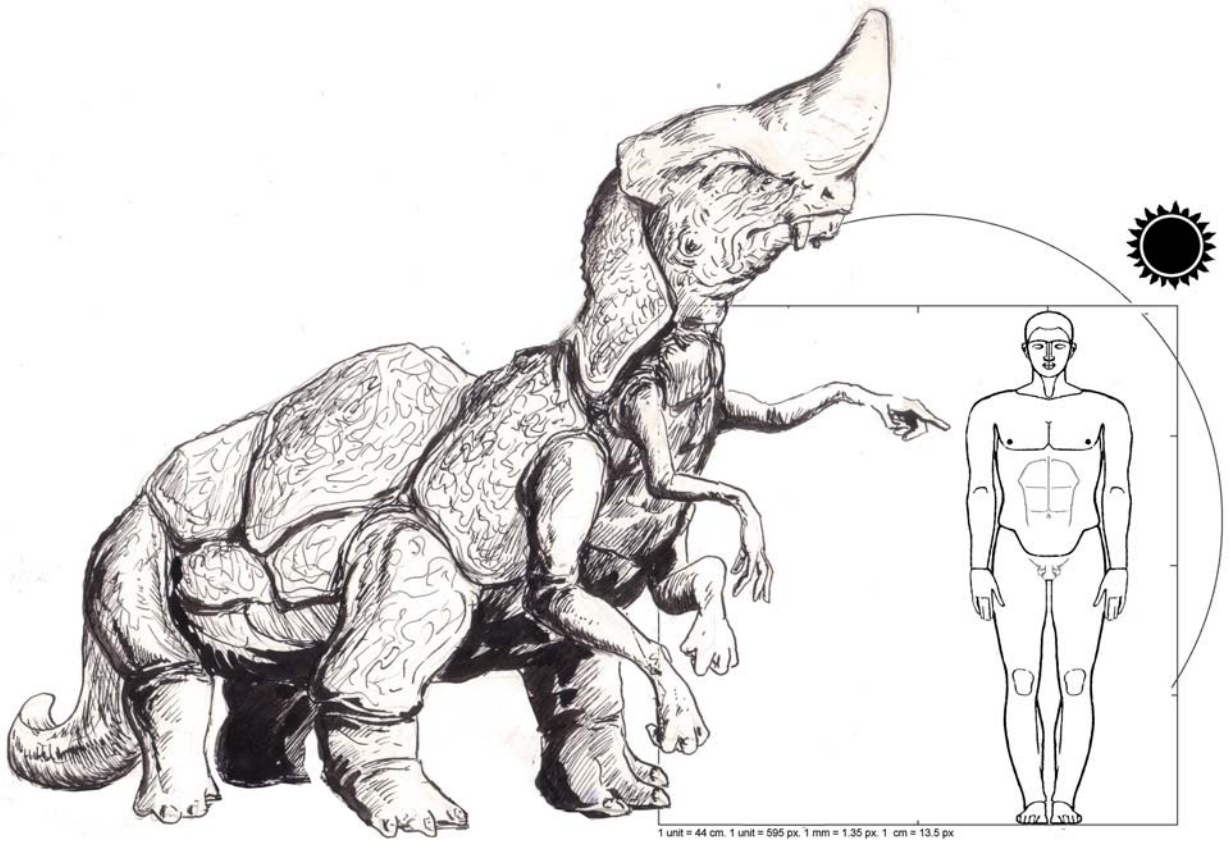
The Virushi of Virshash (Thintle-0 [M1 D] DA86954-6

1 unit = 44 cm. 1 unit = 595 px. 1 mm = 1.35 px. 1 cm = 13.5 px

Sophont Creation

The Sophont Creation Process creates a Sophont Creation Card SCC which is then used as the basis for basic character generation of the Sophont.

The steps and the charts involved are detailed here.

Sophont-01

Checklist

01. Introduction and Checklist. This introduction is an overview and checklist of the **Traveller** Sophont Creation Process.

02. The Sophont Creation Card records the information needed to generate a **Traveller** character from the created race.

A. Prepare a blank SCC.

03. Blank Fillform.

A. Prepare a blank Fillform.

04. Basics. The process selects or creates a plausible homeworld.

A. Create a Homestar.
  1. Flux for Spectral Type (Sp).
  2. Roll for Spectral Decimal 0-9.
  3. Flux for Spectral Size.

B. Determine Habitable Zone.

C. Create Homeworld.
  1. Flux for World or Satellite.
  2. Actual Orbit (HZ Var).
  3. If Satellite, for Satellite Orbit.
  4. Determine Homeworld SAHPG.
  5. Note Climate.
  6. Name Homeworld.

D. Name the Sophonts.

E. Determine Native Status.

05. Environment. The process determines the evolutionary environment for the Sophonts and states their ecological niche.

A. Native Terrain /Locomotion.
  1. Flux for Native Terrain. Record as Environ Roll.
  2. 1D for Locomotion Column and select from the Native Terrain row.

B. Ecological Niche.
  1. Flux for Basic Class.
  2. Flux in the specific Basic Class column.

06. Characteristics. Determine the six personal characteristics for the race.

A. Sophont Characteristics. Flux on columns C1-C2-C3-C4-C5-C6 for characteristic names.

B. Characteristic Values. Flux on columns C1-C2-C3-C4-C5-C6 for Dice for each Characteristic.

07. Caste. If the race has C6= Caste as its social characteristic, then the process determines the details of the racial caste structure. Skip if the race does not have Caste.

A. Caste Structure Types. 1D for Caste Type.

B. Caste Table Creation. Start with Entry 2 on the SCS, roll on the appropriate column for the Caste Entry.
  1. Automatic: Entry 7 = Common.
  2. Automatic: Entry 12 = Unique.

C. If Skilled Caste, 1D and 1D for each Entry on the Caste Skills Table (Chart 11).

D. Caste Shift.

E. Caste Assignment.

F. Caste Based Differences.

08. Gender. Determine the gender structure of the race.

A. Gender Components.
  1. Flux for Gender Structure.
  2. For each Entry 2 to 12 on the Gender Generation Table, Flux for specific Gender.

B. Gender Assignment.

C. Gender Shift.

D. Gender Based Differences.

09. Life Stages and Aging. Determine the stages of life through which race members pass: from infancy to retirement. This determines the lifespan and the effects of aging.

A. Enter ½ for Life Stage 0.

B. Life Stage Duration. For each Life Stage 1 to 9, determine its duration.

10. The Senses. Races may have the same senses as humans, or they may be different. The process determines which senses the race has and how the senses function.

A. For each sense, Flux for each possible Sense to determine if present.

B. For each Sense present, Flux on the appropriate columns to create the Sense String.

C. Generate the Racial Scent.

D. Identify the primary Language.

11. Sophont Body Structure. The process determines the basic physical structure (symmetry, number of limb groups, location of the brain case, and location of the senses) of the race. These details may or may not be of any use in most play. Many are for background.

A. Body Structure.
  1. Flux for Symmetry.
  2. Flux for Head and Torso.
  3. Locomotion Type,
    a. Flux for Front Limbs.
    b. Flux for Rear Limbs.

B. Body Features.
  1. Flux for Skeleton.
  2. Flux for Fluids.
  3. Flux for Skin
  4. Flux for Weapon.
  5. Flux for Manipulators.

12. Sophont Special Abilities.

A. Special Ability
  1. Possible Special Ability Type.
  2. Flux for Special Ability Row.
  3. Adjustments as necessary.

 B. Voices.
  1. Flux for Voice if Hearing
  2. Flux for Pvoice if Perception.

13. Manipulators.

14. Uniques. The creation may implement
  1. Metamorphosis.
  2. Symbionts.
  3. Hibernation.
  4. World Condition Effects.

15. Sophont Size. The process allows a calculation of the height and weight and relative size of a member of the race.

16. Example Sophont Description.

17. Example NIL Sophonts.

The character is the individual through which the player in **Traveller** performs all activity. Most characters are human, and the basic character generation procedures in **Traveller** are for humans.

SOPHONT CREATION CARD — Size:

Race Name	LongName	StarName & Orbit
Homeworld	UWP and Trade Classifications	Homestar

Native Status	Environ Flux	Overview	Life Expectancy ___ yrs
Niche and Subniche	Genders ☒	Symmetry ☒	0 ☒
Native Environment and Locomotion ☒	Castes ☒	Head ☒	1 ☒
Breathes ☒	Racial Scent ☒	Torso ☒	2 ☒

Characteristics (GP) SGEIIS	Senses HTP		Limbgroup 1 ☒	3 Chargen Starts ☒
C1 Str ☒	Energy	Vision String ☒	Limbgroup 2 ☒	4 ☒
C2 Dex Agi Gra ☒	Vibration	Hearing String ☒	Limbgroup 3 ☒	5 Physical Aging ☒
C3 End Sta Vig ☒	Volatiles	Smell String ☒	Limbgroup 4 ☒	6 ☒
C4 Int ☒	Contact	Touch String ☒	Tail ☒	7 ☒
C5 Edu Tra Ins ☒	Fields	Aware String ☒	Skeleton ☒	8 ☒
C6 Soc Cha Cas ☒	Auras	Percep String ☒	Skin ☒ Body Fluids ☒	9 Mental Aging ☒

SOPHONT CREATION CARD (BACK)

	C1	C2	C3	C4	C5			C1	C2	C3	C4	C5
G1 1FE						1FE	K02					
G2 2MA						2MA **2**	K03					
G3 3NB						3NB **3**	K04					
G4						**4**	K05					
G5						**5**	K06					
G6						**6**	K07 Common					
Caste Assignment: ☒						**7**	K08					
Caste Shift ☒						**8**	K09					
Gender Assignment ☒						**9**	K10					
Gender Shift ☒						**10**	K11					
Caste-Gender Relation ☒						**11**	K12 Unique					
						12						

Identification

Can

Sophont	The Can of Sanest (Telsenorsec 1 [M0 V])
Homeworld	Sanest A344000-0 Ba Pa Tz Cold World Omnivore - Gatherer
	NIL: Can: Omnivore Gatherer. Wetlands Flyer. Gender: MF. Symmetry: Bilateral Biped. Limb Groups (WN-LN): Wings with Graspers, Legs, Tailless. Weak Vision: INA, Weak Hearing, Weak Smell, Weak Touch, SDVITS: 222332 Size: 100

Environment

05		
	Native Status	Extinct Natives
	Being Type	Flyer
	Environment	Wetlands +3
	Niche/ Subniche	Omnivore - Gatherer
	Breathes	Breathes: Water and Air-4
10	Racial Spectra	INA (Local= INA)

Characteristics

06	Genetic Profile	SDVITS	
	C1	Str	2 D
	C2	Dex	2 D
	C3	Vig	2 D
	C4	Int	3 D
	C5	Tra	3 D
	C6	Soc	2 D

The Senses   VHST

10		
	Vision	V-08-INA
	Hearing	H-06-5250
	Smell	S-07-4
	Touch	T-10-2

Physical

11	Overview	N-TBS-WN-LN-T
	Symmetry	Bilateral
	Head	Headless
	Torso	Torso with Brain and Senses
13	Manipulators	Graspers
	LimbGroups	WN-LN
	LG-1	Wings with Graspers
	LG-2	
	LG-3	Legs
	LG-4	
	Tail	Tailless
	Peds	Biped
	Skeleton	Exoskeleton
	Body Fluids	Blood
	Skin	Furry Pelt
	Weapons	Tusks

Life Stages

09				
	0	Infancy	Half-term	=2 years
	1	Childhood	2	=8
	2	Adolescence	2	8
	3	Young Adult	4	16
	4	Adult	2	8
	5	Peak	2	8
	6	Mid-Life	1	4
	7	Senior	2	8
	8	Elder	1	4
	9	Retirement	1	4
		Life Expectancy		= 70

Details

15	Size	100
10	Scent	QTL-DQB
12	Special	-
07	Genders	Dual (order= MF)
08	Castes	

Gender and Caste   Genders 2D Castes

07	Female	2
	Male	3
08	Female	4
	Male	5
	Male	6
	Male	7
	Female	8
	Female	9
	Female	10
	Male	11
	Female	12

Gender Differences		Str C01	Dex C02	Vig C03	Int C04	Tra C05
08	G01	0	0	0	0	0
	G02	+5	+4	+3	0	-2
	G03					
	G04					
	G05					
	G06					

Caste Differences		C01	C02	C03	C04	C05
07	K02					
	K03					
	K04					
	K05					
	K06					
	K07	0	0	0	0	0
	K08					
	K09					
	K10					
	K11					
	K12					

08	
07	
07	
08	Gender is Assigned at Birth
08	Gender is Fixed

08	Gender Census: Female: 47, Male: 52.
07	Caste Census:

Identification

Sophont		
Homeworld		-

Environment

05
	Native Status	
	Being Type	
	Environment	
	Niche/ Subniche	-
	Breathes	
10	Racial Spectra	(Local=)

Characteristics

06
	Genetic Profile	
	C1	
	C2	
	C3	
	C4	
	C5	
	C6	

The Senses

10

Physical

11
	Overview	
	Symmetry	
	Head	
	Torso	
13	Manipulators	
	LimbGroups	
	LG-1	
	LG-2	
	LG-3	
	LG-4	
	Tail	
	Peds	
	Skeleton	
	Body Fluids	
	Skin	
	Weapons	

Life Stages

09
		Half-term	=2 years
0	Infancy		
1	Childhood		=
2	Adolescence		
3	Young Adult		
4	Adult		
5	Peak		
6	Mid-Life		
7	Senior		
8	Elder		
9	Retirement		
	Life Expectancy		=

Details

15	Size	
10	Scent	
12	Special	
07	Genders	(order=)
08	Castes	

Gender and Caste   Genders 2D Castes

07

08
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Gender Differences

	Str			Int	
	C01	C02	C03	C04	C05

08
	C01	C02	C03	C04	C05
G01					
G02					
G03					
G04					
G05					
G06					

Caste Differences

07
	C01	C02	C03	C04	C05
K02					
K03					
K04					
K05					
K06					
K07	0	0	0	0	0
K08					
K09					
K10					
K11					
K12					

08	
07	
07	
08	
08	

08	Gender Census:
07	Caste Census:

Homeworld

Each specific species of sophonts originally evolved on a homeworld with specific details of environment. Basic Information generates this information as part of the species background.

Sophont-04
Homeworld

REQUIRED SYSTEM INFORMATION FOR SOPHONTS

The star system and homeworld data necessary for a sophont include:

Homestar Spectral, Decimal, Size.
World or Satellite (and Satellite Orbit), and Habitable Zone Variation.
Habitable Zone for the System.
Homeworld Name, the SAHPG component of the UWP, and Climate.
Race Name (may be deferred until after generation).
Native Status.

PRE-EXISTING INFORMATION

Additional information may be available because it has been previously generated, or because the sophont is being created for an existing system. The tables here allow creation of the required information if it is not otherwise available.

HOMEWORLD

Sophont generation uses the SAHPG (Size, Atmosphere, Hydrographics, Population, Government) components of the Universal World Profile.
S. Size. Planetary Size: 2D-2.
A. Atmosphere: Flux + Size.
If Size =0, Atmosphere =0.

H. Hydrographics. Flux+ Size.
Maximum A.
If Size =0-1, Hyd =0;
If Atm =0-1 or A+, Hyd DM - 4.
P. Population. 2D-2.
G. Government. Flux +Pop.
Convert negative values to 0.

NATIVES

Sophonts who evolved on the Homeworld are Natives.
Native sophonts are identified as "of" a homeworld.
All other sophonts are identified as "from" a different (native) homeworld.

WORLDS

World. A planet or satellite.
Planet. A world orbiting a star.
Satellite. A world orbiting a planet.
Mainworld. The most important world in a system.
Belt. An asteroid belt (which may be a mainworld).or a planetoid belt

HOMESTAR

Flux	Sp	O	B	A	F	G	K	M
- 6	OB	Ia	Ia	Ia	II	II	II	II
- 5	A	Ia	Ia	Ia	II	II	II	II
- 4	F	Ib	Ib	Ib	III	III	III	II
- 3	F	II	II	II	IV	IV	IV	II
- 2	F	III	III	III	V	V	V	III
- 1	G	III	III	IV	V	V	V	V
0	G	III	III	V	V	V	V	V
+1	K	V	III	V	V	V	V	V
+2	K	V	V	V	V	V	V	V
+3	M	V	V	V	V	V	V	V
+4	M	IV	IV	V	VI	VI	VI	VI
+5	M	D	D	D	D	D	D	D
+6	M	D	D	D	D	D	D	D

Size IV is not possible for K5-K9 and M0-M9 stars. Size VI is not possible for A0-A9 and F0-F4 stars.

HABITABLE ZONE ORBIT

Spectral> Size	A0- A3	A4- A8	A9- F1	F2- F6	F7- G1	G2- G8	G9- K3	K4- K8	K9- M3	M4- M8	M9
Ia	12	12	12	12	11	12	12	12	12	12	12
Ib	11	11	10	10	10	10	10	10	10	11	11
II	9	9	8	8	8	8	8	9	9	10	11
III	8	8	7	6	6	6	7	7	8	8	9
IV	7	7	6	6	5	5	5	-	-	-	-
V	7	7	6	5	4	3	2	2	0	0	0
VI	-	-	-	3	3	2	1	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0

The Habitable Zone (HZ) orbit number shown here indicates a world surface environment which is hospitable to humans and similar sophonts.

NATIVE STATUS
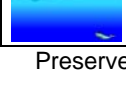
Note the status of the sophonts.
Transients. Pop = 1-2-3. Locals are present as merchant, corporate, military, or research personnel.
Settlers. Pop = 4-5-6. Locals have settled here but do not (as yet) meet the criteria for colonists or transplants.
Colonists. Gov = 6.
Corporate. If Gov = 1 (employees).
Transplants. Atm = 0-1. Sophonts evolved elsewhere and settled this world many years ago. Not used if Settlers or Transients.
Extinct / Vanished. Pop = 0. The sophonts are Extinct. If Transplants, call them Vanished instead. If TL>0, they are Catastrophic Extinct (or Vanished).
Exotic. Environment (Atm >9) makes these sophonts incompatible with traditional human environments.
Natives. If not Settlers, Colonists, Corporate, or Transplants, they are Natives. Pop 0 or 7+ and Atm 2+.

WORLDS AND ORBITS

2D	World	HZ Var	Close	Far
- 6	Satellite	- 2	Ay	En
- 5	Satellite	- 1	Bee	Oh
- 4	Satellite	- 1	Cee	Pee
- 3	Satellite	- 1	Dee	Que
- 2	World	0	Ee	Arr
- 1	World	0	Eff	Ess
0	World	0	Gee	Tee
+1	World	0	Aitch	Yu
+2	World	0	Eye	Vee
+3	World	+1	Jay	Dub
+4	World	+1	Kay	Ex
+5	World	+1	Ell	Wye
+6	World	+2	Em	Zee

CLIMATE

A Mainworld in the orbit shown is marked with this climate.

	HZ	Temperate	
	HZ - 1	Hot	
	HZ +1	Cold	
	HZ = 0 or 1	Twilight Zone	= Tz
	Close Satellite	Locked	= Lk

Hot. At the upper limits of human temperature endurance.
Cold. At the lower limits of human temperature endurance.
Twilight Zone. Tidally locked with a Temperate band at the Twilight Zone, plus a Hot region (hemisphere) facing the Primary and a Cold region (hemisphere) away from the Primary.
Locked. Satellite (Ay through Em) Locked to the planet it orbits. A Locked satellite does not have a Twilight Zone; Its day length equals the time it takes to orbit its planet.

Native Environment

The details of a sophont's evolutionary environment shape its morphology, locomotion, and the ecological niche it occupies.

NATIVE TERRAIN

Image	Name	Value
	Mountain Steep dominating region.	**- 5**
	Desert Dry region with sparse vegetation.	**- 4**
	Exotic Strange or abnormal region.	**- 3**
	Rough Wood. High density vegetation region.	**- 2**
	Rough Uneven or broken surface region.	**- 1**
	Clear Flat expansive unbroken region.	**0**
	Forest Flat with high vegetation.	**+1**
	Wetlands Water dominated marsh region.	**+2**
	Wetland Wood Water dominated swamp region.	**+3**
	Ocean Interface of sea and atmosphere.	**+4**
	Ocean Depths Subsurface ocean regions.	**+5**

Preserve this Roll as Environ DM.

TWILIGHT ZONE / LOCKED

Image	Name	Value
	Baked Lands Hot Region	**- 5**
	Twilight Zone Temperate Region	**- 0**
	Frozen Lands Cold Region May include ice-covered	**+1**

Substitute these Native Terrain names if the Homeworld is Twilight Zone or Locked.

NATIVE EVOLUTIONARY ORIGINS

A natively-evolved sophont has, as its origins, the following elements:

Native Terrain. A specific type of terrain in which the sophont had its earliest origins. Native Terrain in turn influences Locomotion.

Locomotion. The essential self-powered, patterned motion of limbs (or other anatomical parts) system of movement used by the sophont.

NATIVE TERRAIN AND LOCOMOTION

	Native			Roll 1D			
Flux	Terrain	1	2	3	4	5	6
- 5	Mountain	Walker	Walker	Walker	Walker	Walker	Flyer
- 4	Desert	Walker	Walker	Walker	Walker	Walker	Flyer
- 3	Exotic	Amphib	Walker	Walker	Walker	Flyphib	Flyer
- 2	Rough Wood	Amphib	Walker	Walker	Walker	Walker	Flyer
- 1	Rough	Amphib	Walker	Walker	Walker	Walker	Flyer
0	Clear	Walker	Walker	Walker	Walker	Walker	Walker
+1	Forest	Walker	Walker	Walker	Walker	Walker	Walker
+2	Wetland	Amphib	Aquatic	Walker	Walker	Walker	Flyer
+3	Wetland Wood	Amphib	Walker	Walker	Walker	Walker	Flyphib
+4	Ocean	Flyphib	Swim	Swim	Swim	Diver	Diver
+5	Ocean Depth	Diver	Diver	Diver	Diver	Diver	Diver

If Atm 8+, DM - 2. If Size 5-, DM – 1. If Hyd 6+, DM +1. If Hyd 9+, DM +1
Greater than highest entry, use +5; less than minimum entry, use - 5.

SOPHONT MORPHOLOGY

Type	Walks	Dives	Swims	Flies	Other	Breathes
Walker	Walks	-	-	-	-	Air- <Atm>
Amphibian	Walks	-	Swims	-	-	Air- <Atm> and Water
Aquatic	Walks	-	Swims	Flies	-	Air - <Atm>
Diver	-	Dives	Swims	-	-	Water
Flyer	Walks	-	-	Flies	-	Air- <Atm>
Flyphib	-	Dives		Flies	-	Air- <Atm> and Water
Swimmer	-	-	Swims	-	-	Air- <Atm>
Static	-	-	-	-	Immobile	Air- <Atm>
Drifter	-	-	-	-	Drifts	Water

Walks. Moves (walks, jumps, crawls) on land. **Swims.** Moves in water at or near surface. **Dives.** Moves in water, in the depths. **Flies.** Moves in atmosphere. **Breathes.** Insert Homeworld Atmosphere after Air. Static and Drifter apply only if Producer.

ECOLOGICAL NICHE

Flux	Niche	Herbi-	Omni-	Carni-	Scavenger	Producer
- 6	Producer	Grazer	Hunter	Pouncer	Carrion-Eater	Collector
- 5	Producer	Grazer	Hunter	Pouncer	Carrion-Eater	Collector
- 4	Herbivore	Grazer	Hunter	Pouncer	Carrion-Eater	Collector
- 3	Herbivore	Intermittent	Hunter	Pouncer	Hijacker	Collector
- 2	Omnivore	Intermit	Hunter	Pouncer	Hijacker	Collector
- 1	Omnivore	Intermit	Gatherer	Pouncer	Hijacker	Collector
0	Omnivore	Intermit	H / G	Chaser	Intimidator	Basker
+1	Omnivore	Grazer	Gatherer	Chaser	Intimidator	Basker
+2	Omnivore	Grazer	Gatherer	Chaser	Intimidator	Basker
+3	Carnivore	Grazer	Gatherer	Chaser	Intimidator	Basker
+4	Carnivore	Grazer	Gatherer	Trapper	Intimidator	Basker
+5	Scavenger	Grazer	Gatherer	Siren	Reducer	Basker
+6	Scavenger	Filter	Eater	Killer	Reducer	Basker

Roll Flux for Niche; then Flux in the appropriate column.
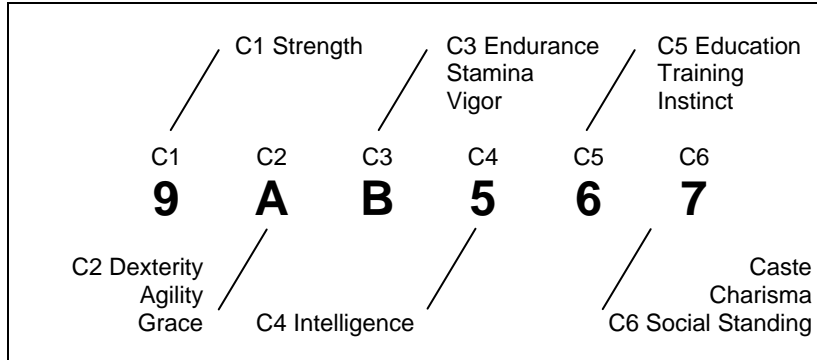Apply Environment Roll to appropriate columns (but not Basic Class).

Characteristics

Sophonts, like standard human **Traveller** characters, have six distinct characteristics: three physical, two mental, and one social. The specific characteristics are determined by this system.

Sophont-06
Characteristics

THE UPP

```
            C1 Strength        C3 Endurance       C5 Education
                               Stamina            Training
                               Vigor              Instinct
         C1     C2     C3     C4     C5     C6
         9      A      B      5      6      7
   C2 Dexterity                                        Caste
      Agility                                        Charisma
      Grace         C4 Intelligence          C6 Social Standing
```

The Universal Personality Profile (UPP) records the six characteristics as single digits using the hex code (the Ehex code if values exceed F).

CHARACTERISTICS

Possible personal characteristics include:

Char		Characteristic	H*	Description	GP Letter
C1	Str	Strength	H	physical power and ability.	S
C2	Dex	Dexterity	H	body and eye-hand coordination.	D
C2	Agi	Agility	A	overall body coordination.	A
C2	Gra	Grace	A	overall body-limb coordination.	G
C3	End	Endurance	H	physical resistance to fatigue.	E
C3	Sta	Stamina	A	long-term ability to pursue a task.	S
C3	Vig	Vigor	A	short-term ability to resist fatigue.	V
C4	Int	Intelligence	H	natural ability to think and reason.	I
C5	Edu	Education	H	achievement level of schooling	E
C5	Tra	Training	A	based on cultural heritage	T
C5	Ins	Instinct	A	based on genetic heritage.	I
C6	Soc	Social Standing	H	position in large group hierarchy.	S
C6	Cha	Charisma	A	position in small group hierarchy.	C
C6	Cas	Caste	A	position in genetic group hierarchy.	K

H= Human characteristic (may be present in non-humans). If all characteristics are H, the species may be (but is not necessarily) Human.
A= Analog (non-human) characteristic.

All races have Strength and Intelligence. A race may have Dexterity or one of its analogs: Grace or Agility. A race may have Endurance or one of its analogs: Stamina or Vigor.
A race may have Education or one of its analogs: Training or Instinct.
A race may have Social Standing or one of its analogs: Charisma or Caste.
In many cases, a characteristic can be used as its analog (usually with a penalty), but other restrictions may also apply.

Genetic Profile GP. The six initial letters of the characteristics for a species comprise the Genetic Profile. The letters in the GP have meaning dependent on position (for example, S in position 1 indicates Strength, and in position 3 indicates Stamina). Because two characteristics in position 6 have the initial letter C, use K for Caste. For example, Human is SDEIES (Strength, Dexterity, Endurance, Intelligence, Education, Social Standing).

Non-Biological Elements. It is possible for other characteristics to be present in artificial beings (and not of importance here).

THE CHARACTERISTICS

C1		Strength	
C2	Agility	Dexterity	Grace
C3	Vigor	Endurance	Stamina
C4		Intelligence	
C5	Training	Education	Instinct
C6	Charisma	Social Standing	Caste

SOPHONT CHARACTERISTICS

Flux	C1	C2	C3	C4	C5	C6
-5	Str	Agi	Sta	Int	Ins	Cas
-4	Str	Agi	Sta	Int	Ins	Cha
-3	Str	Agi	Sta	Int	Ins	Soc
-2	Str	Agi	Sta	Int	Ins	Soc
-1	Str	Dex	End	Int	Edu	Soc
0	Str	Dex	End	Int	Edu	Soc
+1	Str	Dex	End	Int	Edu	Soc
+2	Str	Gra	Vig	Int	Tra	Soc
+3	Str	Gra	Vig	Int	Tra	Soc
+4	Str	Gra	Vig	Int	Tra	Cas
+5	Str	Gra	Vig	Int	Tra	Cha

For characteristics C1 through C6, roll Flux to determine each specific characteristic.

If species is Flyer, DM -2. Flyers are more likely to have Agi, Sta, and Ins

If species is Swimmer or Diver, DM +2. Swimmers and Divers are more likely to have Gra, Vig, and Tra.

CHARACTERISTIC VALUES

	Physical			_Mental_		Social
	C1	C2	C3	C4	C5	C6
		Agi	Sta		Ins	Cas
		Gra	Vig		Tra	Cha
Flux	Str	Dex	End	Int	Edu	Soc
- 5	1D	1D	1D	1D	1D	1D
- 4	1D	1D	1D	1D	1D	1D
- 3	2D	2D	2D	2D	2D	2D
- 2	2D	2D	2D	2D	2D	2D
- 1	2D	2D	2D	2D	2D	2D
0	2D	2D	2D	2D	2D	2D
+1	2D	2D	2D	2D	2D	2D
+2	3D	3D	3D	3D	2D	2D
+3	3D	3D	3D	3D	2D	2D
+4	4D*	4D*	4D*	3D	2D	2D
+5	5D*	5D*	5D*	4D*	2D	2D
+6	6D*	6D*	6D*	4D*	2D	2D

Roll separately on the proper column for each characteristic. Rolls above the entries on the table use the highest entry; rolls below the entries on the table use the lowest entry.

Physical: Roll Flux, DM+ Environ Flux.
C3: If Chaser, +2. If Pouncer, -2.
C5 (Edu/Tra): Always 2D for sophonts.
C6 (Cas): See the Caste tables.

* **IF** the value is 4D 5D 6D roll 4D= 12 + 2D, 5D= 12 + 3D, or 6D= 12 + 4D.

THE CASTE GENERATION TABLE

The Caste Generation Table on the Sophont Creation Card is unique to the race being described; it determines castes of the race, and in what proportion they occur.

Determine the Caste Structure.

Roll Flux on Caste Table Creation and place that result in entry 2 on the Sophont Creation Card. Continue until all entries 2-12 have been made. Some castes may be duplicated; others may not be present depending on the die roll.

CASTE STRUCTURE TYPES

1D Caste Structure

1 **Body.** Caste roles recapitulate roles within the body.
2 **Economic.** Caste roles are economic functions.
3 **Family.** Caste roles are functions within the family unit.
4 **Military.** Caste roles establish military organization.
5 **Social.** Caste roles are elements of a social hierarchy.
6 **Skilled.** Caste roles dictate unique skills for each member.

Caste Structures are metaphors for social or economic structures.

Casteless. An individual who has not (or not yet) been assigned Caste is Casteless.

CASTE TABLE CREATION

	Flux	Body	Economic	Family	Military	Social	Special
	- 5	Healer	Innovator	Healer	Medic	Artist	DeMinimus
=Gender	- 4	=Gender	=Gender	=Gender	=Gender	=Gender	Useless
	- 3	Antibody	Guard	Defender	Aide	Enforcer	Advisor -
	- 2	Sensor	Researcher	Caregiver	Scout	Drone	Instructor
	- 1	Memory	Artisan	Caregiver	Specialist	Artist	Shaman
Common	0	Muscle	Laborer	Breadwinner	Soldier	Unit	Expendable
	+1	Muscle	Craftsman	Breadwinner	Technician	Unit	Defective
	+2	Muscle	Clerk	Breadwinner	Warrior	Unit	Valuable
	+3	Voice	Manager	Uncle	Leader	Patron	Advisor+
=Special	+4	=Special	=Special	=Special	=Special	=Special	Sport
	+5	Claw	Entrepreneur	Leader	Staff	Entertainer	Vice-Leader
=Unique	X	Brain	Director	Archon	General	Ruler	

=Gender (Flux - 4). Caste is the Gender with the same roll on the parallel Gender Determination Table on the Sophont Creation Card.

=**Common (Flux 0).** Automatically insert the Common Caste at Entry 7 on the table.

=**Special (Flux +4).** Re-roll on the Special column.

=**Unique Caste (Entry 12).** The Unique Caste is automatically inserted at Entry 12.

Skilled Caste Type. Each individual member of the Skilled Caste rolls on the Skilled Caste table during Character Generation and receives that Skill with level equal to C5.

Caste Digits: The specific Caste Characteristic digit for the UPP is the highest die roll on the Caste Table which creates this Caste.

THE SKILLED CASTE

The Specific Skill. The individual receives a Skill or Knowledge randomly from the Skill List. Caste Skill is ultimately equal to C5 (Edu, Tra, or Ins).

The Caste name for an individual is the skill held. For example, Author, Pilot, or Gunner.

As in the other Castes, Flux -4 = Gender; Flux +4 = Special. Entry 12 = Leader.

The skill distribution for the Skilled Caste varies by clan, region, or group. Different groups within the species can have different Skilled Caste tables.

CASTE-BASED DIFFERENCES

Flux	C1	C2	C3	C4	C5
- 5	- 5	- 5	- 5	- 5	-5
-4	- 4	- 4	- 4	- 4	- 4
-3	- 3	- 3	- 3	- 3	- 3
-2	- 2	- 2	- 2	- 2	- 2
-1	--	--	--	--	--
0	--	--	--	--	--
+1	--	--	--	--	--
+2	+2	+2	+2	+2	+2
+3	+3	+3	+3	+3	+3
+4	+4	+4	+4	+4	+4
+5	+5	+5	+5	+5	+5

Common is the baseline Caste; differences are from this value. C5 is Ins (but not Edu or Tra).

Roll for each Caste Type other than Common; roll once within each Caste Type for each Characteristic.

Caste-Based Differences are imposed at Caste Assignment.

CASTE SHIFT

1D Shift

1 No shift
2 No shift
3 No shift
4 No shift
5 Mid-Life Shift
6 Rotation

Caste may change in the course of a lifetime.

Mid-Life Shift. Assign (reroll on the table) a new Caste at the start of Life Stage 6.

Rotation. Advance Caste at the start of each Life Stage. Caste 12 promotes to Caste 2.

If Caste Shifts, Caste-Based Differences also shift. Existing Caste skills remain; and a available new Caste skills are acquired one per year.

CASTE ASSIGNMENT

1D	Assignment	Life Stage
1	Random (Assigned At Birth)	0
2	Random (Assigned At Adolescence)	2
3	Random (Assigned By Heredity)	0
4	Random (Assigned By The Community)	0
5	Selected (Family Choice)	2
6	Selected (Personal Choice)	2

Random. Use the Caste Table on the Sophont Creation Card for a character being generated.

Selected. The player chooses Caste.

Before Assignment. An individual is Casteless (without Caste) until it is assigned.

Inherited Caste is subject to special rules.

ASSIGNMENT IN THE SKILLED CASTE

Within the Skilled Caste, a member receives one level of the Caste Skill or Knowledge each year, beginning when Caste is assigned, until the level equals Edu, Tra, or Ins. The levels received are in addition to any other skills received.

THE GENDERS

There are six possible genders for any specific race, and there are a variety of gender structures which make use of them.

Solitaire. Individuals reproduce without participation of an alternate gender mate.

Dual. Two individuals of different genders pair for reproduction.

FMN. Three distinct genders exist, of which only two participate in reproduction. Gender 1 is Female (F), Gender 2 is Male (M), and Gender 3 is Neuter (N).

EAB. Three individuals come together for reproduction. Gender 1 is Egg Donor (E), Gender 2 is Activator (A), and Gender 3 is Bearer (B).

Group. Many individuals come together for reproduction. Genders are identified as numbers One, Two, Three, Four, Five, and Six (not all are necessarily present).

Structure	Gender1	Gender2	Gender3	Gender4	Gender5	Gender6
Solitaire	Solo	--	--	--	--	--
Dual	Female	Male	--	--	--	--
FMN	Female	Male	Neuter	--	--	--
EAB	Egg Donor	Activator	Bearer	--	--	--
Group	One	Two	Three	Four	Five	Six

COMPLETING A GENDER GENERATION TABLE

The Gender Generation Table on the Being Creation Card is unique to the race being described; it determines genders of the race, and in what proportion they occur.

Beginning with entry 2 on the form under Gender Generation, roll Flux and consult Gender Components. Based on the result, consult the appropriate column and continue until all entries 2-12 have been completed. Some possible genders may be duplicated; others may not be present depending on the die roll results.

THE CASTE - GENDER RELATION

1D	Relationship
1	Dependent
2	Dependent
3	Casted Breeder
4	Casted Breeder
5	Independent
6	Independent

Dependent. Each caste is always of one specific gender. Caste determines Gender.

Casted Breeder. The first gender (1FE) is always the breeder caste and is identified as by the gender name. All other castes may be any gender. Apart from 1FE, Caste and Gender are independently determined.

Independent. Caste and Gender are determined independently.

GENDER COMPONENTS

Flux	Structure	Solitaire	Dual	EAB	FMN	Group
-5	Solitaire	Female	Female	Egg	Female	Six
-4	Solitaire	Female	Female	Egg	Female	Six
-3	EAB	Female	Female	Egg	Female	Four
-2	EAB	Female	Female	Activator	Male	Four
-1	Dual	Female	Male	Egg	Female	Two
0	Dual	Female	Female	Activator	Male	One
+1	Dual	Female	Male	Bearer	Neuter	Three
+2	FMN	Female	Male	Bearer	Neuter	Five
+3	FMN	Female	Male	Bearer	Neuter	Five
+4	Group	Female	Female	Activator	Male	Six
+5	Group	Female	Male	Bearer	Neuter	Six

On the Gender Determination Table, enter Gender 1 (Female, Egg, or One) on entry line 2. If Dual, FMN, or EAB, enter Gender 2 (Male, Activator) on entry line 3. If FMN or EAB, enter Gender 3 (Neuter, Bearer) on entry line 4. For each remaining entry line, roll Flux on the appropriate column and enter the result.

GENDER-BASED DIFFERENCES

Flux	C1	C2	C3	C4	C5
- 5	- 5	- 5	- 5	- 5	-5
-4	- 4	- 4	- 4	- 4	- 4
-3	- 3	- 3	- 3	- 3	- 3
-2	- 2	- 2	- 2	- 2	- 2
-1	--	--	--	--	--
0	--	--	--	--	--
+1	--	--	--	--	--
+2	+2	+2	+2	+2	+2
+3	+3	+3	+3	+3	+3
+4	+4	+4	+4	+4	+4
+5	+5	+5	+5	+5	+5

Roll once within each Gender for each Characteristic. C5 is Ins (but not Edu or Tra). Roll for each Gender Type other than 1FE;

GENDER ASSIGNMENT

Flux	Assigned By	Shifts?
- 5	by Family	Progression
-4	at Maturity	Progression
-3	at Maturity	Fixed
-2	at Birth	Fixed
-1	at Birth	Fixed
0	at Birth	Fixed
+1	at Birth	Fixed
+2	at Birth	Fixed
+3	at Maturity	Fixed
+4	at Maturity	Transform
+5	by Individual	Transform

Maturity = Life Stage 2.

BEFORE GENDER ASSIGNMENT

If Gender is not assigned at birth, the individual's Gender prior to assignment is Neuter.

GENDERS MAY SHIFT

Individual Initial Gender Assignment is based on the Gender Determination.

If Gender is not Fixed, it will shift under one of the following structures:

Progression. Individual changes gender at the beginning of each Life Stage. The new gender is the next higher entry on the Gender Table on the Sophont Creation Card (which also means that gender may remain the same).

Transform. Individual transforms from one specific gender to another (randomly determined) once at Mid-Life Life Stage 6. It is possible that the new gender may be the same as the old gender.

Gender-Based Differences shift when Gender shifts.

Life Stages

The Life Stages of a Race determine when a Sophont begins an adult career, when an individual begins to feel the effects of age, when an individual expects to retire, and the traditional lifespan for the Sophont.

THE NINE STAGES OF LIFE

Every sophont's life is a succession of Life Stages, each with its own particular significance. Understanding the Life Stages for a Sophont helps understand the psychology which governs its members. These stages include:

No.	Life Stage	Description	Human=
0.	Infant.	A helpless infant under the care of an adult member of the family.	0 - 1
1.	Child.	An immature individual receiving basic education.	2 - 9
2.	Teen.	A gender mature individual not yet fully responsible in society. Gender and Caste maturity.	10 -17
3.	Young Adult.	A physically mature individual with full responsibilities in society. Character Generation begins.	18 -25
4.	Adult.	A full member of society.	26 -33
5.	Peak.	An individual at the height of physical and mental abilities. Physical aging begins.	34 -41
6.	Mid-Life.	An individual approximately half way through a typical life span.	42 -49
7.	Senior.	An experienced individual.	50 -57
8.	Elder.	An individual at the greatest levels of personal achievement.	58 -65
9.	Retirement.	An individual is living on the fruits of his prior labors. Mental aging begins.	66 -74

Life Stage 2. The first two years of 2-Teen is the period of Gender maturity, and (if the Race has Caste) of Caste maturity.

Cadets. Cadet characters are generated and start play at the beginning of year 3 of Teen. (=12 for Humans).

Life Expectancy (or traditional lifespan) is the sum of the lengths of the Life Stages. For example, Humans have a 2-year infancy and nine stages of 8 years each, producing a traditional lifespan of 74 years.

LIFE STAGE DURATION

Flux	Infant 0	Child 1	Teen 2	Young Adult 3	Adult 4	Peak 5	Mid Life 6	Senior 7	Elder 8	Retired 9
- 5	1/2	1	0	0	0	1	0	0	0	1
- 4	1/2	1	1	1	1	1	1	1	1	1
- 3	1/2	1	1	1	1	1	1	1	1	1
- 2	1/2	1	1	1	1	1	1	1	1	1
- 1	1/2	2	2	2	2	2	2	2	2	2
0	1/2	2	2	2	2	2	2	2	2	2
+1	1/2	2	2	2	2	2	2	2	2	2
+2	1/2	3	3	3	3	3	3	3	3	3
+3	1/2	3	3	3	3	3	3	3	3	3
+4	1/2	4	4	4	4	4	4	4	4	4
+5	1/2	6	6	6	6	6	6	6	6	6

Duration is shown in 4-year Terms (1 = one term of four years).

Life Stages for each sophont may vary in length.

This chart indicates the number of terms (4 year terms) the sophont spends in a Life Stage. Infancy is automatically one-half term (2 years). A result of 0 indicates that a particular Life Stage is skipped (or has an extremely short duration of perhaps a few weeks).

Beginning with Life Stage 1, roll Flux for each Life Stage and record the number of terms for each Stage on the Being Creation Card.

AGING

Aging affects the character's physical and mental characteristics, ultimately reducing them to zero and inflicting death.

Characters are immune to Aging for roughly the first half of their lives. Once Aging begins, it occurs every term on the character's birthday and may reduce individual characteristics.

Physical Aging

Sophont Physical Aging affects the Physical Characteristics C1 Strength, C2 Dexterity Agility Grace, and C3 Endurance Stamina Vigor. It begins at the beginning of Life Stage 5- Peak) and is resolved as an Aging Check.

Mental Aging

Sophont Mental Aging affects Intelligence and Instinct (if present). It begins at the beginning of Life Stage 9- Retirement and is resolved as an Aging Check..

THE AGING CHECK

The Aging Check is resolved every four years on the character's birthday. The Crisis is rolled for each applicable Characteristic.

To Feel Age Effects (The Aging Check)
2D < Life Stage
Success inflicts -1 on the characteristic.
(A character wants to FAIL this action).

If one Characteristic is reduced to 0, it is reset to 1.

If two Characteristics are reduced to 0, the character suffers an illness and spends four weeks in rest and recuperation. The two characteristics are each reset to 1.

If three Characteristics are reduced to 0, the character suffers a major illness and must spend four months in rest and recuperation. The three characteristics are each reset to 1. The second time three characteristics are reduced to 0, the character dies.

The Senses

There are six possible senses, of which all Sophonts have Touch, and they may or may not have one or more of the others.

The senses are defined and described using the human senses as the baseline.

Sophonts-10
The Senses

THE SENSES

Each sense concentrates on one specific phenomenon of the six broad types that senses can perceive.

The six categories are:

Vision sees wavelengths of light (possibly infrared or ultraviolet).

Hearing hears sound (possibly infrasonic or ultrasonic).

Touch feels objects (including sensing of patterns, textures, shapes, temperature, and other information).

Smell and **Taste** sense an identifiable aspect of objects. The two are treated as one sense.

Awareness senses electrical or magnetic fields.

Perception senses biological or sentient auras.

Other senses are possible, but they are either minor in scope or too exotic in execution for this system to handle. When they are present, they are administered as exceptions or through special rules.

Sense Strings. Capabilities of the senses are conveyed by Sense Strings.

SENSE STRINGS

Sense	String	Elements			
Vision	V-00-RGB	V- Constant-	Band1	Band2	Band3
Hearing	H-00-FSVR	H- Constant-	Freq	Span	Voice	Range
Smell	S-00-S	S- Constant-	Sharpness			
Touch	T-00-S	T- Constant-	Sensitivity			
Awareness	A-00-A	A- Constant-	Acuity			
Perception	P-00-AV	P- Constant-	Acuity	PVoice		

THE SENSES

Flux	Constant	Vision	Hearing	Smell	Touch	Aware	Percep
-5	06	Blind	Deaf	Anosmic	Touch	Unaware	Oblivious
-4	08	Blind	Deaf	Anosmic	Touch	Unaware	Oblivious
-3	10	Blind	Deaf	Anosmic	Touch	Unaware	Oblivious
-2	12	Vision	Deaf	Anosmic	Touch	Unaware	Oblivious
-1	14	Vision	Hearing	Anosmic	Touch	Unaware	Oblivious
0	16	Vision	Hearing	Smell	Touch	Unaware	Oblivious
+1	18	Vision	Hearing	Smell	Touch	Aware	Oblivious
+2	20	Vision	Hearing	Smell	Touch	Aware	Percept
+3	22	Vision	Hearing	Smell	Touch	Aware	Percept
+4	24	Vision	Hearing	Smell	Touch	Aware	Percept
+5	26	Vision	Hearing	Smell	Touch	Aware	Percept

Roll Flux once on each Sense column and note the Senses received on the Sophont Creation Card (the sense of Touch is automatic). Roll Constant for EACH Sense received. For each Sense received, consult the specific chart for that Sense and create the Sense String.

	VISION			HEARING					SMELL		TOUCH		AWARE		PERCEPT		
Flux	C	Band	Star	C	Freq	Span	Voice	Range	C	Sharp	C	Sensi	C	Acuity	C	Tone	PVoice
-6	04	DHV	B0-B3	04	1	0	1	0	04	0	04	0	04	0	04	0	0
-5	06	UDH	B5-B8	06	1	0	1	0	06	1	06	1	06	1	06	1	1
-4	08	SUD	B9-A1	08	2	1	2	0	08	1	08	1	08	1	08	1	1
-3	10	PSU	A2-A8	10	3	1	3	0	10	1	10	2	10	2	10	2	2
-2	12	BPS	A9-F6	12	4	2	4	0	12	1	12	2	12	2	12	2	2
-1	14	GBP	F7-G1	14	5	2	5	1	14	2	14	3	14	3	14	3	3
0	16	RGB	G2-K0	16	6	3	6	2	16	3	16	3	16	3	16	3	3
+1	18	CRG	K1-K3	18	7	4	7	3	18	4	18	3	18	3	18	3	3
+2	20	ACR	K4-K6	20	8	4	8	3	20	5	20	4	20	4	20	4	4
+3	22	NAC	K7-K9	22	9	5	9	3	22	5	22	4	22	4	22	4	4
+4	24	INA	M0-M1	24	A	5	A	4	24	6	24	5	24	5	24	5	5
+5	26	FIN	M2-M4	26	B	6	B	4	26	6	26	5	26	5	26	5	5
+6	28	XFI	M5-L8	28	C	6	C	4	28	6	28	6	28	6	28	6	6
+7	30	ZXF	L9+	30	D	7	D	4	30	6	30	6	30	6	30	6	6

LANGUAGE MEDIUM

Sophonts typically communicate by an efficient language based on their available senses under the following priorities:

If The Sense Combination is

Hearing	Verbal Language
Perception, Deaf	Perceptual Language
Vision, Deaf, Oblivious	Visual Sign Language
Touch, Deaf, Oblivious, Blind	Tactile Sign Language

SOME SENSES ABSENT

Blind= No Vision.
Deaf= No Hearing.
Anosmic= No Smell.
Unaware= No Awareness.
Oblivious = No Perception.

THE RACIAL SCENT

Generate the Racial Scent using 1D and 1D for each of the six digits, producing a scent in the format ABC-DEF.

RACIAL SCENT

D	1	2	3	4	5	6
1	1	2	3	4	5	6
2	A	B	C	D	E	F
3	G	H	I	J	K	L
4	M	N	O	P	Q	R
5	S	T	U	V	W	X
6	Y	Z	7	8	9	0

The sophont, like all living creatures, has a characteristic scent which it emits, and which can be sensed by others.

Human is HUM.

Body Structure

The physical appearance of the race is determined by body symmetry, number of limb groups, location of the braincase and senses, armor status of the body, natural weaponry, and number of eyes and ears.

BODY STRUCTURE

Flux	Symmetry	Head and Torso		Flyer Front	Rear	Walker Front	Rear	Aquatic Amphibian Front	Rear	Diver Swimmer Front	Rear	Flyphib Front	Rear	Tail
-5	Asymmetrical	HS	TB	WW	WW	AA	LL	AA	FF	AA	FF	FF	FF	P
-4	Asymmetrical	HS	TB	WW	WM	AA	LL	AA	LF	AA	LF	WW	FM	V
-3	Asymmetrical	HS	TB	WA	WL	AN	LN	AF	LL	AF	LL	WA	FL	T
-2	Bilateral	HBS	T	WA	WN	AN	LN	AF	LN	AF	LN	WA	FN	T
-1	Bilateral	HBS	T	WL	WN	LL	LN	AL	FN	AL	FN	WL	FF	N
0	Bilateral	HBS	T	WL	LN	LL	LN	AL	FN	AL	FN	WL	FN	N
+1	Bilateral	HBS	T	WL	LN	LL	LN	AL	LN	AL	LN	WL	FN	N
+2	Trilateral	HBS	T	WN	LN	LN	LN	AW	WL	FF	FF	WN	FN	N
+3	Trilateral	N	TBS	AN	LM	AL	LM	AF	WF	AF	FF	FN	FN	N
+4	Radial	N	TBS	AN	MM	AL	MM	AF	FM	AF	FM	FN	FM	M
+5	Radial	N	TBS	AA	NN	AN	NN	AN	MM	AN	MM	FF	NN	A

Symmetry. Indicates general structure of the body. Bilateral limbs are in pairs; Trilateral limb groups are triplets; Radial limb groups have 1D limbs per group. Asymmetrical has 1D limbs per group (roll for each limb group). DM -2 if Grace. +2 if Agility. +2 if Swimmer or Diver.

Head and Torso. One roll determines both Head and Torso. Note that the Brain is not necessarily located in the Head, but there is only one Brain.

Limb Group Structure. Using Environment Type (Flyer, Walker, Amphibian, Swimmer, Diver, Flyphibian) roll for Front limbs and Rear limbs. Front Limbs terminate in Manipulators; Rear Limbs do not have Manipulators.

Tails. Roll for the presence of a Tail. Manipulator is a prehensile tail. Proboscis is technically not a tail; it is a Trunk emanating from the Head (if no head, from the front of the Torso).

BODY STRUCTURE OVERVIEW

The Body Structure Overview presents in capsule form the details of the head, torso, limbs, and tail of the sophont in the format:

A-B-CD-EF-G

A= Head (with or without Brain and Senses), B= Torso (with or without Brain and Senses), CD= Front Limbs (with Manipulators), EF= Rear Limbs, and G= Tail / Proboscis.

Stance. A sophont is horizontal (and has Length rather than Height) if it has NO rear limb groups, or more Rear limb groups than Front limb groups. All others are Vertical and have Height (not Length).

HEAD, TORSO, AND LIMB CODES
Head And Torso

HS	Head with Senses
HBS	Head with Brain and Senses
N	No Head
T	Torso
TB	Torso with Brain
TBS	Torso with Brain and Senses

Limb Groups

A	Arms
F	Flippers
L	Legs
M	Multiple Leg Groups
N	No Limbs
W	Wings

Tail/Proboscis

A	Antennae
M	Manipulator
N	No Tail
T	Tail
V	Vestigial Tail
P	Proboscis

BODY FEATURES

Flux	Skeleton	Fluids	Skin	Weapon	Manipulators
-6	Fluid Interior Sacs	Foam	Feathery Pelt		Tentacles
-5	Fluid Interior Sacs	Foam	Feathery Pelt		Tentacles
-4	Fluid Interior Sacs	Lymph	Furry Pelt	Tusks	Tentacles
-3	Cartilege Interior	Hemolymph	Hairy Pelt	Fangs	Grippers
-2	Cartilege Interior	Ichor	Leather	Teeth	Grippers
-1	Bony Interior	Blood	Skin	-	Hands
0	Bony Interior	Blood	Skin	-	Hands
+1	Bony Interior	Blood	Skin	-	Hands
+2	Exoskeleton	Gore	Fine Scales	Claws	Paws
+3	Exoskeleton	Slime	Scales	Hooves	Graspers
+4	Segmented Shell	Scum	Spines	Spikes	Graspers
+5	Segmented Shell	Humours	Plates	Sting	Sockets
+6	Segmented Shell	Humours	Plates	Sting	Sockets

DM +1 if Swimmer Flyer. DM -1 if Flyer.

Body Feature Terms
Skeleton. The type of interior support structure.
Fluids. Typical body fluids.
Skin. General description of body covering.
Armor. General description of natural armor (value = 2D)
Weapon. General description of natural weapon.
Manipulators. Front Limbs terminate in Manipulators (Rear Limbs do not). Manipulators on Legs are dual use (thus doubling as Feet or Peds).
If otherwise no Manipulators, assume Mouth is Manipulator.

Special Abilities

A sophont may have special abilities (for every member, or for specific members based on gender or caste).

CASTE SKILLS LIST EXPANDED

	Die C					
A B	1	2	3	4	5	6
1 1	Recon	Aeronautics	Admin	Advocate	SoundMimic	ACV
1 2	Spines	Aquanautics	Artillery	Artist	Biologics	Author
1 3	Sensors	Automotive	Astrogator	Beams	Computer	Broker
1 4	Actor	Bureaucracy	Craftsman	Compute	Driver	Mole
1 5	Flyer	BattleDress	Dancer	Diplomat	Explosives	Medic
1 6	Empath	Engineer	Designer	Exotics	G-Drive	Grav
2 1	Flapper	Fluidics	Electronics	Forensics	J-Drive	Math
2 2	Leader	Heavy Wpns	Engineer	Legged	Liaison	JOT
2 3	Tracked	Launcher	Gravitics	Mechanic	Athlete	Trader
2 4	Pilot	Magnetics	Hostile Env	Ordnance	Blades	LTA
2 5	Animals	Life Support	Language	P-Plant	Counsellor	Sail
2 6	Tactics	Photonics	Musician	Sapper	Ortillery	Ship
3 1	Turrets	Programmer	Strategy	Small Craft	Fighting	Rotor
3 2	Seafarer	Slug Thrower	M-Drive	Stealth	Osmancer	Rider
3 3	Survey	Naval Arch	Navigation	Survival	Wheeled	Sprays
3 4	Comms	Streetwise	Polymers	Trainer	Screens	Sub
3 5	Teacher	Teamster	Spacecraft	Animals	Steward	Wing
3 6	Unarmed	Vacc Suit	Starships	No Skill	Zero-G	WMD

Roll die A (if greater than 3, reroll) and die B for row; roll die C for column.

SPECIAL ABILITIES

	1	2	3	4	5	6
Flux	The Arts	Talents	Talents	Senses	Disability	Trades
- 5	Actor	Insight	Math	Touch	-	Biologics
- 4	Actor	Empath	Math	Touch	Stench	Biologics
- 3	Dancer	Hibernate	Memorize	Vision	Blind	Mechanics
- 2	Artist	Hypno	SoundMimic	Hearing	Deaf	Mechanics
- 1	-	-	-	-	-	-
0	-	-	-	-	-	-
+1	-	-	-	-	-	-
+2	Music	Intuition	Mem < - >	Awareness	Unaware	Craftsman
+3	Artist	Rage	Mem < - >	Perception	Oblivious	Craftsman
+4	Osmance	ReGen	Mem < - >	Smell	Anosmic	Electronic
+5	Osmance	Curiosity	Mem < - >	Smell	Anosmic	Electronic

It is entirely possible that a race may have no special ability. If a Special Ability is present, the individual generated character receives = 1D. Roll 1D for the column, followed by Flux for the row which applies.

Sophont Based Special Abilities. Consult this table once for the Race.
Gender Based Special Abilities. Consult this table once for each Gender..
Caste-Based Special Abilities Consult this table once for each Caste.

Adjustments to Special Abilities.
　Music: If Deaf and Oblivious, reroll.
　Smell: If Anosmic, reroll.
　Mem < - >. Roll for the Sense associated. 1= Vision. 2= Audio. 3= Scent. 4= reroll. 5= Aware. 6= Percep. If the sense is absent, reroll.
　SoundMimic: If Deaf, reroll.
　Senses: If the sense is currently absent, the recipient Gender or Caste acquires the sense. Create its String. If the sense is present, increase the Constant for the recipient Gender or Caste by +2.
　Disability: If the sense is already absent, there is no effect.
　Morph: If Internal Structure= Fluid Filled Sac, if 1D= 5 or 6, Sophont has Morph.

CASTE SKILLS LIST SHORT

1D	1D	Skill List 1	Skill List 2
1	1	Actor	Heavy Wpns
1	2	Admin	Hi-G
1	3	Animals	Hostile Env
1	4	Art	Insight
1	5	Astrogator	JOT
1	6	Athlete	Language
2	1	Author	Lawyer
2	2	BattleDress	Leader
2	3	Biologics	Liaison
2	4	Broker	Mechanic
2	5	Bureaucracy	Medic
2	6	Carouse	Music
3	1	Command	Naval Arch
3	2	Comms	Photonics
3	3	Computer	Pilot
3	4	Counsellor	Polymers
3	5	Craftsman	Programmer
3	6	Dancer	Recon
4	1	Designer	Sapper
4	2	Diplomat	Seafarer
4	3	Driver	Sensors
4	4	Electronics	Stealth
4	5	Engineer	Steward
4	6	Explosives	Strategy
5	1	Fighting	Streetwise
5	2	Fluidics	Survey
5	3	Flyer	Survival
5	4	Forensics	Tactics
5	5	Forward Obsv	Teacher
5	5	Gambler	Trader
6	1	Gravitics	Vacc Suit
6	2	Gunner	Zero-G
6	3	Biologics	Mechanic
6	4	Electronics	Photonics
6	5	Fluidics	Polymers
6	6	Gravitics	Programmer

Select Skill List 1 or Skill List 2.

TYPES OF VOICES

Flux	Code	Voice	PVoice
0	0	Mute	Mute
-5	1	Whistles	Faint
-4	2	Whistle	Vague
-3	3	Vowels	Common
-2	4	Musical	Firm
-1	5	Standard	Strong
0	6	Standard	Powerful
+1	7	Standard	
+2	8	Guttural	
+3	9	Consonantal	
+4	A	Clicks Pops	
+5	B	Mimic	

Manipulators

Sophonts need to manipulate their environment; most do so with hands or hand-like manipulators. The common forms of manipulators are hands, paws, tentacles, gripper, graspers, and sockets.

Sophont-13
Manipulators

Hands
The termination of a limb consisting of two opposed groups of one or more moderately flexible digits, capable of holding an object.

Paws
The termination of a limb consisting of several unopposed moderately flexible digits which can grasp and hold an object.

Tentacles
The termination of a limb capable of entwining or coiling. The termination may be one tentacle, or it may be more than one working together.

Graspers
The termination of a limb consisting of three or more mutually opposed flaps or digits capable of clamping an object between them.

Grippers
The termination of a limb consisting of two opposed groups of relatively inflexible flaps or digits capable of clamping an object between them.

Sockets
The termination of a limb consisting of a hollow rimmed with muscle capable of holding an object within it. It may have an internal tentacle-like manipulator.

USING MANIPULATORS
Manipulators determine precisely how a sophont handles objects and operates mechanisms.

Grip. Grip is the strength which a manipulator adds (or doesn't add) when holding an object. Grip is a mod for tasks using Strength and involving manipulators.

USING CONTROLS WITH MANIPULATORS
Controls are the interface between a sophont and an object. They range from simple handles to keypad inputs.

CONTROLS

	Grip	Preferred	Optimized	Alien	Touch
Hand	0	0	0	- 1	0
Paw	- 2	0	- 1	- 3	-1
Tentacle	+1	0	0	- 1	0
Grasper	0	0	0	- 2	-2
Gripper	+2	0	- 1	- 3	-1
Socket	- 1	0	0	- 2	-3

The Mod shown applies when using the manipulator with the control type shown.

Touch Mod is used with the Touch Sense Action

Typical Controls
The grip or handle and trigger mechanism on a weapon.
The adjusting knobs on a communicator.
The operating levers and mechanism on a vehicle.
The input devices on computers and equipment.

Preferred Controls. Controls adapted to a specific manipulator (for example, Paw Controls, Tentacle Controls). Properly used Preferred Controls have no mods.

Optimized Controls. Controls specifically designed to be used by all possible manipulators. Optimized Controls have fewer disadvantageous mods. Many vehicles have Optimized Controls.

Alien Controls. Non-optimized controls not adapted for the manipulator being used (for example Paw controls being used by Hands). Alien Controls are subject to disadvantageous mods.

Configurable Controls
Controls capable of being adjusted to Preferred Controls. Configuration time varies, as does the actual effectiveness of the configured format.

Unique Circumstances

Some sophonts have unusual or unique physical or life cycle structures. These uniques may be implemented for specific sophonts are necessary. This list is not exhaustive.

METAMORPHOSIS

The sophont individual undergoes one or more abrupt and dramatic changes in physical structure or form, typically when the sophont advances from one Life Stage to the next. At its simplest, Metamorphosis occurs once and the sophont changes abruptly; in more complex structures, the sophont repeatedly transforms into new and different forms.

The Changes. When a sophont Metamorphosizes, it takes on a totally new physical structure: create a NEW sophont to be the next stage: the only firm requirement is that the new form must be larger than the old form.

Life Stages. Each change takes place at the beginning of a Life Stage.

Metamorphic Stages. The Table gives a series of Metamorphic Stage names. Their precise meaning for a sophont may differ from the classic biological meaning. For example, Egg is the name of the lowest or earliest of Metamorphic Stages rather than necessarily an ovoid immobile form.

SYMBIONTS

The sophont lives in a paired relationship with another organism.

Dominated Carrier. An external or visible sophont (the Carrier) is inhabited by an interior symbiont (Dominant) acting as the brain. The Carrier is typically deficient in Mental Characteristics; the Dominant is typically diminutive by highly intelligent.

A Dominant can be transferred from Carrier to Carrier.

Assisted Carrier. The Carrier is inhabited by an interior symbiont (Assistant). Both Carrier and Assistant are intelligent and interact to process information.

An Assistant can be transferred from Carrier to Carrier.

AVAILABLE METAMORPHIC STAGES

Egg.
Embryo.
Larva.
Nymph.
Pupae.
Subimago.
Imago.
Postimago
Adult.
Post Adult.

HIBERNATION

The sophont undergoes a long-term hibernation (typically lasting a full life stage).

UNIQUES

This system cannot cover every possible situation. Where necessary, or where desired, unique elements of the Sophont structure can be inserted. Such Uniques may change, supplement, complement, or supersede any of the other sophont information. For example,

The Shriekers of Shvireeyiyi experience an intense aging crisis at Life Stage 5.

The Intferhi of Beta Hydrae have two heads.

THE EFFECTS OF WORLD CONDITIONS

The conditions of the homeworld have an effect of the abilities of the sophont. Sophonts from worlds with extremes of Hot, Cold, Light, and Radiation react to the damage they inflict differently.

Sophont From

Normal	Hot World	Cold World	Normal	Rad World	Normal	Bright World
Hot-4	Hot-3	Hot-5				
Hot-3	Hot-2	Hot-4				
Hot-2	Hot-1	Hot-3				
Hot-1		Hot-2				
--	Cold-1	Hot-1	--		--	
Cold-1	Cold-2		Rad-1		Flash-1	
Cold-2	Cold-3	Cold-1	Rad-2	Rad-1	Flash-2	Flash-1
Cold-3	Cold-4	Cold-2	Rad-3	Rad-2	Flash-3	Flash-2
Cold-4	Cold-5	Cold-3	Rad-4	Rad-3	Flash-4	Flash-3

BEING SIZE

Size is a measure of the volume (and to some extent the weight) of a sophont. Size is measured in units approximately equal to one liter (1000 liters to a cubic meter). As a very rough measure, Size is also the mass of a person or sophont in kilograms. The size standard or benchmark is Human = 100. Size for a sophont is based on the three physical characteristics C1 C2 C3 (and according to the Calculating Size Table).

Individual Size

To determine the size of an **individual** sophont,

Total the physical characteristics for the individual (halving Grace and Agility; doubling Stamina). Divide the total by 21 and multiply by 100. The result is individual sophont size.

Calculating Species or Sophont Size

C1 Strength	Char
C2 Dexterity	Char
C2 Grace	Char / 2	makes it lighter or smaller
C2 Agility	Char / 2	makes it lighter or smaller
C3 Endurance	Char
C3 Stamina	Char * 2	makes it heavier or larger
C3 Vigor	Char /2	makes it lighter or smaller

Char= Individual rolled Characteristic Value (for example, if Str = 7, Char = 7).

Total= C1 + C2 + C3
Individual Size = 100 * (Total / 21).

For example, a Human SDEIES rolls 2D each for C1 C2 C3 physical characteristics and the result is 777 = 21/ 21 = 1 * 100 = 100. This human is totally average in size.

For example, a Hexaphant SDSIES rolls 3D+12, 2D, 3D +12 for C1 C2 C3 physical characteristics and the result is M9T= 21 + 9 + 54 = 84 / 21 = 4 * 100 = Size 400. This individual is larger than the average Hexaphant and large by any measure.

Average Size

To determine the average size for a Sophont,

Total the number of dice used to generate the Physical Characteristics (halving Grace, Agility, and Vigor; doubling Stamina). Divide the total by 6 and multiply by 100. The result is typical size for the sophont.

Calculating Species or Sophont Size

C1 Strength	Dice
C2 Dexterity	Dice
C2 Grace	Dice / 2	makes it lighter or smaller
C2 Agility	Dice / 2	makes it lighter or smaller
C3 Endurance	Dice
C3 Stamina	Dice * 2	makes it heavier or larger
C3 Vigor	Dice /2	makes it lighter or smaller

Dice= Number of dice rolled for the characteristic (for example, if Str = 2D, Dice = 2).

Total= C1 + C2 + C3
Typical Size = 100 * (Total / 6).

For example, a Human SDEIES rolls 6D (2D + 2D + 2D) for C1 C2 C3 physical characteristics = 6 / 6 = 1 * 100 = 100. A Human is size 100.

For example, a Hexaphant SDSIES rolls 12D (5D + 2D + 5D) = 5+ 2 + 5*2 = 17/6 = 2.83* 100 = 283. A Hexaphant is size 283.

If the Sophont has Mods on the die rolls, add or subtract fractional dice (+1 = +0.16; -1 = -0.16). For example, a Sssnth SDEIES rolls 6D-3 (2D-1 + 2D-1 + 2D -1) for physical characteristics C1 C2 C3 = 6-.5 = 5.5/6 = 0.91 *100 = 91.A Sssnth is Size = 91.

SMALL, STANDARD, OVERSIZE, AND TITAN

Sophonts (and all users: robots, armored suits) fall into four broad classes: Small, Standard, Oversize, and Titan. All four classes are approximations, with wide variation in the specifics.

Small (about 50). A small number of sophonts fall into the Small Size Class. Small assumes the individual is less than 1 meter tall and less than 50 kg mass. C1 C2 C3 are probably created with 1D each.

Standard (about 100). Humanity and most sophonts fall into the Standard Size Class. Standard assumes the individual is approximately 1.5 to 2 meters tall and less than 100 kg mass. C1 C2 C3 are probably created with 2D each.

Oversize (about 200). A few sophonts fall into the Oversize Size Class. Oversize assumes the individual is approximately 3 to 4 meters tall (possibly altered by a multi-legged horizontal stance) and masses 400 to 800 kg. C1 C2 C3 are probably created with 3D each.

Titan (about 300). A very few sophonts are in the Titan Size Class. Titan assumes the individual is approximately 4 to 5 meters tall (possibly altered by a multi-legged horizontal stance) and masses 1 to 2 tons. C1 C2 C3 are probably created with 4D or 5D each.

Armor and Robots

Armor for sophonts, and Humaniform or Sophontiform robots are produced in Standard (same size as the Sophont), Oversize (double size), and Titan (triple size).

For example, an Oversize Humaniform Robot is twice the size (height) of a human. A Titan Battledress for a human is triple the size (height) of a standard robot.

From Page 1269 of **Wiseman's Guide To Sophonts** (Deneb edition).

The Enmiish of Garkila (Uug 5 [F4 V]).

HomeWorld Profile: Garkila D4209CC-A
   Garkila (Uug 5) is a temperate world orbiting a F4 V primary. Garkila is a desert world. The Enmiish homeworld is a poor non-agricultural industrial world. Garkila is a high population world diversely populated by an eclectic mix of natives (approximately 54%), transplanted groups, and others (humans = 36%).
   System Details. The Uug system includes four worlds (plus various minor planets and satellites), two gas giants, and no planetoid belts.

Body Structure
   Enmiishs are bilateral bipeds (classified HBS-T-AN-LN-N). The Enmiish body structure consists of a head with brain and senses and a torso with two limbgroups..   Limbgroup one has arms with graspers.   Limbgroup three has legs.   Under the LG4 AN-LN standard classification system, LG2 LG4 are omitted.   The Enmiish body is characterized by a exoskeleton covered by scales. Interior body fluids are gore.
   The Enmiish are Wetlands Walkers: generally adapted to and most comfortable in wetlands terrain. These sophonts originally occupied the Omnivore Gatherer ecological niche. Enmiish breathe Water and Air-2.
    The genetic profile is SASIEK. The Enmiish have an average life expectancy of 60 years. On the standard Imperial Size spectrum (where humans are 100), the Enmiish are size-ranked 116 .

Gender Structure
   The Enmiish have a Dual (technically MF) gender structure. The reported gender census (IISS Survey Report: 420-175Y) is Female: 47, Male: 52. (shown as percentages; may not total 100% due to rounding).
   Gender Based Differences. Observed differences between gender roles include: The Male is somewhat stronger, is slightly more agile, has somewhat less stamina, and is considerably smarter.

Caste Structure(subject to change based on additional data).
   The Enmiish have a Social caste structure based on random caste assignment at birth (presumably through hormone and enzyme interactions). Caste assignments do not shift during the lifetime of the individual. Observed caste roles include Patron, Unit, Artist, Unit (var-1), Unit (var-2), Unit (var-3), Enforcer, Unit (var-4), Entertainer, Unit (var-5), and Ruler. A reported caste census (IISS Survey Report: 420-175Y) is 5-Social: Artist: 7, Enforcer: 12, Unit: 58, Patron: 2, Entertainer: 7, Ruler: 2.

   The Patron has somewhat more stamina, and is substantially less smart. The Unit is slightly stronger, is slightly less agile, and is slightly smarter. The Artist is somewhat smarter. The Unit (var-1) is considerably less agile, has slightly less stamina, and is somewhat smarter. The Unit (var-2) is somewhat less agile, and is substantially less smart.
   The Unit (var-3) is the baseline against which other Castes are compared.
   The Enforcer is slightly weaker, and has slightly less stamina. The Unit (var-4) has somewhat less stamina, and is slightly less smart. The Entertainer is slightly more agile. The Unit (var-5) is considerably weaker, is slightly less agile, has slightly less stamina, and is slightly smarter.
   The Ruler is somewhat weaker, is slightly less agile, has slightly more stamina, and is considerably smarter.
   The reasons for the variations (physiological and/or mental differences) (marked (var-)) within caste roles remains unclear.

Sensory Abilities
   The Enmiish have a range of senses which includes Vision, Hearing, Smell, Touch, and Percept.
   The sense of vision is somewhat superior; Enmiish eyes are sensitive to the band: GBP.
   The sense of hearing is generally somewhat inferior. Enmiish hear in the range 2^2 to 2^6 hertz.   Enmiish voices are generally in the range 2^3 to 2^7 hertz. Enmiish voices are not audible to humans. Human voices are audible to Enmiish. For reference, humans hear in the range 2^6 to 2^{12} and speak in the range 2^7 to 2^9. A dog whistle is about 2^{14}.
   The sense of smell is generally slightly inferior.
   The sense of touch is generally superior.
   Perception is generally slightly superior.
   The Enmiish sense of Touch is dominant.
   The racial scent is KPX-41F (revised from previous data).

   Special Abilities and Talents. There are reports that individuals are capable of Teleken

Additional World Data and Commentary (omitted)

The standard short description of a sophont uses the format from the **Pocket Edition of Wiseman's Guide to Sophonts**. About 30 words paint a picture of the sophont's appearance and capabilities, and a traveller venturing to a world benefits from reviewing the **Wiseman's Guide to Sophonts** before arrival.

NATIVE INTELLIGENT LIFE

Reference:		Comments:
03-D	NIL: Sophont Name.	NIL= Native Intelligent Life.
04-B-1 and 2	Niche and Subniche.	
04-A-1 and 2	Terrain and Locomotion.	
06-A	Caste.	Omitted if no Caste.
07-A	Gender Structure.	Genders shown with more numerous first.
10-A-1 and 3b	Symmetry and Peds.	
10-A-3	Limb Group Structure.	
09	Senses.	Include Adjective if Constant outside the range 12-20
05-A and B	Genetic Profile and Content.	
12	Size.	

Example:	**NIL:** Kugurgam: Herbivore Intermittent. Forest Walker. Gender: BAE. Symmetry: Bilateral Biped. Limb Groups (AN-LN): Arms with Hands, Legs, Tailless. Enhanced Vision- BPS, Enhanced Hearing, Enhanced Touch. SAEIIS: 221222 Size: 66.	From Page 198 of the **Pocket Wiseman's Guide To Sophonts** (Deneb edition).

	NIL: Lasousshesan: Omnivore Hunter. Plains Walker. Gender: MFN. Symmetry: Bilateral 8-ped. Limb Groups (AN-LM): Arms with Paws, Legs, Three Leg Groups, Manipulative Tail. Enhanced Vision: XFI, Enhanced Hearing, Touch, SDVITS: 323332 Size: 133	From Page 1011 of the **Pocket Wiseman's Guide To Sophonts** (Deneb edition).

	NIL: Viigvi: Omnivore Gatherer. Jungle Walker. Gender: FM. Symmetry: Asymmetrical No-ped. Limb Groups (AN-NN): 4 Arms with Sockets, Tailless. Weak Vision: NAC, Enhanced Hearing, Smell, Enhanced Touch, Weak Aware, Enhanced Percept, SGEIES: 313332 Size: 108	From Page 923 of the **Pocket Wiseman's Guide To Sophonts** (Deneb edition).

	NIL: Enaphsul: Omnivore Hunter. Forest Walker. Gender: FNM. Symmetry: Bilateral Quadruped. Limb Groups (NL-NL): Legs with Hands, Legs, Tailless. Hearing, Touch, SDEIES: 322222 Size: 116	From Page 514 of the **Pocket Wiseman's Guide To Sophonts** (Deneb edition).

Sense Constant Adjective

1	11	Weak
12	20	Normal
21	30	Strong