Portal

Prologue

ACTIVISION
ENTERTAINMENT SOFTWARE

© 1986 Activision, Inc. G-946-46

I've always been something of a loner. That's why I volunteered for the mission. Yet this empty world below scared me.

We came in over Florida. I knew it had to be Earth. But the broad facilities of Canaveral were nothing more than a grassy field, though the outlines were there, and the monuments of the early launch facilities seemed to be in good repair. Only after we landed could I see that their preservation was less than perfect.

I walked around, poking into the few remaining buildings. All were empty and silent. Gulls circled overhead; small animals moved in the underbrush at the edge of the meadow; birds sang. I found a terminal of unknown design in a building. Nearby was a small cap labeled with the words "Mindlink XV3-2044." I put it on, but nothing happened. The terminal was inactive, and I could find no way to change that. It had no screen, no keyboard-only what I took to be a holographic projection platform, and this cap. I'm not even sure it was a terminal.

Gyges has been of remarkably little help. All her expert systems, all her powerful AI functions seem helpless. So I asked her to go over ship's log.

Our trajectory went according to program. We approached 87.79 percent lightspeed within the first five years' subjective travel. Then something interrupted the program. Gyges is unable to analyze what. A broad swatch of datastorage seems to have been wiped. A proton flux? Magnetic anomaly? The scoop performed according to design. Speed increased to 93.45 percent C, then to 94, 95, 96, 97. Time dilation began to affect the circuits in ways Gyges could not determine.

We never reached 61 Cygni.

I listen to audible representations. Mostly the hiss of high-speed data, the shrill chatter of bits flowing in the superconducting circuits. Why do I do this? I do not know. There's nothing else to do.

Once 1 thought I heard something. 1 asked for slower and slower replays. I tried filtering and modulating the sounds. It was almost like music, a chant or patterned polyphony. I moved the frequency up and down.

I heard what I thought must be a name: Peter Devore.

I must have been mistaken. Yet the name was there, hidden in the chittering data, clearly enunciated. I listened to it over and over. Then I went outside again.

It was a warm spring day. A light breeze came in from the ocean. The air was clean and bracing with salt and ozone. It was so much like the day I had left this field (how many years ago'?) that I felt a strange sense of disorientation. It was as if. for me, everyone and everything familiar had vanished overnight.

Gyges sampled all available frequencies, all available channels.

There was no one in the world, so I lifted the ship and moved slowly over the face of the Earth, looking for.. .I do not know what I was looking for.

Where Washington D.C. once sprawled beside the Potomac lay a scattered parkland with ancient monuments; the Lincoln Memorial, the Washington Monument, the Capitol building. The Pentagon was just an outline, a pentagonal berm covered with grass.

In the Library of Congress building I found a map called *Intercorp World Administrative Regions Archival Hardcopy,* with a date: 14 August 2077. The map includes what appears to be an organizational chart for the Intercorp Council and its political or administrative regions.

I didn't recognize any names. But I read an outline of 2 I st century history. My own departure is listed for 2004. Monday, 24 May. One of the first hypersonic salt-cycle suborbitals took me up the Gyges scoop. It's all there. The newsnets of the time carried live coverage of the scoops going operational. By the time I'd left Mars orbit, I was all but forgotten. So many other things seemed to be happening in the world.

In the entry for Thursday, 5 February 2076: "Gyges 61 Cygni single man explorer telemetry ceased as of this date. Signal attenuation indicates system shutdown. Presumed lost."

That's all. "Presumed lost." No effort to understand what happened.

***　　　　　　　　　　　　　　　　　　　　***

I had no idea how much time had passed, of course. When the ship revived me, 200 million kilometers out, I was disoriented and puzzled. Later, when we swept in over the South Atlantic on our first orbit, I grew alarmed.

This was not the world I left, although the general geography was familiar. There was the hooked circle of Antarctica, the Western Hemisphere, the broad bulge of Siberia and the Arctic ice cap, but where were the cities? Where was the constant communications chatter? Where were the signs of traffic and human life? The planet I was orbiting was empty.

Yet the system was the same. The LP-5 colonies still hovered at the Legrange points, but they too were silent. The moon circled overhead, but no voices came out of the Lunar bases. The geosyncs and relay satellites had certainly multiplied since I'd been gone, but nothing but unmodulated carrier waves moved between them.

Yesterday, I was laid into the complex hum of the first cryofield aboard the Gyges and put to sleep. For me it was yesterday, yet years have passed. I should have revived in orbit off 61 Cygni and spent a year observing the double star.

This did not happen.

Gyges held me, my cryofield, and the most advanced artificial intelligence computer Earth scientists could produce in the early 21st. She spoke and understood standard natural language. She contained the intuitive and deductive skills of countless experts in celestial navigation, the physical and biological sciences, life support, entertainment, and psychological adaptation. I anticipated no problems.

But I awoke (it seemed) moments after I'd gone into the cryofield-200 million kilometers from Earth, inward bound- and everything has changed.

Manhattan is a monument. The triangular mile-high pyramids of midtown still stand, but they're empty. The lower East Side is a vast field littered with abandoned vehicles of types I have never seen. Some of them have been open to the seasons for years. Brambles have grown over the seats and through the steering columns (at least I think that's what those whiplike extensions from just below the left-hand window must be). A cold wind was blowing.

Then, early in June, I found an entrance.

Everyone had moved underground. Of course that movement had begun before I left, but I had had no idea it would be so extensive. The world has been reforested.

It is very beautiful, but here is no one to talk to. I am the last person left alive.

Underground is nothing but desolation. Endless corridors where my footsteps echo. Condensation collects and runs down the walls. Occasionally a gust of air shows some random action of the atmosphere controls, so somewhere there's still power, but I have yet to find a machine or terminal that works. Not that I understand how to work them even if they were active. The lifts don't work, and I've had to climb access ladders or stairs.

There is no sign of violence. It's as if everyone had stepped out years ago and not returned.

The Gyges works very well on the planetary surface. Naturally I left the scoop in orbit, but she was designed to be rugged and intelligent. She sang to me as we flew over what was once the eastern United States (recently called, from the chart, the "Northwest Alliance"). Nothing exists but trees, as far as I can see, as far as Gyges's sensors can scan: trees and rolling hills. This used to be called Pennsylvania when I left, and this was Ohio. The Lakes gleam to the north, pale and blue.

I landed south of Chicago. The Loop is enclosed in a dome, the old 20th-century buildings perfectly preserved. Everywhere else, there's nothing but forest and meadow, river and lake.

I walked into old Chicago. The access lock to the dome stood open. Ancient computer printout littered the street. I found a hospital on the first level down. There were bodies in some of the beds, the first sign of human beings I have found.

The bodies were mummified inside life-support tents. They had been dead for years, and there were not many of them. I sat beside one of them for hours. I don't know what happened to them, what terrible disease they had or why they were abandoned here in life-support that no longer functioned.

On the second level I found a terminal with a small ready light burning. Nearby I found the "WORLDNET Emergency Operating Instructions."

The instructions tell me what to do if my mindlink is not functional. I don't know what a mindlink is, but I assume that it must be adapted to my own mind, and this has never happened. So 1 will read the instructions, and then I will try to find out what has happened to the world, where the people have gone, and if I must remain alone for the rest of my life.

Gyges tells me my psychological adjustment is in peril. I have been too long without other people.

WORLDNET

Emergency Operating Instructions

Geneva Node Ref. #1347-030 Alpha
Fiber Media Update 11 November 2088.

* * * Warning * * *

This document is NOT intended as a full explanation of Worldnet capabilities or usage. It is for emergency use only, For Edmod Neurotransfer contact your Local Node Edmod AI.

CONTENTS

Purpose

In event of catastrophic failure of neural I/O peripherals, this fiber media printout is designed to help any citizen enter Worldnet dataspace.

Such catastrophic failure might include:

- medical emergency with both personal monitor and mindlink failure,
- new viral intrusion into essential grown organic pica-electronics,
- deliberate or accidental sabotage of Local Node housing or traffic AI,
- I/O detuning of a single-strand remote terminal or portable datapad,
- induced madness in a local AI, and/or
- drastic power loss to Local Node.

While Geneva Node (Central Processing Artificial Intelligence) considers these possibilities *extremely* remote (< one in one billion), Intercorp Council orders that these emergency instructions be centrally available in hardcopy form in all Urb warrens, outposts, museum or monument structures, medical support chambers, and Local Node housings.

This document is intended for emergency support only If no emergency exists, route questions to Geneva Node via Local Node through standard mindlink or phonic channels.

<p align="center">***</p>

If an emergency is in progress, please read this document before attempting entry.

<p align="center">* * *</p>

Geneva Node requests your patience. You are used to standard I/O procedures working at standard speeds. Emergency entry requires more time and effort than mindlink or phonic drivers.

Assumptions

Worldnet assumes you have access to an active terminal, are in sentient physical condition, and are familiar with Worldnet coding procedures.

Attached to most terminals you will find one or more archaic manual input devices. While these devices date from the previous century, they remain reliable and effective, if almost unbearably slow They go by various names: joystick, mouse, tablet, wand, pointer, keyboard. Whatever style you have available for your terminal, these devices allow you to indicate, by means of physical gesture, the options you wish to select on Worldnet.

On terminals that feature a separate pointing device, you make selections by pointing at them and pressing a button on the pointing device. On terminals lacking such a device, you must use directional guidance keys on the keyboard, a flat. panel featuring rows of keys inscribed with an alphabetic, syllabary, or ideographic hierarchy; After highlighting your selection by means of the directional guidance keys, confirm your choice by pressing the long, horizontal bar (called a space bar) at the front of the keyboard.

You may need to enter data manually through the keyboard. Worldnet will require little input through this archaic device, but may request your name or DNA number.

Entry

Activate your terminal in the usual way. For local activation customs, consult your regional librarian or online Artificial Intelligence Node.

Worldnet will perform compatibility checks for peripheral devices.

Worldnet will offer messages regarding any transit queries or unacknowledged files. Remember that, as usual, you must access all unacknowledged files before Geneva can pass on your requests.

Interface Panel

Interface provides all citizens with limited access to the twelve standard dataspaces, including their AI Nodes (where applicable). Some dataspaces, as usual, are not available at all times or are proscribed to those with inappropriate Edmod profiles or psych classification.

The twelve dataspace icons that. appear on the Interface Panel are:

CENTRAL PROCESSING (Geneva)
HOMER (Storytelling Artificial Intelligence)

PSYCHOLOGY (Psychological profiles of individual citizens)
EDMOD (Individual Educational Modules, aptitudes, and programming)
LIFE SUPPORT (Physiological data; time-stamped data not available with older peripheral I/O)
WASATCH (Genealogies since around 2010, Utah region, Western Alliance)

HISTORY (Short accounts of significant events)

MILITARY (Proscribed)
PSILINK (Proscribed; located Wallace Urb warrens, Kansas Region, Western Alliance)

SCITECH (Science and Technology)
GEOGRAPHY (General maps and data)
MED10 (Medical information)

As indicated, these dataspaces are divided into five general areas: *Communication and Control* (Homer and Central Processing); *Personal* (Psychology, Edmod, Life Support, and Wasatch); *Historical* (History); *Proscribed* (Military and PsiLink); and *Scientific and Technical Information* (Scitech, Geography, and Med10). On some terminals these areas may be color-coded.

Splicing

Splicing into dataspaces is simple, even if you do not have mindlink or other neurolinking I/O. Depending on the type of terminal in use, merely center the selection you want in the Interface window or point to the dataspace you wish to enter. Then press the button or space bar, as required. Worldnet. will allow you to enter the dataspace provided you have clearance and the dataspace is available.

Once in a dataspace, you may move around using your pointing device (joystick, mouse, etc.). Moving through file menus or option icons should highlight the current available choices. Highlighting means the color of the selection will change, usually to black and white or reversed colors.

There is a data line at the top of the screen. This line tells you what the current selection will do if you press the button or space bar, as required.

Entering a file brings up the text for that file. By moving the pointing device up or down, selecting the up and down arrows to the right of the text, or using directional guidance keys, as required, you may page through the file. To exit the file, use a mouse-type device to select the focus line (see below) in the lower left of the screen, press the button on a joystick-type pointing device, or press the space bar on terminals lacking a pointing device of any kind. You may bring any available graphics to the foreground by selecting them in the normal fashion.

Focus Line

The bottom of each dataspace screen gives you important information, such as how deep you are into the dataspace. The first box from the left contains the hierarchy of levels you have traversed. Selecting this box moves you back up one level.

The square box next to the first one is the place-saving option. Selecting this will preserve your place in whatever field you are currently exploring, should you wish to leave the terrninal for a period of time.

The next box offers a way of interacting with an Artificial Intelligence Node in the system. Most often, this box signals if the AI has a message for you. What icon appears in this box will depend on what your task is. As an example, assume that you are using Homer as your guide AI. Homer's icon will appear in this box. Selecting it will take you to whatever message Homer may have for you. Sometimes Homer may flash, indicating an urgent message or request.

The final box on this line returns you to Interface. Selecting this option takes you directly to the Interface panel without your having to travel back up the hierarchy through current dataspace.

Standard Usage

It is a good idea to spend some time practicing with these older I/O devices. They are slow and clumsy offering none of the subtlety, speed, or emotional overtones of current I/O systems.

Try moving around the dataspaces: page through files, bring up graphics, and so on. Soon you will discover that, while they are not as effortless as mindlink or even phonic drivers, these devices are relatively easy to use and will suffice when rnore acceptable methods are unavailable.

Summary

Worldnet is here to serve you. If you are dissatisfied with service or have suggestions or thoughts for service improvement, please leave open file messages at Geneva Transfer point either for Intercorp Council consideration or for CP AI action.

And remember, be patient. This is an emergency situation. Local Node AIs are undoubtedly already at, work correcting whatever has gone wrong You can help by informing CP of the situation.

Geneva Node Ref. #134 7-030Alpha

Appendices

A: **Personal Dataspace Charts and Graphs**
B: **Worldnet Online Help**
C: **Homer Interface Tutorial**
D: **Glossary**

A: Personal Dataspace Charts and Graphs

Worldnet's personal dataspaces (Psychology, Edmod, Life Support, and Wasatch) present data-intensive graphic information in both realtime-inductive **and** static modes. *Under emergency conditions, such graphic* data *presents static lifetime-averaged data* and is *presented for informational* purposes only. The following is an explanation of all personal dataspace graphic presentations.

WASATCH

Wasatch presents genealogical information, complete only since circa 2010. The dataspace Leyden Jars and crystal storage occupy an ancient mine in the Wasatch mountains in the old Utah Region of the Western Alliance.

The following graphs will appear in Emergency Mode:

Core Intelligence (horizontal bar graph). Late 20th-century and early 2lst-century research suggested four core and several ancillary IQ areas. In personal dataspaces, including Wasatch, Core Intelligence offers standard reference positions of relative standing in the four core intelligence areas. They arc:

- **LING.** Linguistic IQ. Sensitivity to the meanings of words, grammar, rhythms, and inflections of the spoken and written language.

- **MUSC.** Musical IQ. Ability to discern meaning and importance in a set of pitches rhythmically arranged.

- *ART. Artistic IQ. Ability to represent mental imagery on canvas or in clay, due to developed spatial orientation and bodily-kinesthetic intelligences.

- **MATH.** Mathematical IQ. Ability to skillfully handle long chains of reasoning and create mathematical patterns of ideas.

Physiology and ESP (horizontal bar graph). Four areas are represented:

- **ESP**. Extra-Sensory Perception. Still little-understood and *proscribed* science (see regulations and access codes regarding use of Psilink dataspace) of psychic senses outside the known range of physical. ESP has been closely correlated to high spatial skills and thalamus activity

- **FAT.** Fat-to-weight ratio. Percentage of body weight that is fatty tissue.

- **SLOW.** Slow twitch muscles. Percentage of muscle rnass conditioned for endurance and stamina.

- **FAST.** Fast twitch muscles. Percentage of muscle mass conditioned for bursts of speed and strength.

Family Tree (tree). Will provide names of ancestors back over two generations. Scrolling through initials puts names into the data line beneath the tree.

PSYCHOLOGY (Psychological profiles of individual citizens)

Psychology offers graphic information in the following areas: Emotional, Personal Growth, and Core Intelligence.

Emotional (horizontal bar graph).

- **MATR.** Maturity. Developed sense of awareness and acceptance of oneself as a person.

- *HOST. Hostility Aggressiveness misdirected against others, one sign of immaturity

- **SELF.** Self-esteem. Self-worth that grows out of a developed sensitivity to others' moods, motives, and intentions and **an** awareness of **one's own** maturity and emotions.

Personal Growth (partition bar graph).

- **GROW.** Personal Growth. Measure of maturity rate over time of

school-age subjects.

- **INTR.** Introspection. Intrapersonal intelligence: awareness of self and access to one's own feelings and emotions.

- **COMN. Common** sense. Reflection of logical and mechanical knowledge as well as interpersonal skills.

Core Intelligence (See WASATCH)

EDMOD (Individual Educational Modules, aptitudes, and programming)

Edmod offers information in those areas important to well-directed educational and social development under the Intercorp Council Educational Development Program (Directive Reference #238912Sigma). These include Intrapersonal, Memory, Logic, and Core IQ.

Intrapersonal (partition bar graph).

- **SPAT.** Spatial orientation. Capacity for visual imagery and the mental manipulation of objects in three-dimensional space.

- **BODY.** Bodily-kinesthetic. Developed fine motor control and/or skillful object, manipulation.

- **SOCI.** Social adjustment. Interpersonal intelligence, sensitivity to the feelings and motivations of others; an expression of innate leadership talent.

Memory (horizontal bar graph).

- **ATEN.** Attention span. Measure of intensity and duration of intellectural focus and concentration.

- **SHRT.** Short-term memory. Measure of rote memorization skills, with no consideration for later retention.

- **LERN.** Learning curve. Measure of the speed with which one can become familiar with and use a new concept or skill.

- **LONG.** Long-term memory Ability to understand, integrate, **and** retain concepts and skills and recall and use them over time.

Logic (partition bar graph).

- **MATH.** Mathematical IQ.

- **DEDC.** Deductive reasoning Ability to reach conclusions from numerous apparently unrelated facts.

- **INDC.** Inductive reasoning Ability to prove the steps needed to reach a stated conclusion from certain starting parameters.

Core Intelligence (See WASATCH).

LIFE SUPPORT (Physiological data; time-stamped data not available with older peripheral I/O)

Life Support, graphic information is based on continuous realtime personal monitor data archived in Local Node Housings.

Blood Pressure (planeline graph/sec. vs. press. Hg).

- **SYST.** Systolic. Peak blood pressure as the heart contracts.

- **DIAS.** Diastolic. Blood pressure when the heart muscle relaxes and the ventricles snap shut.

Temperature (planeline graph/sec. vs. percentage from base).

- **FACE.** Face temperature. Changes in face temperature reflecting changes in mood.

- **EXTR.** Peripheral temperature. Reflection of sympathetic nervous system or emotional response.

Respiration + **GSR** (planeline graph/sec. vs. |108M/208M/308M/BASE/RSPS).

- **GSR.** Galvanic skin response. Skin conductance; shows emotional response when sweat glands are activated.

- **RESP.** Respiration. Measure of breaths per minute.

Heartrate and EEG (planeline graph/sec. vs. 33%/66%/ONE/   100812008).

- **HR.** Heart rate. Increases in proportion to the need for oxygenation, resulting from both emotional response and increases in muscle activity,

- **EEG.** Electroencephalogram. Measures electrical activity in the brain according to the following waves and their general parameters:
  DELTA <4cps · asleep
  THETA 4-8cps · drowsy
  ALPHA 8-13cps · relaxed and receptive
  BETA >13cps · alert
  These measures represent very general conditions. Theta, for example, is associated with high levels of creativity, alpha with light meditative state.

Glycogen Metabolism (planeline graph/sec. vs. -25M/-10M/ lMM/5MM/ 15MM).

- **BGLU.** Blood glucose. Glycogen, used to power muscle contraction; stored in muscles and liver; controls blood sugar levels.

- **PHOS.** Phosphorylase. Inhibits glycogen synthesis, which brings the glycogen metabolism full circle.

- INSN.   Insulin. Increases liver capacity to synthesize glycogen.

- **GLON.** Glucagon. Increases blood sugar levels by stimulating breakdown of glycogen in liver, as epinephrine does in muscles.

Neurotransmitters (planeline graph/sec. vs. -25M/-20M/-15M/-lOM/-5M).

- **ACET.** Acetylcholine. Mediates nerve impulse travel across synaptic cleft; electrically excites motor end plates during normal parasympathetic muscle activity.

- **EPIN.** Epinephrine. Released during a sympathetic "fight or flight" response; stimulates glycogen breakdown in the muscles preparatory to action.

Hormones (planeline graph/sec. vs -2SM/-20M/-l5M/-l0M/-5M).

- **ENDO.** Endorphins. Analgesic hormones released from pituitary-regulated   pain   response.

- **THYR.** Thyroxin. Regulates physical growth and oxidative metabolism.

Tension Level (planeline graph/sec. vs. 2OHZ/40HZ/60HZ/80HZ/100HZ).

- **MASR.** Masseter. Jaw muscle.

- **FRNT.** Frontalis. Forehead muscle.

- **CORG.** Corrugator. Eyebrow muscle.

- **DEPR.** Depressor Muscle at the corners of the mouth.

NOTE: You may also get oscilloscope readings in certain instances, usually through Central Processing

B: Worldnet Online Help

Welcome to Worldnet Online Help.

There are some things that you need to remember as you attempt to access Worldnet through a manual or keyboard interface:

1) Because it is not possible to communicate the quantity (or quality) of information through a screen, as it, is through a standard mindlink, the data files open to citizens using emergency procedures are limited to those relevant, to the subject at hand. Your coordinating AI will control the flow of information to your terminal.

2) Most AIs demand that, you read an entire file before releasing additional significant, data, although they may make exceptions under extreme emergency conditions. The message line at the top of your screen will let you know when you have read the entire file by displaying **NO MORE. You should** read each tile through to the end.

3) To remind you which tiles you have read, your AI will place a checkmark alongside the file name in each of the dataspace directories.

4) Manual interfaces are not as responsive as the mindlink. Particularly when using a joystick-type device, be sure that you arc firmly pressing the button on your interlace, not just hitting it quickly There will usually be an audio signal when Worldnet receives the button command.

5) Since you have entered this tutorial, you have discovered that you access various areas of the screen by:

   a) moving the stick, which in turn moves a black area on the screen, and
   b) pressing the button when the area you want to enter is highlighted.

This activity should allow you to access all needed data files until such time that the mindlink and/or other interfaces become re-activated.

6) Your AI will attempt to anticipate which file you would like to enter within each dataspace by entering the directory with that file in the correct position to be immediately accessed.

Please exercise patience with this archaic form of computer interface.

C: Homer Interface Tutorial

Welcome to the Homer Interface Tutorial.

As you begin to communicate directly with Homer (your coordinating Al), there are a few things you should know about the interface:

1) The yellow "help" button at. the bottom right of the screen will become a direct, link to Homer You may access this AI directly at any time. If you are **having** a problem, you may receive some help. In any case Homer will have something to say; storytelling AIs always do.

2) Homer will flash the access button whenever it has something important to communicate. Please return directly to the main Worldnet menu and then to Homer dataspace whenever this happens.

3) Whenever you are having trouble and don't know what to do, return to either Central Processing and/or Homer to see if additional files have **opened.** If not,, return to each of the dataspaces to be sure that. you have read all of the necessary files completely. Remember, necessary files that leave been read have checkmarks next to the file name.

4) One of the more difficult but essential things to do when under emergency conditions is to scroll through the file names in the dataspace directories. To do so:

   a) Move the black highlight to the top file name.
   b) Press the button or spacebar, as required, quickly (the file name becomes unhighlighted).
   c) Pull back on joystick-type devices or using directional guidance keys in the absence of such a device until you have the file you wish to enter at the top of the screen.
   d) Press the button or spacebar, as required, to highlight the access button.
   e) Press it one more time to access the file.

It is important that you learn to do this. Practice on the Homer directory until you can access the Current file, which you will find as you scroll through the directory

During emergencies, only the Current file is activated.

Remember: **when** you successfully access the Current, file, this tutorial will be replaced by a direct link with Homer.

D. Glossary

AEF: Antarctic Expeditionary Force. Sent by Regent Sable when Protector to invade and control Antarctica.

Agrobotics: Robotic agriculture dominated by early **AI** picoelectronic. Solved all world nutrition problems.

AI: See Artificial Intelligence.

Anomaly: The Anomaly is probably a black hole complex 19 light years from Earth in the direction of Vega.

Ants: Colloquial term for the citizens of Antarctica.

Artificial Intelligence: A thinking construct, originally based on complex "expert system" software, later grown as picoelectronic circuits of great complexity, and finally grown in crystal tanks. **AIs,** as they are called, are local quasi-intelligent monitors that control information traffic or perform other managerial tasks.

Axion Equations: The Axion Flux was hypothesized in the late 20th century to explain the so-called "missing mass" of the universe. Axions were found to be highly energetic massless particles available in interstellar space for propulsion purposes.

BioCybernon: Late 20th-century corporation which designed and built early biopsych tanks, meditation chambers, and inductive education programs.

Biomonitor: Provided by law to all citizens, biomonitors recorded and archived physiological and emotional information about the subject. Provided medical and life-support functions.

Core Crystals: Similar to the older "core memory," core crystals represented the central storage in long-term **AI** memories.

Crystal Tanks: Seed and nutrient support tanks for growing **AI** crystals.

ENC: Elite Neutralization Corps, the policing arm of the Intercorp Council.

Heuristic: Technically, the self-teaching method used by many **AIs;** a form of learning from experience.

Holo: Short, for holographic, a three-dimensional imaging technology common from the early 21st century on.

Induction Sensorium: The entire sensory modality in the brain (as opposed to the sense organs themselves). Technologies for inducing sensory experiences directly in the brain were discovered in the early 2 1st century **See Inductive Composition.**

Inductive Composition: Composing for the inductive sensorium. **See Mozart.**

IR Nightvision Thermography: A form of remote sensing of infrared thermal radiation used by Worldnet and biomonitors to track human and animal life on the Earth's surface.

LN Cells: Liquid Nitrogen, the most common independent power source during most of the 21st century; provided clean, safe power to vehicles and other machinery

LP: Legrange Point, where Earth and lunar (or solar) gravity cancel one another; LPs provided gravitationally stable locations for the so-called "Elpie-Five" colonies in space.

Megalips: Ancient computer term; referred to millions of logic instructions per second.

Meldslats: Laser-fused mineral substance commonly used for underground construction, flooring, and walls.

Mindlink: Most common method for communicating with computer systems by the mid-21st century Mindlink provided direct neural input/output with Worldnet using inductive techniques. **See Neural Induction.**

Mozart: The artistic application of **Neural Induction. See** also **Induction Sensorium.**

Neural Induction: The technology for creating sensory experiences directly in the brain.

Neurophage Weapons: Applications of neural induction that, numbed, damaged, or destroyed neural pathways, causing confusion and in the case of Mindwars weapons, eventual death through genetic disease.

Node: A local nexus in the **Worldnet** system, usually holding its own Al.

Portal: Name given by Peter Devore to the energy vortex phenomenon near the **Anomaly** that allowed migration into the Realm.

Proscribed DB: Some databases on the **Worldnet** are proscribed to certain personality profiles for educational or security reasons; Military and PsiLink are examples.

Psion Equations: The original mathematical models for psychic functioning, described in 1990 by Dittmore Seminole Gadd.

Realm: The hypothetical reality of eleven-dimensional space-time beyond the **Portal.**

Realtime Experience: Induced experience that is both a) real, not composed; and b) taking place concurrently in some remote location.

Realtime Relay: Method of transferring **Realtime Experience** through space.

Sigma State: EEG readout indicating deep trance, not ordinarily covered by **biomonitors.**

Tailored Helpers: Genetically manipulated animals, usually primates, used for menial tasks; a short-lived enthusiasm in the early 21st century

Urbs: Urban areas, composed of a complex of **warrens,** usually following the nomenclature and locations of previous surface metropolitan areas.

Warren: Underground city with ready access to surface parks, either remotely through sensing or directly

Worldnet: The worldwide computer and data network, cornposed of millions of **AIs, Nodes** and satellite relays.