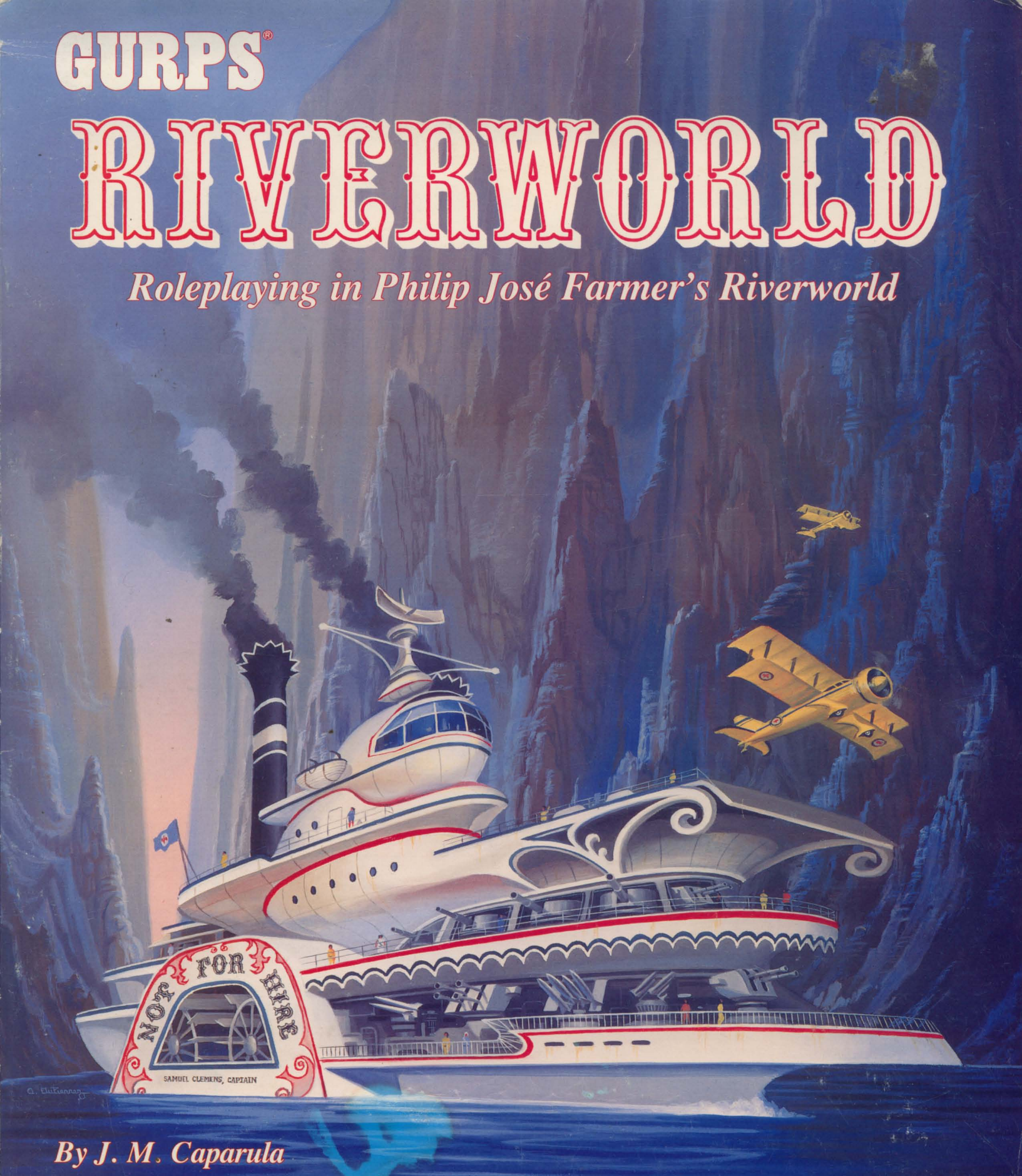
GURPS®

RIVERWORLD

Roleplaying in Philip José Farmer's Riverworld



By J. M. Caparula

STEVE JACKSON GAMES

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Roleplaying in Philip José Farmer's Riverworld

By J.M. Caparula

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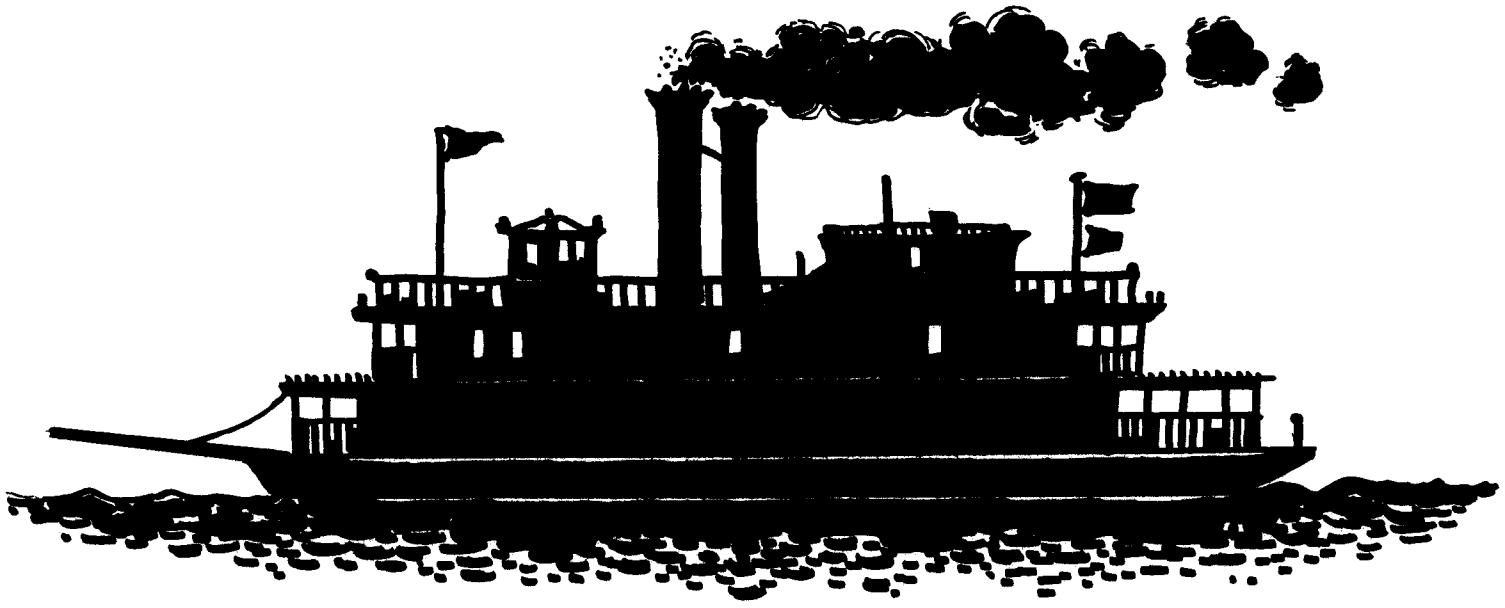
This work is respectfully dedicated to a fellow Midwesterner, the "real" Peter Jairus Frigate. Special thanks to my two brothers for their spirited enthusiasm. Also hats off to Bill Bodden, Pegasus Games of Madison, the organizers of Madison Games Day, and especially to Ann for her editing, patience and inspiration.



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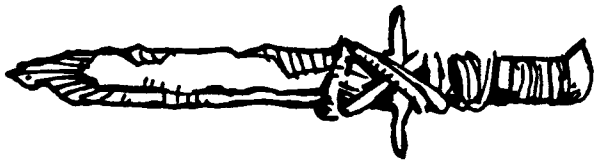

INTRODUCTION

As stand we percht on point of Time, betwixt the two Eternities,
Whose awful secrets gathering round, with black profound oppress our eyes.
—The Kasidah of Haji Abdu al-Yazdi

Philip José Farmer's classic *Riverworld* series provides a unique roleplaying opportunity. Every human who has ever lived, from the Neanderthal to the astronaut, from the Greek philosopher to the American businessman, is reborn on the Riverworld. The mighty and the meek, the famous and the forlorn — all of them together, divided in culture, but united in the face of the grandest mystery of the universe: who built the Riverworld, and why?

The Riverworld saga began in 1952, when a then-unknown science fiction writer named Philip José Farmer submitted a novel entitled *Owe For The Flesh* to an international writing contest. The story won, but it was never published. After "resurrecting" it in 1964, Farmer faced several more rejections, until fellow SF writer Frederick Pohl suggested that the concept was too big for one story. Two novelettes ensued in the next couple of years: *Day of the Great Shout* and *The Suicide Express*. These stories became a novel, *To Your Scattered Bodies Go,* the first book in the *Riverworld* series, published in 1971.

Since then, four more novels and one novelette have appeared, establishing the *Riverworld* series as Farmer's masterpiece. It is a triumphant combination of history, religion and technology, set in a mythological context that draws from Farmer's Midwestern roots (he lives on the Illinois River, part of the Mississippi-Missouri River network). A serious student of pulp fiction, Farmer has filled the series with larger-than-life historical characters and grand adventure.

GURPS Riverworld brings the *Riverworld* series into the world of roleplaying. As a player, you have the entire spectrum of history from which to choose characters — play your favorite historical figure, or even play yourself or your friends. As a GM, you can involve players in quests to reach the River's source, or entangle them in the plots and intrigue of Ethical renegades and agents. Form nations, build riverboats and airships, and meet the great people of history!

This book is intended primarily as a guide for Game Masters. Hence, it reveals all the secrets of the Riverworld! Players who have *not* read the *Riverworld* books, and who intend to run ***GURPS Riverworld*** characters, should only read the sections in Chapter 2 which pertain to creating characters. GMs will probably want their own copies of all the books (see p. 124).

The adventure "Resurrection Day," which begins on page 112, is intended as an introduction to the Riverworld. It can be run by GMs who have not yet read the rest of the book.

I hope you find ***GURPS Riverworld*** exciting and challenging, and here's hoping that we may all someday meet on the banks of the River, "where we'll board the fabulous Riverboat."

— J.M. Caparula

About GURPS

Steve Jackson Games is committed to full support of the ***GURPS*** system. Our address is SJ Games, Box 18957, Austin, TX 78760. Please include a self-addressed, stamped envelope (SASE) any time you write us! Resources now available include:

Roleplayer. This bimonthly newsletter includes new rules, new races, beasts, information on upcoming releases, scenario ideas and more. Ask your game retailer, or write for subscription information.

New supplements and adventures. We're always working on new material, and we'll be happy to let you know what's available. A current catalog is available for an SASE.

Errata. Everyone makes mistakes, including us — but we do our best to fix our errors. Up-to-date errata sheets for all ***GURPS*** releases, including this book, are always available from SJ Games; be sure to include an SASE with your request.

Q&A. We do our best to answer any game question accompanied by an SASE.

Gamer input. We value your comments. We will consider them, not only for new products, but also when we update this book on later printings!

BBS. For those of you who have computers, SJ Games operates a BBS with discussion areas for several games, including ***GURPS***. Much of our playtest feedback for new products comes from the BBS. It's up 24 hours per day at 512-447-4449, at 300, 1200 or 2400 baud. Give us a call!

Page References

Rules and statistics in this book are specifically for the ***GURPS Basic Set,*** 3rd Edition. A page reference beginning with a B refers to the ***Basic Set*** — e.g., p. B10 means p. 10 of the ***Basic Set,*** 3rd Edition.

About the Author

J.M. (Joe) Caparula has been roleplaying for 14 years, and has been a freelance game writer for the past five. He is a voracious reader of science fiction and fantasy. ***GURPS Riverworld*** is his first major work.

In his free time, when not gaming, reading or writing, Joe indulges his passions for cycling, cooking, bock beer and B movies. He lives in Madison, Wisconsin, with his wife Ann, half a ton of books, and a stubborn computer.

THE GREAT RIVERVALLEY

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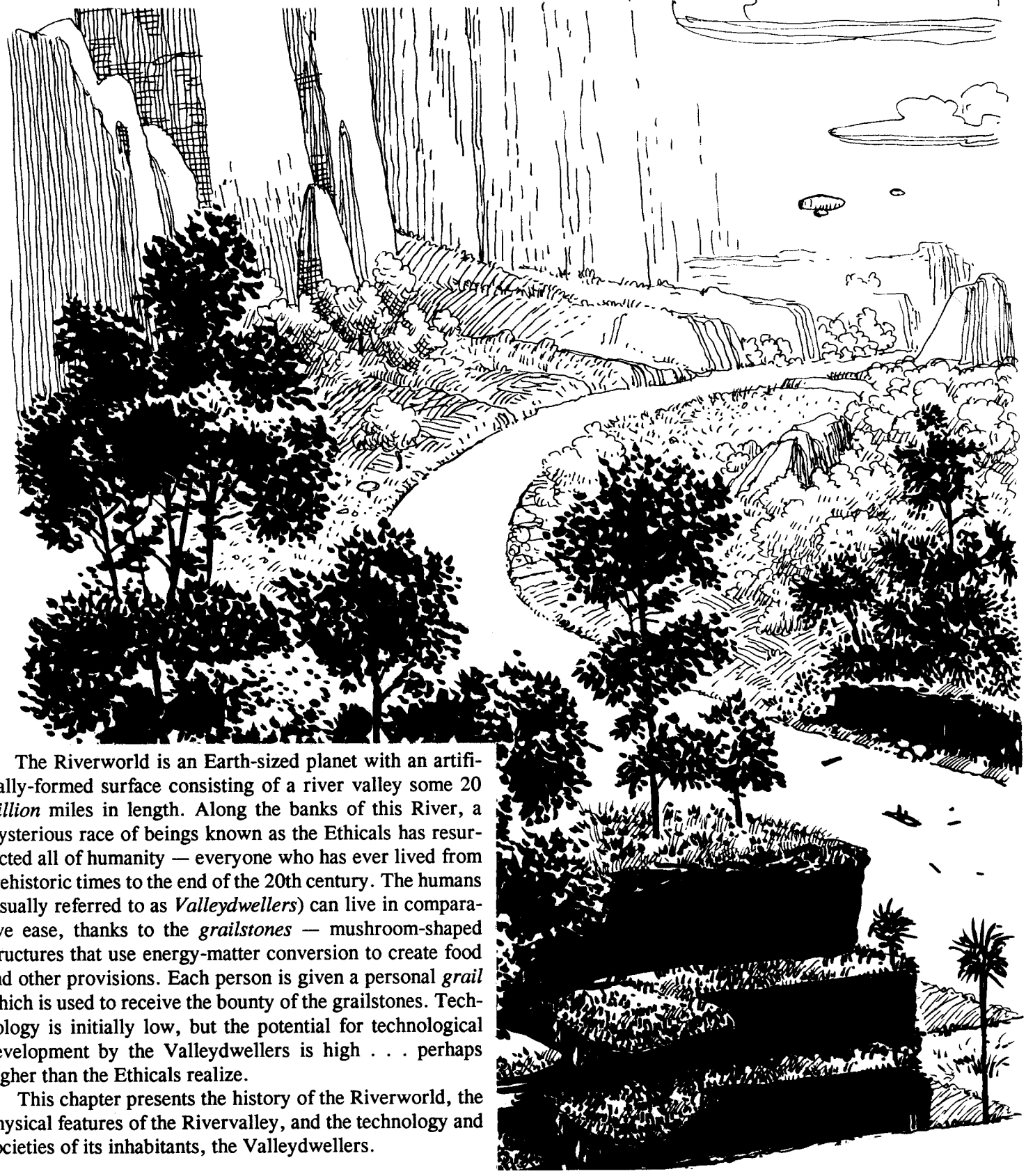


The Riverworld is an Earth-sized planet with an artificially-formed surface consisting of a river valley some 20 *million* miles in length. Along the banks of this River, a mysterious race of beings known as the Ethicals has resurrected all of humanity — everyone who has ever lived from prehistoric times to the end of the 20th century. The humans (usually referred to as *Valleydwellers*) can live in comparative ease, thanks to the *grailstones* — mushroom-shaped structures that use energy-matter conversion to create food and other provisions. Each person is given a personal *grail* which is used to receive the bounty of the grailstones. Technology is initially low, but the potential for technological development by the Valleydwellers is high . . . perhaps higher than the Ethicals realize.

This chapter presents the history of the Riverworld, the physical features of the Rivervalley, and the technology and societies of its inhabitants, the Valleydwellers.

Book References

The material in this book is based primarily on the five *Riverworld* novels and one novelette by Philip José Farmer. References are given in these rules whenever the source material would be especially useful in expanding on a particular subject. For example, the reference 5/33 means page 33 of the fifth book. All references are to the Berkley paperback editions.

See the *Bibliography*, p. 124, for more information.

0: "Riverworld," in *Riverworld and Other Stories*
1: *To Your Scattered Bodies Go*
2: *The Fabulous Riverboat*
3: *The Dark Design*
4: *The Magic Labyrinth*
5: *Gods of Riverworld*

Chronology

This is a timeline of important events in the *Riverworld* series, intended to give a historical perspective on the planet's development and how the Project was sabotaged. If you have *not* read all of the books, be warned: *this section will give everything away.*

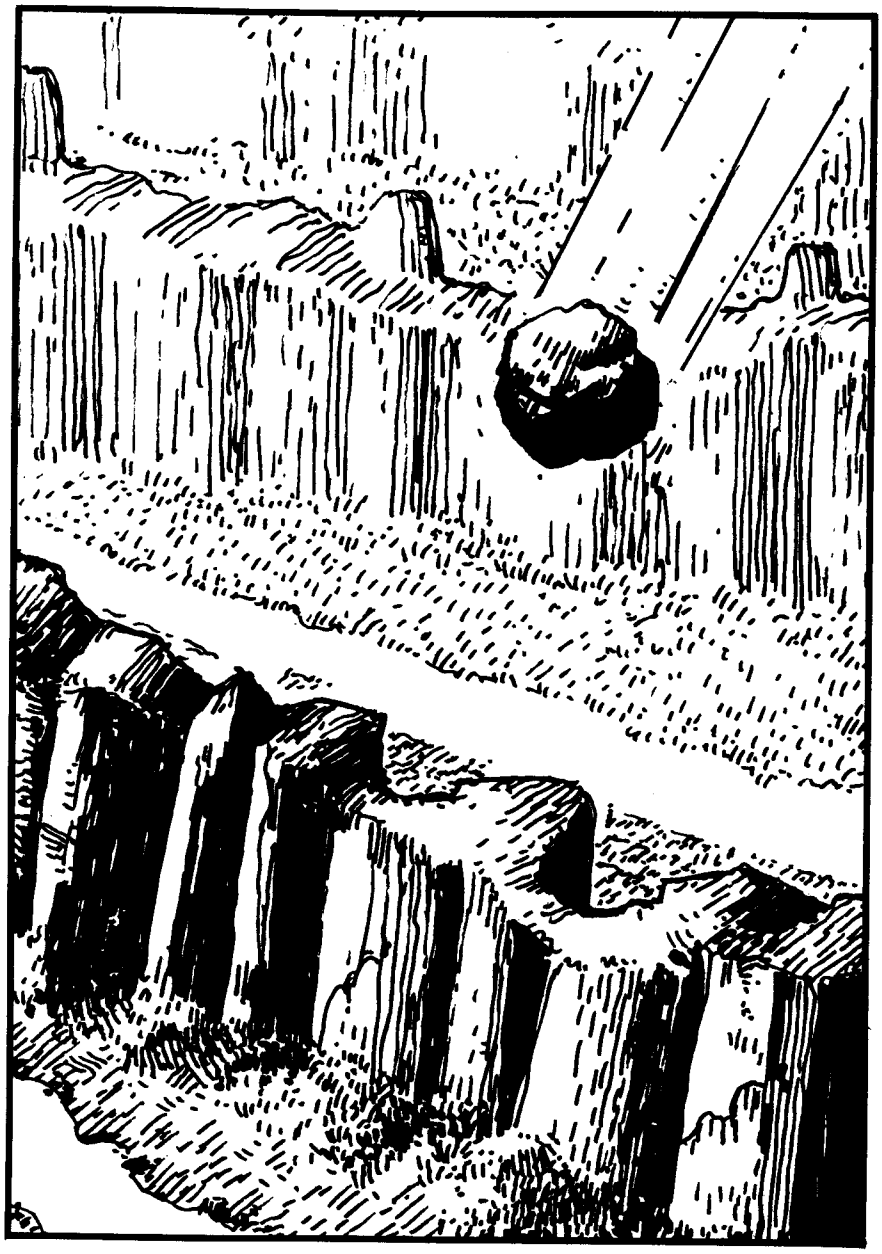
Dates not from Earth's Gregorian calendar are Riverworld reckoning, which considers Resurrection Day to be Day One. Years are generally 365 days long (although that may vary from society to society) and are numbered from After Resurrection Day (A.R.). For example, the year 0 A.R. is the first year after Resurrection Day, with 1 A.R. marking the beginning of the second year after Resurrection Day.

ca. 97,000 B.C.: Monat's race builds the *wathan*-generators and -catchers on Earth. The Project begins; *wathans* passing out of deceased human bodies are collected and saved. Human development is observed and recorded .

ca. 50,000 B.C.: The titanthrop race becomes extinct.

ca. 1100 B.C.: Loga lives for four years in ancient Troy, before being slain by Greek soldiers.

ca. 900 B.C.: The Gardenworld is constructed by Monat's race to resurrect humans dying before the age of five. Loga is resurrected and raised there, and becomes one of the Ethical Council of Twelve. Other humans resurrected there become Ethical observers on Earth.



1983 A.D.: Cutoff date for *wathans* to be revived in the first phase of the Project.

ca. 2000 A.D.: Wars on Earth render the planet essentially uninhabitable.

2008 A.D. According to the story told by the alien Monat and the various Ethical agents on the Riverworld, this was the year in which an alien ship from Tau Ceti destroyed much of the human race in self-defense. This is untrue, but would be believed by any Valleydweller; the story became widespread.

2009 A.D.: The Council leaves the Gardenworld to prepare a planet to be the Riverworld. On this planet, resurrected humanity will be tested for ethical fitness, and those who pass will live forever.

2169 A.D.: The Council's ship and equipment arrive at the world which will become the Riverworld.

2169 to 2219 A.D.: The Riverworld is constructed and the Computer and pre-resurrection chamber (PRC) are installed. Loga, despite his Ethical training, becomes obsessed with the need to make sure that his own resurrected family will pass the Riverworld "test." To this end, he begins to sabotage the Project in various subtle and unsubtle ways, to insure his own control.

2246 A.D./0 A.R.: Resurrection Day. Every human who died from 97,000 B.C.

through 1983 A.D. is resurrected on the banks of the Rivervalley by matching *wathans* to artificial bodies created according to records in the Computer. (Ethical agents on the Riverworld will later claim that the cutoff date was 2008; they are lying. Anyone who says he lived after 1983 is an Ethical agent.)

Some time prior to the resurrection, Loga manages to arouse Sir Richard Francis Burton into temporary consciousness while the bodies are being prepared in the pre-resurrection chamber. Burton will never forget this terrifying and incomprehensible sight.

During the first year, anarchy and panic give way to small societies bound by common historical background. Monat the Operator, the alien "mentor" of the Council, discovers Loga's tampering with Burton in the PRC, and assigns himself and several other agents to watch Burton. Burton and his followers, including Alice Hargreaves, Gwenafra, and Kazz, build *The Hadji* and begin navigating the River, accompanied by Monat.

1 A.R.: After a 25,000-mile journey, *The Hadji* is attacked and sunk by soldiers of Hermann Göring (1/109). Göring imprisons Burton and his comrades in a grail slave camp. Burton engineers a mass escape and sets up a small nation, where he discovers the presence of an Ethical agent. Burton leaves and is soon visited by the "Mysterious Stranger," or "X" (Loga), who tells him he is being watched by the Ethicals and instructs him to get to the Polar Sea.

3 A.R.: An expedition led by the pharoah Ikhnaton seeks to find the mouth of the River. Among its members are is the titanthrop who will later be called Joe Miller (the Egyptians call him Thoth). Joe does not reach the Polar Sea, but several of the Egyptians do; most are captured and suspended by the Ethicals, but one escapes and is eventually translated back to the Valley, where he tells the tale of the Dark Tower.

5 A.R.: Burton begins a plan to evade Ethical agents by assuming disguises, killing himself when he is discovered, then being translated elsewhere in the Rivervalley. He calls this "The Suicide Express." During these translations, he discovers the titanthrops, meets a 17th-century Englishman named Collop who tells him of the Church of The Second Chance, and by amazing coincidence, continues to be translated in the same area as Hermann Göring.

7 A.R.: Peter Jairus Frigate, an American science fiction writer (unaware that an Ethical agent is posing as him), boards the *Razzle Dazzle,* which is being captained by Jack London and Tom Mix (3/165).

13 A.R.: After 777 translations throughout the Rivervalley, Burton finds himself before the Council. His memory is taped so that the Council can see the renegade Ethical through his eyes. However, Loga manipulates the Computer to misread the data, and his identity is protected. The Council attempts to wipe Burton's memory of the meeting, but Loga foils them and Burton returns to the Valley with a complete memory of his interrogation (1/214).

20 A.R.: The Riverworld satellite which destroys approaching meteors is sabotaged by Loga. Through contragrav technology he "steers" a large meteor, rich in nickel-iron, to an area of the Valley where Sam Clemens and his comrades are sailing aboard the *Dreyrugr.* When the meteor impacts, a tremendous tidal wave rushes down the Valley, and the west-bank grailstones fail to discharge for one full day (2/17).

Sam finds and claims the meteor, and is immediately threatened by neighboring nations, the most dangerous being one ruled by King John Lackland. Knowing he cannot defeat King John, he forms an alliance with him and founds the nation of Parolando. Fearing betrayal by his violent companion, Erik Bloodaxe, Sam murders him first. Bloodaxe swears an oath of vengeance upon Clemens (2/83).

21 to 25 A.R.: During this period Parolando builds Sam's dream of a fabulous riverboat. Sam trades iron ore for other raw materials, from wood to

Campaign Periods

The chronology should be used by the GM when deciding on a campaign period. Ideally, all ***GURPS Riverworld*** campaigns should begin on Resurrection Day and progress from there. However, GMs may prefer to start their campaign on a later date to give the players easier access to metal and technology.

Three campaign periods are presented on this and the following pages. Each period focuses on the events that will affect play, assuming that the PCs have done nothing to alter the chronology. The GM may wish to change the background somewhat, especially by adjusting Loga's actions to suit himself. For hints on doing that, see Chapter 5.

Resurrection Day (0 to 20 A.R.)

A Resurrection Day campaign means that the characters enter play on Resurrection Day — that is, they wake up on the Riverworld with the rest of humanity. This is the easiest and best way to begin a campaign. Alternatively, GMs may wish to bring new characters into play sometime after Resurrection Day but before the meteor impact.

The first Riverworld period is marked by panic and uncertainty. The renegade Ethical, Loga, keeps a low profile for the first 20 years of The Project, contacting key members of his "chosen few," but otherwise staying within the Tower and keeping an eye on his fellow Council members. During this time, the Valleydwellers "feel out" the planet, form small nations, and construct low-tech sailing vessels to explore other parts of the Valley. This is a good campaign period to use if the GM wishes to emphasize the interaction of historical characters without the intrigue of Ethical manipulations and the distraction of high technology.

References: The first book of the series, *To Your Scattered Bodies Go,* covers this period from the viewpoint of Sir Richard Francis Burton. Also, the story "Riverworld" (see *Bibliography,* p. 124) is set in this early period and is a model for designing an adventure involving low-tech Riverworld nations.

Thor's Hammer (20 to 30 A.R.)

This period begins when Loga diverts a meteor to impact on the planet. This wipes out all life in the section of Valley where it strikes, though of course the victims are reborn immediately. But, as Loga planned, the meteor provides a huge source of iron ore, allowing tremendous technological advancement. This period is dominated by the rise of Parolando, the nation founded by Sam Clemens and King John to build the metal riverboat. Parolando becomes the most advanced nation on the planet, and news of their development can be heard in all parts of the Valley. This causes an influx of Valleydwellers who wish to be part of Parolando's technological acceleration. Loga begins contacting a large number of Valleydwellers (perhaps even the PCs?) and provides conflicting stories to confuse Ethical agents. Monat's pursuit of Loga begins.

Adventures in this period can center on attempts to reach Parolando and its wonders, or can actually take place *within* Parolando, perhaps offering the PCs a chance to foil the plans of King John. Rumors of The Mysterious Stranger should reach the ears of the PCs, which might motivate them to journey north toward Virolando and the Polar Sea.

References: The second book, *The Fabulous Riverboat,* tells of the meteor strike, the rise of Parolando, and King John's treachery.

bauxite, from neighboring nations. One neighbor, Soul City, causes major problems for Sam and eventually attacks Parolando in an attempt to capture the riverboat, but is defeated.

26 A.R.: Sam's riverboat, the *Not for Hire,* is completed. During the christening ceremonies King John attempts to poison Clemens, then captures the boat. Sam vows to build another boat and follow John up-River until he takes his vengeance.

30 A.R.: Sam completes and launches his second riverboat, the *Mark Twain.* Milton Firebrass, now president of Parolando, begins preliminary construction for an airship. About this time, Loga fears his tampering with the Computer will be discovered by Monat. He activates the death spheres in the brains of all Ethicals within the Tower, and instructs the Computer to stop all resurrections until a special command is given. Loga's plan is to help selected Valleydwellers occupy the Tower. Only then will he give the command to resume resurrections.

Because of Loga's actions, translations come to a stop within the Valley. The Ethical agents in the Valley, including Monat himself, realize that something has gone terribly wrong, and a mass migration to reach the Tower begins. Unbeknownst to Loga, Monat has placed an overriding command in the Computer to prevent further resurrections until *he* gives the special command.

31 A.R.: Jill Gulbirra, an experienced airship pilot, arrives in Parolando after travelling 20,000 miles up-River in a canoe. Burton, reunited with his former companions, builds the *Hadji II* and continues his up-River quest. The boat is destroyed after an encounter with a group of pre-Colombian Indians and a dispute with some ancient Babylonians.

32 A.R.: Burton's party builds another vessel, the *Snark,* and continues the voyage. Burton, Alice and Kazz deduce that Monat and Frigate are Ethical agents, and attempt to capture them, only to discover they have vanished. Construction begins on Parolando's rigid airship, the *Parseval.*

Along the River as a whole, most construction of large wooden vessels ends about now, as the supplies of flint and chert run out. Only those areas with a supply of metal retain their technology.

33 A.R.: Parolando christens the *Minerva,* a semi-rigid airship and precursor to the larger *Parseval.* The *Razzle Dazzle* docks at New Bohemia, a metal-rich nation whose founder, Ladislas Podebrad, converts to the Church of the Second Chance and resigns his post. Frigate, London and Mix then build a non-rigid airship to reach the Polar Sea faster. It is stolen by Podebrad (3/307).

34 A.R.: The *Parseval* is christened and launched, with a crew including Jill Gulbirra and Cyrano de Bergerac. Loga is also aboard; he had been in Parolandro under the identity of an airship pilot named Barry Thorn. The *Parseval* and the *Minerva* launch an attack on King John's riverboat (newly named the *Rex Grandissimus*), only to be double-crossed by the *Minerva's* pilot, John de Greystock. The *Parseval* then heads for the Polar Sea.

At the Tower, Ethical agents aboard the *Parseval* (including Firebrass) attempt escape in a helicopter, but are killed by a bomb planted by "Thorn." No one is able to gain entrance to the Tower except a Japanese Sufi named Piscator, who does not return. After leaving the Polar Sea, a raid is conducted on the *Rex* using the other helicopter (3/368). It fails; after the copter returns to the mothership the *Parseval* is destroyed by Loga, who escapes uninjured, hoping to board one of the riverboats now heading towards the headwaters (3/391). Of the great airship's crew, only Cyrano survives.

Meanwhile, Frigate, London and Mix build a hydrogen balloon and make for the Polar Sea, only to be blown off course by a storm. They crash into the mountains near the place where the *Parseval* was sabotaged.

35 A.R.: The right-bank grailstones quit functioning. It is conjectured that the New Bohemians were digging deeply around a grailstone when they broke

the circuit. Since the Ethicals in the Tower are dead, there is no one there to repair the line. Mass panic ensues; the left bank grailstones are raided throughout the Valley, resulting in many casualties. It is estimated that half the population of the Valley — over 17 billion people — die in the next 24 hours.

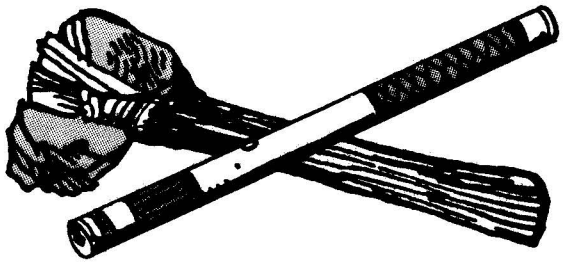
Burton and his comrades, the real Frigate, London and Mix all board the *Rex*. Monat gets aboard the *Mark Twain*, which by now has been renamed the *Not For Hire* (Clemens having reclaimed his original name). Soon thereafter, Loga boards in disguise, and assassinates Monat. Both vessels head for the wide waters of Virolando, where the final battle will inevitably ensue.

36 A.R.: The Battle of Virolando. Hermann Göring, now a Church of the Second Chance missionary, tries to play peacemaker between Clemens and King John, but to no avail. During the climactic battle, both ships are sunk and all their aircraft destroyed, although a few small boats survive. Both captains perish (Clemens by a heart attack after being rescued by Erik Bloodaxe).

Burton, Loga (in the identity of a Mayan, Ah Qaaq), and other recruits of Loga survive the battle and make for the Polar Sea. They go to the River's headwaters by boat, then climb over and through the mountains ringing the sea. They succeed in getting into the Tower through a secret entrance left by Loga. There, Burton discovers Loga's identity, but Loga eludes them within the Tower's labyrinthine corridors.

After the long absence of the Ethicals, machinery in the Tower is breaking down. A safety valve that admits seawater into the Computer's protein brain is stuck, threatening the *wathans* collected therein. Loga reveals his story to the others, and the entire group searches for a solution to the problem. Hermann Göring, who followed the group into the Tower, volunteers to infiltrate the Computer's defense systems and open the valve. He fails, sacrificing his life in vain. Alice Hargreaves then intuitively comes up with a way to bypass Monat's security systems and saves the *wathans* from release and eternal oblivion.

Loga continues the Project with the Valleydwellers in control of the Tower. He then suffers a mysterious "death," and Burton's group is confronted with another presence in the Tower. They discover the body of an Ethical who apparently murdered Loga. Burton's group realizes that they are now "gods" of the Riverworld and take advantage of the tremendous technology available to them — resurrecting lost friends, creating artificial environments, studying the Valleydwellers. They remain unable to restart the resurrections without Loga or Monat.



37 A.R.: The Computer is sabotaged by one of the new resurrectees, Star Spoon, who tries to murder everyone in the Tower and nearly succeeds. She also seems to have released all the *wathans*. Loga returns, revealing that his death was faked in order to "test" the group on their use of power (he also reveals that he built a backup for the Computer and that the *wathans* are still safe). Burton decides that Loga's erratic behavior proves he is insane, and "suspends" his *wathan* until the Gardenworlders arrive. Burton then proposes leaving the Riverworld in the Ethical spacecraft.

100 to 120 A.R.: The Gardenworlders are scheduled to return to the Riverworld sometime during this period to "phase out" the first part of the Project and resurrect those born after 1983 A.D. What will they find when they arrive?

Twilight of the Gods (30 to 36 A.R.)

In 30 A.R., Loga pulls the plug on the Ethicals by murdering the Council and everyone else in the Tower, reprogramming the Computer, and stopping the resurrections. Ethical agents within the Valley begin a mass migration northward, accelerating the Valleydwellers' technological development in the process. This is a time of intrigue, suspicion and opportunity. Metal becomes more available when New Bohemia (and perhaps other nations) dig deep enough to discover natural iron ores. Parolando builds a second riverboat and two airships. This period culminates in the Battle of Virolando, the final testament to technological greed and vengeance on the Riverworld.

GMs wishing to emphasize a technological campaign may set it in this period. The Ethical agents are panicky enough to forget their oaths of non-interference and start assisting the Valleydwellers with high technology. The PCs should have plenty of opportunities to build vessels, increase TLs, and establish nations. GMs looking for intrigue should also use this period, as Ethical agents will be working closely with the PCs in their endeavors (in fact, they may be *among* the PCs — see Chapter 4).

References: The third and fourth books, *The Dark Design* and *The Magic Labyrinth*, cover this period and emphasize the technology and intrigue that goes with it.

The Dark Tower (36 A.R. and Beyond)

After The Battle of Virolando, Loga's plan came to fruition when many of his chosen managed to reach and occupy the Dark Tower. Once the *wathans* were saved by Alice, Loga vanished and left the Tower and its marvelous technology to its occupants for a full year. Upon his return, Burton decided he was insane and "suspended" his *wathan* indefinitely. The Tower's occupants then decided to spread the truth about the Riverworld throughout the Valley, and there was talk of leaving the planet to find other worlds.

This is the most open-ended period in which to set a campaign. The Valleydwellers are now in control of the planet, but Ethical agents are still at large in the Valley. Once news of the "truth" reaches the ears of the Valleydwellers, anything could happen, including a full-scale invasion of the Tower to get at its technology. Ethicals from the Gardenworld are scheduled to arrive around 100 A.R. to phase out the first part of the Project and resurrect those who died after 1983. The PCs could help "prepare" for their arrival in any way they choose, or they might be able to leave the planet in Ethical spaceships and seek out the Gardenworld — or other planets — themselves. The game could leave its Riverworld background and become a full-fledged ***Space*** campaign . . . though the universe will be essentially humans only, unless the human Ethicals or the remnants of Monat's race are encountered.

References: Burton's expedition to the Dark Tower and what happens when his group arrives there are described in the second half of *The Magic Labyrinth*. The fifth book, *Gods of Riverworld*, deals with the Ethical technology within the Tower and how it is used and abused by the Valleydwellers.

The Land

The Rivervalley extends for millions of miles across the surface of the planet; the Riverdwellers estimate its length at anywhere from 10 to 20 million miles. It starts at the Polar Sea and zigzags back and forth all across the face of one hemisphere. It then circles the south pole and runs back and forth across the other hemisphere before re-entering the sea from which it came.

The Valley looks almost the same over almost all its huge length. It is, on the average, about ten miles wide.

The River is banked on both sides by sloping grassy plains that become rolling wooded hills. The hills then become rough highlands, ending at sheer mountain cliff faces. The mountains form the "boundaries" of the twisting Rivervalley. Several sample sections of Valley are shown on pp. 25-27.

The River

The River itself varies in width, but on the average it is a mile across. At some points it widens to form lakes up to six miles wide; at other places it narrows between cliffs, forming a swift cataract. Some areas of the River are dotted with "islands," usually tall rock spires jutting out of the water. These usually occur in groups, and some of the larger ones have grailstones.

Small streams empty into the River from the Valley highlands. The grassy plains do not end when they meet the River; instead, the grass continues along the River bottom, growing taller as the River becomes deeper. The River is inhabited by many species of small fish, serving as food for the larger, predator fish (see sidebar, p. 11).

The average mid-River current is 15 mph. It is much faster where the River narrows, and much slower in lakes and a few anomalous areas, otherwise normal-seeming, where the River becomes "lazy" for many miles. Flow is maintained by a complex system of pressure pumps beneath the River bottom, controlled by the Computer at the Dark Tower. Average depth of the River is 1,000 feet at the middle, but this can vary; some of the larger lakes are 3,000 feet deep! The water is usually at a moderate temperature, except in the extreme higher latitudes, where it is icy cold.

The Polar Sea

The River begins and ends at the Polar Sea, a large freshwater body at the planet's north pole. The Polar Sea is approximately 60 miles in diameter, surrounded by a wall of mountains 32,000 feet high (Mt. Everest is 29,000 feet high!). The River flows into and out of the sea through two underground chambers. Rising out of the center of the Polar Sea is the Dark Tower of the Ethicals, which is a mile high and 10 miles across. For a more detailed description of the Polar Sea, see p. 94.

The Valley

Short grass grows along the plains that line the Riverbanks. It is believed that the grass forms one huge artificially-created organism, because it is so tough and its roots so intertwined that it cannot be cut except by sharp steel.

Grailstones (see p. 13) are found along the River spaced exactly one mile apart and within 20 feet of the River's edge. The plains gradually slope up away from the River for about a mile before becoming hills.

The grass grows taller and thicker on the hills. Small clumps of bamboo and deciduous trees are scattered throughout the hilly areas. There are also *irontrees* here (see below).

The hills become rough, wooded highlands about 2½ miles from the Riverbank. The highlands are mostly covered with trees: oaks, yews, tall pines, and

more irontrees. Thicker clumps of bamboo can be found in the highlands. Small streams from the mountains wind their way between the rough hills, forming rapids and small waterfalls. Grailstones can also be found in the highlands, although less frequently and with no regularity.

The tall irontrees are covered with long, strong vines. In some areas these vines bear colorful flowers; in others they do not. The flowering and unflowering areas alternate every 10,000 miles.

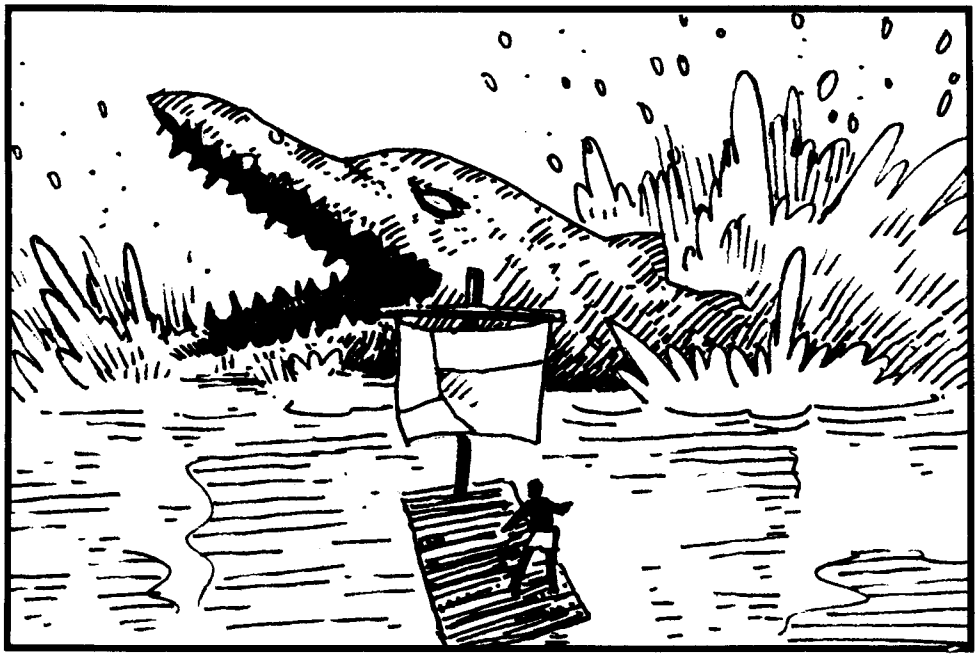
The highlands abruptly end at the bottom of the mountains' cliff face. The mountains reach up to 10,000 feet in height from River level (about 8,000' up from the base in the highlands). They appear to be taller, perhaps because of the claustrophobic sensation created by the narrow Rivervalley. The mountains are jagged precipices of dark blue or black stone supporting no plant life except for a blue-green lichen. Water condenses at their top, to flow downward in icy cataracts; many of these deliver thousands of gallons per minute. These become streams which flow down to the River, making up what it loses to evaporation.

Rubble can be found along the base of the mountains — from large building stones to fist-sized lumps of basalt, and sometimes valuable flint and chert.

The mountains are unclimbable (at least, no one has ever heard of anyone climbing them), and their stone is so hard that only steel tools and explosives can cut it.

Life

The Riverworld was resurfaced for the sole purpose of supporting human life. The ecosystem is extremely simple, since no food chain is necessary (the grails provide all the food humans need). There are no land animals, birds, or insects. Aquatic life consists of over 100 species of fish, mostly small creatures that exist to sustain the much larger riverdragons and hornfish (see sidebar). The only land dwellers other than the humans are several species of earthworms. They emerge from the soil at night and dispose of waste products and corpses. One species of worm makes it possible to create gunpowder (see p. 49).



Plant life is more diverse. In addition to trees like oaks, pines, and yews, bamboo dominates the Valley. There are over 500 different species of bamboo, of all sizes. Some types grow up to 100 feet tall; others have stalks up to three feet in diameter.

Riverworld Bestiary

Dragonfish

ST: 500	**PD/DR:** 1/4
DX: 13	**Dmg:** 6d+2 cut
IQ: 4	**Reach:** C
HT: 15/50-100	**Size:** 20-30
Speed/Dodge: 14/7	**Wt:** 200+ tons

The dragonfish (also called *riverdragon*) is a massive predator of the River, as large as Earth's biggest whales. They can reach lengths in excess of 100 feet. They have a tough, thick skin that protects them from changes in pressure. For this reason, they can rapidly move between the River bottom and its surface. Dragonfish subsist on lower forms of River life, and their diet includes both hornfish and croakers (see sidebar, next page). They *usually* do not attack boats or swimmers unless provoked, and then they will fight swiftly and viciously, attacking with their powerful teeth.

The skin of the dragonfish provides the toughest leather (DR 2). The bones around its mouth make the best compound bows; the other bones are also useful, some being very heavy and others being light and delicate but strong. Some of its internal organs make useful goods; others are delicious to eat. Therefore, men hunt the dragonfish. However, this is a massive and dangerous undertaking; dragonfishers build huge rafts, with masts, rudders, derricks and strong anchors, and use the techniques that Earthmen developed for whaling. The techniques of dragonfishing are widely spread along the River, because it is a dangerous job. More than anyone else except soldiers, dragonfishers have a tendency to wake up, naked and bald, in a strange place.

Continued on next page . . .

Riverworld Bestiary (Continued)

Hornfish

ST: 18	**PD/DR:** 0/0
DX: 10	**Dmg:** 1d+3 imp
IQ: 3	**Reach:** C
HT: 12-14	**Size:** 2
Speed/Dodge: 20/10	**Wt:** 200 lbs.

The hornfish is a six-foot-long River predator that lives about 100 feet below the surface. It subsists on small fish and plants, and will not attack either dragonfish or humans. Its vertebrae are an intricate spiral shape and come in several colors — shiny black, red and white — and make beautiful jewelry, and its flesh is tasty. The bones have many uses, including arrow fletching, and the stomach lining makes a good grade of vellum for writing paper.

However, the hornfish is probably most valuable to the Valleydwellers because of the six-inch horn on its forehead, which it uses as an impaling weapon (1d+3 damage). The horn can easily be removed and makes good speartips and knives.

The hornfish can be caught either in nets of woven grass, or on a strong line.

Croaker

ST: 8	**PD/DR:** 0/0
DX: 8	**Dmg:** 1d cut
IQ: 3	**Reach:** C
HT: 10-12	**Size:** 1
Speed/Dodge: 5/4	**Wt:** 100 lbs.

The croakers are the sanitation system of the River. They are scavengers, eating anything that does not resist them. They are about the size of a dog and very slow-moving. Their flesh is tasteless and their bones are useless for weapons. A croaker never attacks, and if provoked it prefers to flee, although its bite does 1d of cutting damage. They are lungfish, and often come up along the banks at night to scavenge for food. Their large eyes and loud croaking have startled many a Valleydweller.

Other Fish

There are over a hundred species of fish in the River. Some of the others include the scaleless *toadfish*, small and good to eat; the four-foot *blue dolphin*, also good to eat; the *redfish*, whose skin makes an attractive red leather; and the *turtlefish*, which has an actual shell. This shell can be used in the same ways that Earth tortoise shell is used, and often becomes the body of a lyre or other musical instrument.

Thus, fishing is a worthwhile and respected profession all along the River. Although men can live solely from their grails, and can get along without the food and raw materials that fishermen produce, they would rather not do so.

Riverworld vegetation is all very hardy and fast-growing. The bamboo grows at a phenomenal rate (a 50-foot plant could grow from a shoot in just ten days). Even the "ordinary" trees regrow within six months if cut. *Irontrees* are enormous, twisted trees reaching 1,000 feet in height and having broad, elephant-ear leaves, bright green with red veins. Vines bearing bright flowers cover the branches in some areas. The trunk of an irontree is exceedingly tough (DR 12). The wood cannot be cut except with steel, and is totally resistant to fire.

Mineral Resources

The most predominant mineral resources on the Riverworld are quartzite minerals such as flint and chert. Small stones can be found along the base of the mountains at many locations in the valley. Large deposits of these stones are rarer. Such stones, which will hold an edge, are extremely valuable on the Riverworld, for edged tools are necessary in order to make use of the abundant

wood and bamboo. In areas where flint is uncommon, housing and shipbuilding remains at a much cruder level.

Metals are extremely rare. Soft metals like copper are the most "abundant," which is to say there is about a 1% chance of finding a small but workable amount in any given 50-mile area. Traces of bauxite (aluminum ore), platinum, and even iron ore may be found in widely scattered parts of the Valley, but the chance of discovering these is even smaller.

This scarce distribution of metals applies only to the surface area of the Riverworld. If one digs deep enough beneath the planet's artificial crust, a whole range of metals and ores may be discovered. A hole at least 200 feet deep must be dug (the base of the mountains is the best place to dig; the grass is designed to resist erosion, its roots thick and impenetrable) to reach the limestone stratum beneath the crust. Digging into the limestone will reveal mineral veins of whatever nature the GM desires. Of course, not every area yields valuable minerals, any more than a randomly dug mine on Earth would.

In certain places, though, extraordinarily rich deposits may be found! These are the areas where the Ethicals dumped the surface ores which they found while rebuilding the Riverworld. Such deposits are usually underneath the plains area, to make them harder to find and much harder to dig up. If such a deposit is discovered, through luck, extrasensory abilities, or the inside knowledge of an Ethical agent, it will be likely to contain several types of valuable ores close together. The only problem will be digging it up! Digging (see p. B90) is actually harder in the plains area than it is in the mountains. A pick is useless; a shovel is required to cut the roots, and a man can remove only .01×ST cubic yards per hour, at a cost of 4 Fatigue. This unbearably slow rate causes most diggers to quit in frustration unless they *know* there is something underneath.

Ethical Technology

The Ethicals possess a technology of TL15. They can resurface planets, convert energy to matter (and vice versa), and build massive protein-brains (computers). They can also create, store, and retrieve *wathans*, the (normally) invisible "essence" within all sentient life.

The Valleydwellers will generally not come into contact with most Ethical technology, except for the system of energy-matter conversion devices commonly known as grailstones. The GM should consult Chapter 4 for a detailed treatment of Ethical technology.

Grailstones

Grailstones are the Valleydwellers' name for the short, broad mushroom-shaped structures that line both banks of the River. Each grailstone is an energy/matter (e/m) converter, part of a circuit connecting all the stones on the same side of the River; thus, there are two separate circuits. Stones along the bank are one mile apart, while those in the highlands occur irregularly (but are still on the same circuit as the others). Stones found on the larger River islands are connected to the circuit of the closest Riverbank.

A grailstone is actually shaped more like a table than a mushroom, having a central cylindrical support three feet high and five feet in diameter. The broad, flat, circular surface is 50 feet across, with with 700 round indentations, each a 18" in diameter, arranged in 50 concentric rings. Grailstones appear to be made of a granite-like stone, streaked with red. The material is in fact *charruzz*, an extremely dense metal made by the Ethicals.

Grailstones have two major functions: grail provisions and translations. They also serve as observation devices; anyone with access to the Computer in the Dark Tower can see and hear anything within line of sight of any grailstone.

Food from the Grails

Three times a day, the grailstones provide the Valleydwellers with items of sustenance and comfort. The GM should feel free to elaborate on the PCs' grail provisions after each discharge, providing details and allowing the PCs to accumulate or trade specific items.

Food

The grails are programmed to deliver a wide variety of cuisine from all areas of human culture and history. The food is of superlative quality, an exact reproduction of the original. It arrives piping hot and in generous portions, and comes with plastic eating utensils (though nothing sharp enough to be used as a weapon). In general, each person's grail gives the type of food they were accustomed to get on Earth, but there are many random variations. There are also some improvements. For instance, the crystals that come with many meals are self-heating. Dropped into cold water, they quickly produce hot coffee or tea!

Some sample grail meals, with their accompanying luxury items (see sidebars, p. 19-20) include:

Breakfast: Bacon and eggs, toast with butter and jam, a slice of cantaloupe, milk, a cup of liqueur, ten cigarettes, a marijuana cigarette, a cigar, and dreamgum.

Lunch: Antipasto salad, Italian black bread with melted garlic butter, spaghetti and meatballs, a bunch of grapes, coffee crystals, red wine, four chocolate creams, ten cigarettes, a small cigar, a marijuana cigarette, a cake of soap, and a pack of toilet paper.

Dinner: Steak (in a four-inch cube), salad with dressing, brown bread (a sphere, with crust on the outside), potatoes and gravy, bourbon, ice cubes, a pipe, and a sack of shag tobacco.

Dinner: Tacos, enchiladas, burritos, bean salad, tequila (with salt and lemon), custard, three "rope" cigars, and dreamgum.

Dinner: Kangaroo meat, burned on the outside and raw on the inside, live grubworms of three varieties, tubers, beer, soap, toilet paper and shampoo. (Meals such as this, which most people would find wholly inappropriate, might occur one time in a hundred.)

GMs with a culinary knack may wish to create tables of various entrees and generate them randomly.

Surviving Without a Grail

It is not absolutely necessary to have a grail in order to survive. Non-grail food available in the Rivervalley includes bamboo shoots, dried fish, and acorn bread. This is a healthy diet, but a boring one. Note also that if *nobody* used their grails, the resources of the Valley could support perhaps 1% of its intended population.

The mountain lichen can be fermented to produce drinkable alcohol. With Power technology at TL6 or better, a chemist of TL6+ can eventually synthesize alcohol (and many other chemicals, including plastic) from the cellulose of the trees.

For extended travel, many grail offerings can also be smoked or dried so that they'll keep.

Luxuries from the Grails

Liquor

The Ethicals were well aware of the drinking habits of humans. Each grail discharge (including breakfast) will include six ounces of some type of alcoholic beverage. This includes beers of various types (lagers, ales, stouts, etc.), wine (simulated vintages from every period of history), and distilled spirits like whiskey and brandy. Of course, many Valleydwellers do not drink, and will readily trade liquor for other items. Stockpiles of liquor are a valuable commodity.

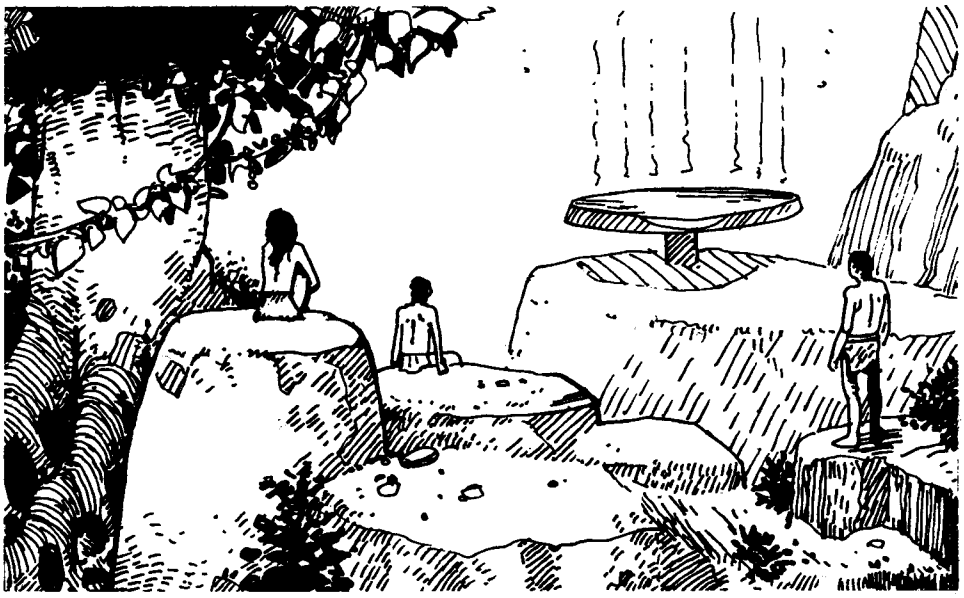
Tobacco

With each meal, the grails provide tobacco, either in the form of cigarettes (filterless, usually in packages of ten), panatela cigars, or shag for pipes (a briarwood pipe is occasionally included). Often, some combination of these can be found. Again, non-smokers can stockpile these for trading purposes. Note that smoking tobacco *in no way* affects a Valleydweller's health, but it *can* become an addiction.

Drugs

Drugs have been used for recreational purposes throughout history. The Ethicals have elected to keep "harder" drugs like opiates and cocaine out of the Valleydwellers' hands, but have included marijuana cigarettes (again, in packages of ten) and dreamgum (see sidebars, p. 36-37). Perhaps this has to do with their idea of free will; perhaps they intend it as part of the "test"; perhaps it is just intended as a luxury. No one knows.

When smoked or ingested, marijuana acts as a euphoric relaxant — reduce IQ rolls by one-third when making Vision and Hearing rolls and when trying to concentrate on a detailed task. Like any other drug, marijuana can be habit-forming and addictive.



But the Valleydwellers have no idea that this is happening. They think of the grailstones simply as providers.

Grail Provisions

Grailstones can convert energy into matter within a *grail.* Grails (also known as copias, glory buckets, lunch pails, and a thousand other names in a thousand different languages) are hollow, cylindrical objects, also made of *charruzz,* a foot and a half in diameter and 2½ feet in length. The grails are a nonreflective gray in color, and as thin as newspaper except at the base — yet no force available to the Riverdwellers can damage them. Each grail has a hinged lid with a handle, and a strap made of a transparent plastic material. Six small *charruzz* containers fit snugly inside the grail. The bottom of each grail contains complex computer codes that instruct the grailstones on the type of matter to be formed from an energy discharge.

The energy discharges occur three times daily: morning, noon, and evening. Intense blue flames emerge from the top of the stones and leap 20 feet into the air. The discharge is accompanied by a loud roar, and lasts only a second. A grailstone discharge does 3d damage to appendages (arms and legs) extended over the grailstone at the time, and instantly kills anyone touching a stone!

Any grails placed in the depressions before the discharge are filled with food, alcohol, tobacco, drugs, and other personal items, based on the codings of the grail (see sidebars, pp. 13-15).

Each Valleydweller is raised on the Riverworld with his or her own personal grail, which is found strapped to the wrist of the resurrectee. Only the "owner" of a grail can open it — the grail has sensors keyed to the brain-wave patterns of its user. The exception to this rule are the so-called "free" grails — each grailstone had a "sample" grail placed on it to demonstrate how they worked. These grails can be used by anyone, and are therefore extremely valuable.

Translations

When the Valleydwellers die, they return, or are *translated,* the following day elsewhere on the Riverworld. The grailstone system acts as a ranged e/m converter to create this effect. When the body dies, its *wathan* leaves it and immediately goes to the *wathan* chamber deep within the Dark Tower. Over the next 24 hours the Computer collects the body record of the deceased and processes a new body for it in the resurrection chamber. The body is then converted to

energy and sent to a seemingly random grailstone somewhere in the Valley. The *wathan* immediately leaves the *wathan* chamber and reattaches itself to the resurrectee, bringing the body to life.

The resurrectee will find himself nude and hairless once again, lying near a grailstone. A new grail will be attached to his wrist, and several towels will be nearby. Generally, translations occur during or just before the morning grailstone discharge, but they may take place any time. Observers will see a shimmering in the air near the stone for about five seconds before the body materializes.

GMs should note that translations within the Valley *stop* sometime in 30 A.R. (the *wathans* of the deceased are simply stored in the *wathan* chamber), when Loga murders the Ethicals in the Tower. PC action may delay, accelerate, or prevent this event, in which case the GM should adjust this date accordingly. See Chapter 4 for more on the game effects of translations.

Society

Humans are social animals, and once the shock of the Resurrection subsides the Valleydwellers will coalesce into societies. Given the demographics of the Resurrection (see sidebar, p. 16), many people in a given area will be from the same time and place, and will tend to form societies loosely based on their original ones. However, the more advanced a civilization was on Earth, the more difficult it will be adjusting it to the conditions of the Riverworld.

Societies in a ***GURPS Riverworld*** campaign are created either by the GM or the player characters. GM-created societies are those that the PCs encounter on a River voyage, or those that the players may not wish to have a role in creating.

Clothing and Supplies from the Grails

Clothing

Twenty days after Resurrection Day, the grails began supplying the Valleydwellers with towel-like rectangles of cloth, which could be used to form kilts and other clothing. They are made of a soft, absorbent material that is extremely tough (see *Armor*, p. 50). It usually resists stone and bamboo knives, although metal can cut it. The kilts are sealed with magnetic tabs, and can be adjusted to various sizes. They come in a variety of colors and patterns, and have numbers of possible uses other than clothing.

Although those first 20 days went a long way toward breaking down the nudity taboo among the Riverdwellers, most people now wear the kilts for comfort (especially in the cold mornings after the rain) and decoration.

Firestarters

The first grail discharge on Resurrection Day includes a small tool called a *firestarter* which will ignite cigarettes and other flammables. It is a flat, two-inch-long piece of shiny metal, less than a half-inch wide. When the projection on the end is pushed, a half-inch-long wire emerges, radiating tremendous heat, It will instantly ignite any flammable material it touches. See p. 48 for its use as a weapon.

A firestarter can be used about 2,000 times before its power source is exhausted. On the average, each grail will produce a new firestarter once every six months.

An exhausted firestarter "baked" in a grail at very high temperatures will yield small bits of iron and copper — about a B-B's worth — but PCs should have to experiment to learn this for themselves. And if the firestarter still has power, the heat will cause an explosion; the grail will be undamaged, but melted firestarter fragments may do 1d damage to some unlucky watcher.

Hygiene and Cosmetics

Once daily the grails provide items for hygiene: soap cakes, toothpaste, toilet paper, etc. The Ethicals wish to take the Riverdwellers' minds off the "rat race" of society to allow contemplation and ethical development — but this does not require that they give up the basic comforts of civilization.

Occasionally, the grails also supply small brushes, combs, scissors and so on. These are made of a hard plastic material; they appear metallic, but aren't. Oddly enough, mirrors are *not* supplied; Valleydwellers must improvise their own from mica, obsidian or grails full of water.

The grails of men and women alike will sometimes yield cosmetics, such as lipstick and eye shadow. These are also a valuable source of pigments for artists!

Demographics of the Resurrection

There is a general pattern in the way the Ethicals resurrected humans along the River. The reason for this is unknown, save that it made the massive project easier.

The resurrections run in a rough chronological and national sequence from the River's source to its mouth. This means that primitive humans are mostly found near the headwaters, then ancient civilizations further down-River, etc. The exception is 20th-centurians; these people seem to be scattered more or less evenly along the Valley. The polar regions are inhabited mostly by Arctic and Scandinavian people.

At the time of the original resurrections, the Valley was divided up into (usually) 10-mile areas. Within a typical area, the resurrected people consisted of about 60% of a given nationality and historical period. These people died in the same geographical area (usually a nation) all within 100 years of each other. 30% of the population consists of some other nationality and period, with no apparent connection to the dominant group (for example, an area could be 60% 12th-century Norsemen, and 30% 19th-century Samoans). The remaining 10% are a mixture of people from any time and place; many of them will be 20th-centurians.

These proportions do not hold everywhere along the River. In some areas, the proportion is more like 90% of the dominant group, and 10% of the secondary group, with a few left-overs of all times and places.

As a rule, entirely different groups will be raised on opposite sides of the River; one might have 13th-century Frenchmen and Australian aborigines on one side, and a mixture of 10th-century American Indians on the other bank.

Some areas have even more complex populations. Soul City, a rival of the state of Parolandro, had ¼ 20th-century Harlem blacks, ⅛ 18th-century Dahomeyan blacks, ¼ 14th-century Wahhabi Arabs, ¼ 13th-century Dravidians (black-skinned Caucasians), and ⅛ randomly chosen people!

And in rare cases, a whole area will be populated with randomly chosen people, or with people chosen in some unusual way. For instance, the area that became Virolando was populated almost entirely with children between five and seven years old, on both sides of the River, with just enough adults to take care of them.

Thus, GMs creating a nation have unlimited options in choosing the population. For random tables of population groups, see p. 102.

Every society is defined in terms of the *type of government*, its *Control Rating* and its *tech levels*.

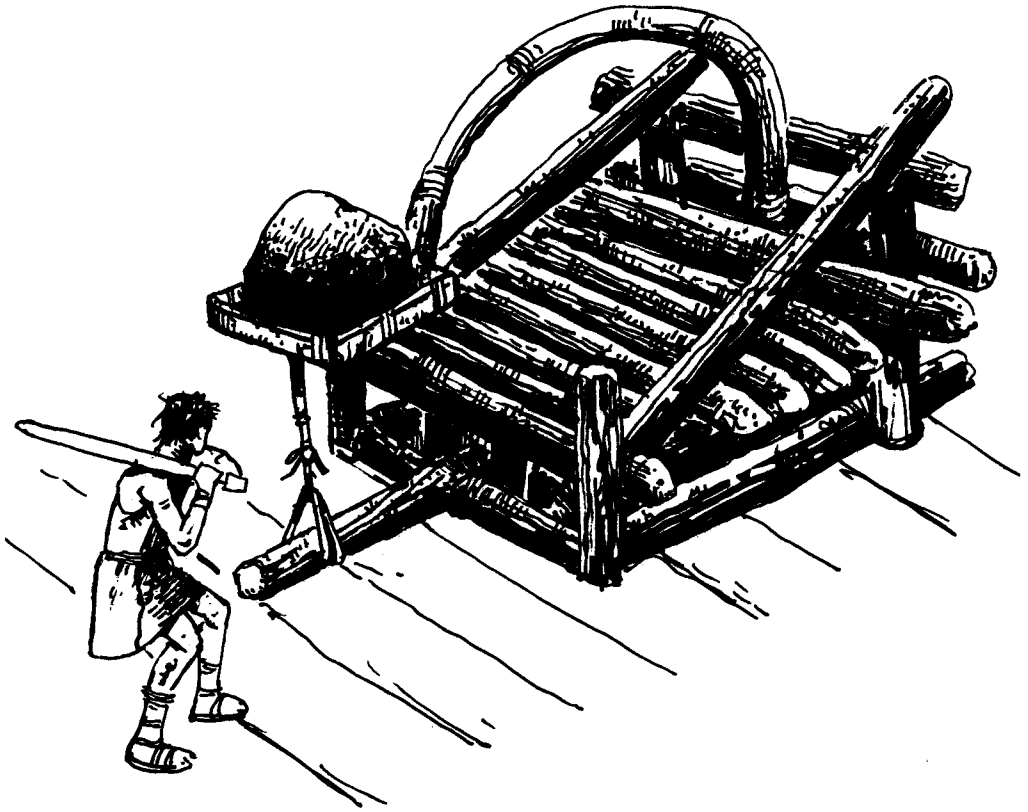
Riverworld Nations

It may seem strange to apply the word "nation" to an area of perhaps 50 square miles, housing only a few thousand people. But, especially in the first years A.R., that is the largest area that could normally remain under one "government." There were several reasons for this. The most important were the low technology (which limited communications) and the diverse nature of the populace. If the language changes when you travel five miles in either direction, it's hard to set up an empire.

And, because the River is so wide (and usually the people on opposite banks are from different cultures), most nations take up only one side of the River. Islands may have little nations of their own, but only if they have their own grailstones — and then they are likely to be taken over by the first powerful Riverbank nation to appear nearby.

Nations on the Riverworld usually exist for three purposes: protection, power and technology. A common enemy is always a good motive to build a society. People threatened by others (perhaps a powerful military leader on the opposite Riverbank, perhaps a well-armed riverboat on its way up-River) find safety in numbers and can defend themselves better when organized. Societies built for protection tend to be militaristic, with the citizens stratified into ranks, led by a great military leader of Earth. Once the threat is met and dealt with, the nation may break up unless a further unifying force is discovered or created.

Protection is often the excuse given by leaders — often famous people on Earth, but sometimes talented nonentities — who just want to hold power. Such people may invent a threat, or they may just convince their fellow Riverdwellers that "it's time to get organized." In the end, rivalries among such petty leaders can create the threats that were imaginary to begin with, creating war.



Nations also exist to develop technology. With the wide variety of skills available among the Valleydwellers, and the limited resources, well-organized societies are a necessity to increase the level of available technology. Major projects, like building a riverboat or an airship, require nothing less than a major nation of thousands of people.

Areas where metal is discovered are fostering grounds for large nations for two reasons. Once metal-using technology is created, it becomes sought after by competing nations. This in turn accelerates tech development by creating a demand for better weapons, which become valuable prizes, *ad infinitum.*

Types of Government

Riverworld societies have a great historical tradition of governments from which to choose. In the beginning, monarchies and dictatorships will usually hold sway. Generally, governments can be defined by determining who makes the decisions and how much input the citizens have in those decisions.

True democracy ("rule by the people") means that *all* the citizens vote on *all* the decisions faced by the society, with the majority vote winning. This sort of democracy has rarely existed on Earth, and it is doubtful that it will on the Riverworld (although the players should be encouraged to try it). More common (and easier to manage) is the *representative democracy,* or republic, where the citizens elect representatives to a decision-making body. The American republic is based on the notion that a congress of representatives make the laws, while an elected administration makes the policies. Other variations of democracy include extended clans and multi-party politburos.

Once power becomes vested away from the citizens and into the hands of an elite group, varying forms of totalitarianism emerge. This can be economic totalitarianism (power vested in the rich), dictatorship (power vested in a single, charismatic leader), militarism (power vested in those with weapons), monarchy (power vested in those with birthright), and dozens of other forms and combinations.

Many of the small nations on the Riverworld are theocracies — that is, governments controlled by the religious leaders. A theocracy is not necessarily a dictatorship; it may be very enlightened. Virolando (sidebar, p. 23) is a theocracy.

GMs may wish to consult Chapter 11 of ***GURPS Space*** for a more detailed treatment of various types of governments.

Control Rating

The Control Rating of a society reflects the level of control a government exercises. The lower the CR, the more personal freedom exists and is recognized. The GM should assign a CR to a society based on its population, type of government, and available resources.

If for any reason the PCs need to determine the legality of an action within a society, the GM can roll one die against the society's CR. If the result is lower than the CR, the act is illegal or the PCs are harassed, delayed, or perhaps imprisoned. If it is higher, they escape trouble. If the CR is rolled exactly, the situation could go either way; play out an encounter and make reaction rolls.

The Control Ratings are as follows:

0. Anarchy. There are no laws or taxes.

1. Very free. Nothing is illegal except the use of force against other citizens. Personal liberties of life, expression, and property are held in the highest esteem. There are no taxes.

2. Free. Some laws exist, primarily to benefit the individual and not the state. There may be some nominal taxes.

PC-Created Nations

Player characters wishing to establish nations have a daunting task ahead of them. Organizing a large group of people into a society requires skill and patience, plus a reason that the PCs should be in charge.

Three skills are needed to start and run a nation: Leadership, Diplomacy and Administration. Leadership rolls are required to assemble a group of people into a cohesive whole. Initially, rolls against Performance and Bard skills may be required to get people's attention. Once a group is assembled, Diplomacy is needed to iron out differences between factions. Failed Diplomacy rolls may mean anything from citizens deserting to outright civil war. As the nation establishes itself, Administration skill is necessary to operate it — that is, divide up resources, assign duties, etc.

The actual techniques of governing the nation are left up to the would-be governors. They may wish to recruit specific NPCs with special skills into their ranks. They may establish representative councils, or take a dictatorial approach. The GM should assign a Control Rating to the PCs' nation, depending on how they govern it.

If the PCs create and govern a nation, they won't be able to travel along the River looking for adventure . . . so adventure will have to come to them. The attitudes of travelers and neighboring nations will depend on the Control Rating, and the general policies, of the PCs' nation.

The Riverworld: Planetary Data

The exact location of the Riverworld is a well-kept secret, but it is safe to assume that it is somewhere near the galactic core. The planet's night sky is illuminated by interstellar gas clouds and thousands of large, brilliant stars; the light level is equivalent to a full moon. Some of the stars are so large and bright that they show a visible disk and can be seen by day! The dense clusters of young stars near the galactic core would provide this kind of sky, but it is also possible that the planet is located near a large nebula.

The world was nearly identical to Earth, although lifeless, before the Ethicals terraformed it. It has a slightly larger nickel-iron core, but exactly the same gravity. Its orbit was changed to give it an Earthlike day and year. Its atmosphere is now almost identical to Earth's.

Here is a description of the Riverworld according to the ***GURPS Space*** format.

Planet type: Earthlike
Diameter: 7,900.57 mi.
Gravity: 1.0 G
Density: 5.53
Composition: Medium-Iron
Axial Tilt: 0°
Seasonal Variation: None
Length of Day: 24 hrs.
Length of Year: 365 days/1 Earth year
Atmospheric Pressure: 1.0 (Standard)
Atmosphere Type and Composition: 77% Nitrogen, 21% Oxygen, 1% Argon
Climate: Earth-normal
Temperatures at 30° latitude: Low 65°, Average 80°, High 90°
Surface Water: 15%
Humidity: 80%
Primary Terrain: Artificially shaped; one long winding rivervalley, hemmed in by mountains.
Mineral Resources: Gems/Crystals: Absent. *Rare Minerals:* Absent. *Radioactives:* Absent. *Heavy Metals:* Scarce. *Industrial Metals:* Scarce. *Light Metals:* Scarce. *Organics:* Absent.
Moons: None

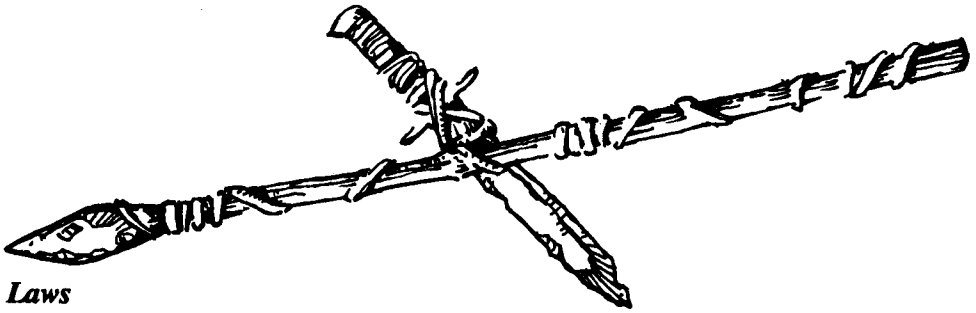
No map is provided of the Riverworld surface, because at any reasonable scale there is no surface detail. Even the Polar Sea, the biggest feature on the planet, is only 60 miles across. At the standard scale, one hex on the planetary record map equals 553 miles, which means that the Rivervalley traverses each hex about 50 times!

3. Moderate. There are many laws to benefit the individual and to protect the rights of organizations. Taxes are noticeable.

4. Controlled. Many laws exist; most are for the convenience of the state. Weapons are generally licensed, most forms of expression are regulated. There are significant taxes.

5. Repressive. There are many laws, strictly enforced. Weapons, property ownership, and information distribution are severely regulated. Either taxes are confiscatory, or the state regulates what the citizen can spend his money on, or the state employs all citizens.

6. Total Control. Laws are numerous, complex, and at the expense of individual liberty. Censorship, death penalties, and slavery are common. Private ownership is illegal. Taxes are irrelevant, because everyone is essentially the property of the government already.



Laws

The laws of a nation will be designed to carry out the ideals of the founders of that nation. Often, this mainly means "keep the founders in power." But a democratic nation which was founded to protect against a menace may have a high Control Rating, in self-protection.

Often, there will be laws requiring citizens to labor at state projects. This is really a form of taxation — see below.

Since raw materials and technology are so important, many states will rigidly control their export. No military-oriented state will permit the export of metal unless it is traded for something even more valuable. In areas where flint is rare, it may even be illegal to take a flint weapon away.

There will usually be laws against assault, theft, destruction of others' goods, and so on. Trials may be highly formal or wholly informal.

Laws are often based on religion, especially (but not necessarily) when the government is a theocracy. See p. 21.

Taxes

There is no money on the Riverworld; everything proceeds by barter, including taxes. Most nations will take a portion of the luxury goods from every grail discharge. Fishermen, woodcutters, miners and so on may also be taxed a portion of their production. All this material goes into the state treasury, to be used to barter for goods and services that the state needs.

Some states will tax visitors; others will not. Travelers entering strange territory should be cautious; in some places, the "tax" on visitors may be their boat and everything they own.

The other commodity which every Riverdweller has is, of course, time. Thus, many states will require all their citizens to put in a certain amount of time each week on necessary labor. Depending on the nation, and the talents of the individual, that may mean privy-cleaning, spear-carrying in the militia, or complex scientific and engineering work.

On the other hand, some states will not exact a "time tax." They will simply hire the work they need, paying for it with the proceeds of the "grail tax." And in some places, citizens may have a choice of contributing time or paying with goods.

Grail Slavery

A common phenomenon on the Riverworld is *grail slavery.* Since nearly all sustenance in the Valley comes from the grails, a person without a grail might almost as well be dead. Therefore, if you control someone's grail, you control that person — unless he is willing to escape by the Suicide Express!

There are various types of grail slavery. In the most benign type, the "slave" is allowed to keep everything in his grail, and may even be given extra luxuries, but the state keeps his grail as a hostage. This is the type of "slavery" that would be used to keep a scientist or engineer at work.

In some nations, second-class citizens (for instance, those who will not join the militia) must give up their grails while they stay in the nation. If they leave, they can have their grail back, but in the meantime, they must give up some of their luxury items.

In the most common sort of slavery, the slaveholding nation captures other Valleydwellers and uses them as laborers. After each discharge, the slaves are forced to open their grails; the slaveholders take all the luxury goods. The slavers thus can stockpile and trade massive amounts of liquor, tobacco, and drugs at the expense of the slaves, while getting the benefit of the slaves' labor.

In the worst sort of grail slavery, the slaves are simply blinded (or crippled, or both) and imprisoned in an out-of-the-way place. They are given only enough food for minimum sustenance, so the slavers can have even more food and luxuries for themselves. The most brutal thing about this sort of slavery is that no injury is permanent on the Riverworld . . . so as the slaves heal, they must be maimed over and over again.

Valleydweller Technology

The Valleydwellers originate from a wide variety of tech level backgrounds, from TL0 all the way up to TL7. When they are resurrected, they will find themselves in a TL0 world — wood and stone will be the only "technology" immediately available. Those from primitive societies will be at an advantage at first, but it will not take long for people from advanced civilizations to apply

Mineral Wealth

For those attempting to build a society or technology on the Riverworld, the limiting factor is not knowledge. *Somebody* on the planet knows how to do whatever you want, and if you wait long enough, he'll come along. The problem is the great shortage of raw materials. The Ethicals did not want resurrected humanity to build a technological society. Man, being ingenious, did so anyway.

There are four major sources of raw materials on the Riverworld: animal, vegetable, mineral and grail. Of the four, only mineral wealth is significantly different from one area to the next. When the GM creates a nation, he should determine the mineral wealth present there — and what is possessed by its near neighbors, as well. Most wars on the Riverworld are fought over mineral wealth. (Other raw materials are discussed on pp. 42-44.)

In most areas of the Riverworld, there are no usable minerals at all, except for small nodules of chert and flint at the base of the mountains. When these are gone, there are no more until someone can trade for them. Therefore, *any* mineral deposit makes an area rich and desirable.

Stone

This can be used, by primitives or those who learn from primitives (Armourer skill at TL 0-1) to make tools and weapons. There is about a 20% chance that any given 50-mile area will have significant deposits of chert and flint in workable veins at the base of the mountains.

Soft Metals and Minerals

There is only a 1% chance that there will be a usable deposit of a soft metal like copper. There is a 1% chance of a valuable material like obsidian (for weapons, mirrors, etc.), mica (mirrors, electrical operations), pigments, and so on. If any such material is present, the GM may determine its type randomly.

Industrial Metals

There is even less chance that there will be a harder metal, such as iron, nickel or platinum. Iron is almost unknown and incredibly valuable. Even a rumor of iron will bring traders and explorers from thousands of miles away. A peaceful nation which discovers iron would be best advised to hide it!

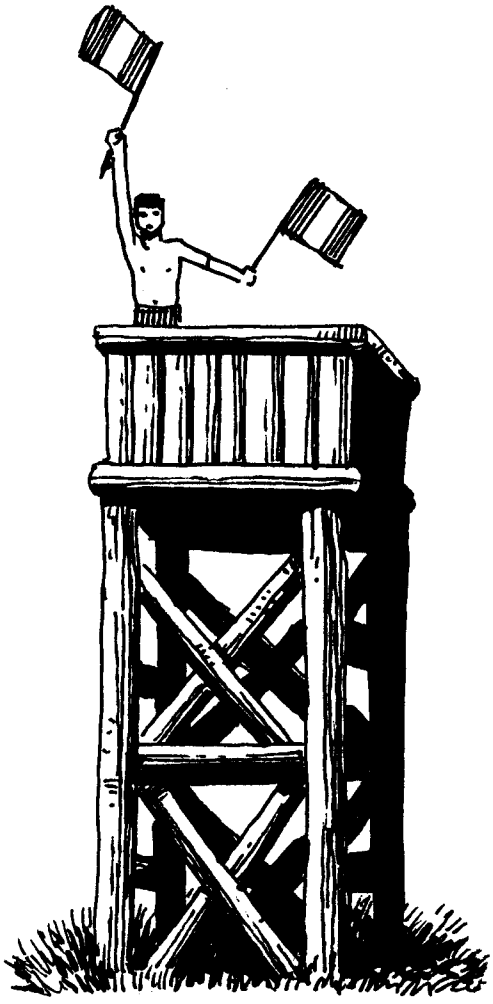
Larger deposits of all sorts of metals are available deep underground (see p. 13), but finding these requires luck, high technology, or inside information.

Communications TLs

Use these tech levels when dealing with the improvement of communications on the Riverworld. Note that a quick advance to TL3 is fairly easy (requiring mostly good organization), but TL4 requires hard work, and TL5 is impossible without metal.

0. Spoken languages
1. Written messages, drums
2. Messenger services, Morse code with drums
3. Heliographs, flag signals
4. Printing, semaphore
5. Telegraph, telephone
6. Radio, air mail
7. Computers, television

TL7 is not impossible for Riverworlders; Parolando had both computers and TV.



In many areas, improving technology is a prime concern. The grails supply physical needs, and the environment is comfortable . . . but many people are not content to relax and vegetate. They want to *do something!* Needless to say, this type of character is the most interesting to play.

Technology may be a means to an end: the desire to build a boat or an airship in order to travel, or to build weapons in order to conquer the neighboring states. But it may also be seen as an end in itself, either for the satisfaction of developing it, or the pride of possessing it.

When the PCs encounter a state that has developed, or is developing, high technology, "Why are they doing it?" is just as important a question as "What can they do?"

Building Up Technology

The rules on p. B186 provide a basic overview of how to build up local technology. These rules are expanded here.

There are four "sciences" that can be improved upon in ***GURPS Riverworld:*** transportation, weapons and armor, power, and communications (medicine is excluded because the Ethicals take care of that). The tech levels for transportation, weapons and armor, and power are as per p. B183, except that the "batacitor" (p. 63) replaces nuclear power at TL7. Tech levels for Riverworld communications are in the sidebar.

Each science has a set of prerequisite skills associated with it. These skills must be known at level 12 or better *at the current tech level and the tech level desired.* Use the tech level modifiers on p. B185 to determine the *effective* skill at higher or lower TLs. For example, a character wishes to raise the Power TL of an area from 1 to 2, and has an Engineer skill level of 14 at TL4. This means his effective skill level at TL3 is 13, and at TL2 it is 11, which is not enough to raise the local TL.

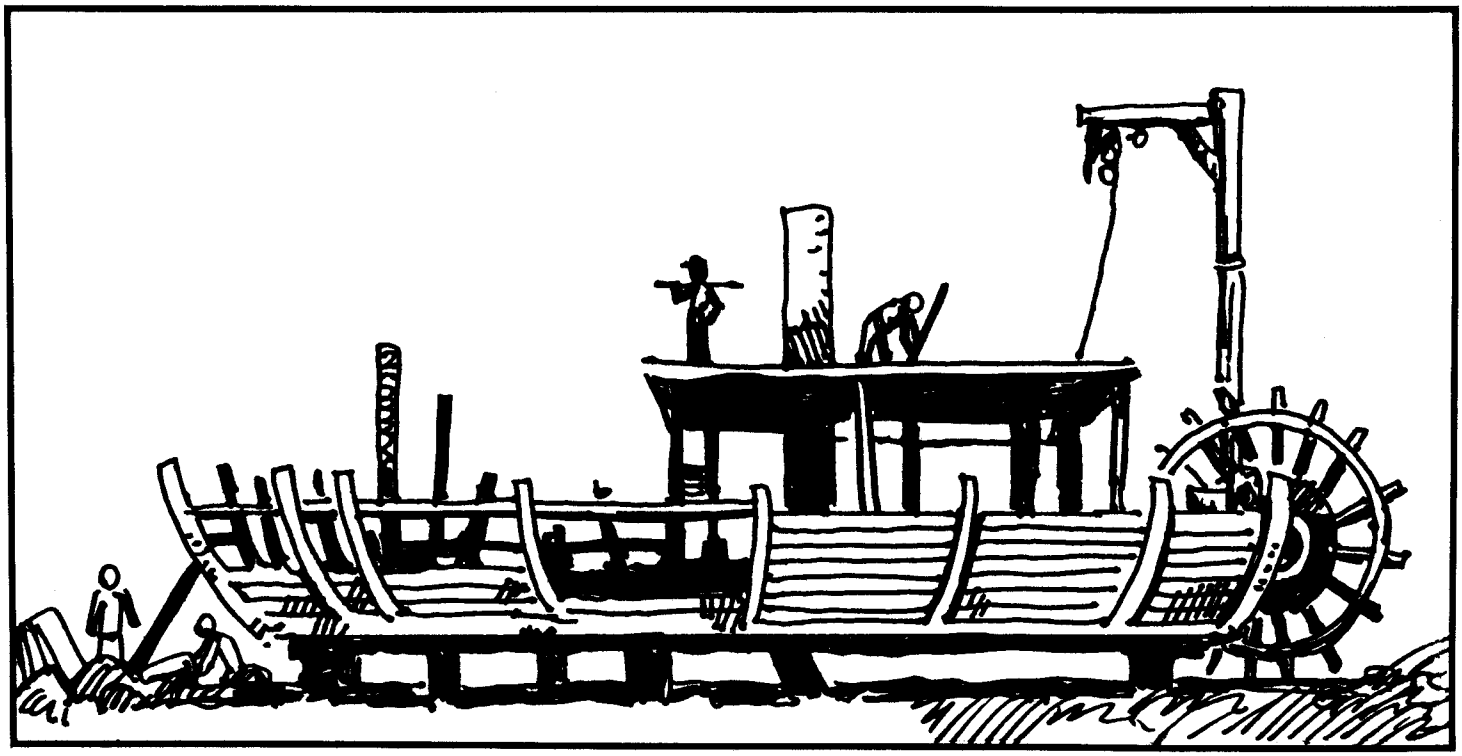
Science	*Prerequisite(s)*
Transportation	Engineer, Mechanic
Weapons and Armor	Armoury
Power	Engineer
Communications	Linguistics (pre-TL5), Telegraphy (TL5+), Electronics (TL6+)

It is unusual for one person to possess all the prerequisites required to raise a TL. Therefore, it is usually done by groups who together possess the required effective skill levels.

Once the required skills are available, labor and raw materials are needed to build and develop the technology. Use the guidelines for constructing equipment on pp. 45-46 to determine the amount of materials and time required. The TL of equipment is determined by the GM according to the TL guidelines on p. B185-186 and the sidebar on this page. Note that it is possible to *skip* tech levels, if the skills and resources are available.

The TL of a given science is considered to have been raised once the construction of the technology is completed, and it proves to have worked. Once a TL has been changed, the rules governing tech levels (skill modifications, inventions, improving skills, and, of course, further tech development) come into effect at the new TL. Note that it is quite possible for an area to have different tech levels in different sciences.

Each area may be given a general TL rating, but if it becomes important, TL can and should be rated separately in each of the four sciences.



Dropping Tech Levels

It is possible that a TL will drop when resources become scarce or technology is lost or not maintained. The GM may decide that a TL of a science has dropped if one of these situations occurs. Of course, TLs in other sciences may remain the same or even improve.

Rebuilding the TL to its original level may be a simple matter of recovering lost technology or resources (a good adventure possibility), or it may require constructing the technology over again. In either case, precious time may be lost in attaining the technology needed to move the PCs up-River.

These rules on TL gain and loss are intended to provide a formal system for the GM. Situations will vary widely from campaign to campaign, and the GM will have to adjust these rules as he sees fit. Other "sciences" may be developed (along with appropriate prerequisites), and inventions by creative PCs may put a TL "off the scale." In the end, the GM should encourage the imaginative use of local resources, and reward clever developments with character points.

Religion

Religion plays a role in any society, and an especially interesting one in Riverworld societies. The Resurrection appeared to disprove all terrestrial religious concepts of an afterlife. Many terrestrial religions have "adapted" to the Riverworld (usually by viewing it as a purgatory) and can be found in their institutional forms as part of Riverworld nations. Other religions have sprung up since the resurrection, centering on concepts of deities at the north pole.

The Church of the Second Chance

The Church of the Second Chance (CSC) is the major religion native to the Riverworld. It is practiced throughout the Valley by people of all nationalities and historical origins.

Beliefs

The Church of the Second Chance teaches that a race of Ancients has monitored humanity since its birth and has recorded each individual's *ka* (soul) for preservation. These Ancients were not angels, but they were carrying out God's

How Long is the River?

The true length of the River is never stated, although it is a constant subject of speculation by the Valleydwellers. It is generally accepted that it is between 10 and 20 million miles long, but there is no agreement on where it falls in that range.

It is known that the Valley is very close to 10 miles in most places. Allowing a bit of extra for the mountain ranges, and a bit more for the fact that the Valley is wider in the extreme polar regions, an average width of 11 miles is close enough. Thus, every 11 square miles of planetary surface corresponds to one mile of River.

With a planetary diameter of 7,900 miles, the Riverworld has a surface area of 195,967,400 square miles. Dividing this by 11 yields 17,815,218. So the Rivervalley is not quite 18 million miles long.

Total Population

The population of the Rivervalley is known exactly (by the Ethicals, that is — the Valleydwellers guess, but don't know). On Resurrection Day, 36,600,900,637 people were raised.

Since they are spread, more or less evenly, along both banks of the River, the average population must be about 1,000 per mile of riverbank. This is more than the river grailstones, with 700 holes each, can feed. Therefore, about a third of the population must stay around the highlands grailstones. And there must be at least one highlands stone, on the average, for every two miles of Riverbank.

plan through technological means. And, although they *preserved* mankind for its second chance, the *salvation* of each person is up to that person alone.

After death, the Second Chancers teach, humans are resurrected indefinitely until they attain personal salvation, which they call "union with the Godhead." This is called "Going On," and is the desired end of every Second Chancer. When someone "Goes On," his cycle of resurrections stops; his body reappears one last time, but it is dead. The Second Chancers can cite several "documented" examples of saintly persons being "revived dead" in this way.

This salvation, according to their teachings, is achieved only through total love of all men and complete non-violence. Thus, the Second Chancers teach Esperanto in order that men may better understand each other.

The Second Chancers also preach pacifism. However, many of them are aggressive in their pacifism! A Second Chancer might risk his life to destroy a warship, for instance, but he would do so only if there was no chance that his actions would harm anyone.

Many members of the Church have a strong anti-technology attitude. They feel that Man was placed on the Riverworld, with its pleasant weather and all-providing grails, to give him time to learn. They feel that technology is a tool of self-aggrandizement at best, and war at worst. They will non-violently, but very persistently, oppose anyone who attempts to industrialize, or to invent anything complex.

The Church of the Second Chance is monotheistic; there is only one God, and the Ancients, or Ethicals, are his agents. They disapprove of any sort of idol worship. They do not believe in any sort of "retreat" or monasticism; the place of any Second Chancer is working among the people.

The mission of the church is to spread its doctrine, teach non-violence, and increase the use of Esperanto as a universal language. Recruiting converts is not of primary importance — the church feels that non-members can still benefit from its teachings. There is no ritual, save a blessing consisting of a circular hand motion (the circle representing the cycle of resurrections) with three fingers upraised.

Origins

The religion was founded by a man called Jacques Gillot, of French-Canadian background. On Earth, he had been a deeply religious man. When he awoke on the Riverworld, he was chagrined and humbled to find that Whoever

Weather and Climate

The Riverworld's climate is temperate, even at the equator, where the temperatures rarely climb above 100° Fahrenheit. At the higher latitudes, temperatures hover around 50° during the day, dropping below freezing at night. The Valley in these areas is considerably wider, and the mountains lower, to allow more sunlight to reach the ground. The Riverworld's axis is exactly vertical with respect to the plane of the ecliptic; thus, there are no seasons.

Humidity on the Riverworld is above average, and it rains daily. In the tropical parts of the planet, these rains start about 3 in the morning; in temperate zones, they start in the early evening. These rains are usually showers lasting a half-hour or so, but they are often accompanied by lightning and thunder. In areas where the rain comes in the morning, the temperature remains chilly until the sun is well over the mountains; "morning clothes" cover the whole body warmly. Snow reaches the higher elevations at 10° latitude or lower.

The prevailing winds on the planet are similiar to those of Earth. Warm, equatorial jet streams move from west to east, and the warm air is carried toward the north and south poles by northeasterly or southeasterly winds respectively. The prevailing winds are found at about ten miles above River level, and their speed is around 20 mph. Below this altitude, wind speeds and directions generally depend on pressure and temperature differences between air masses.

However, the winds are usually fairly predictable in any one place. Because of the structure of the Valley, they will always blow either up-River or down-River; they can't very well blow crossways in a 10-mile-wide valley. Speed may vary from 5 to 20 mph, depending on the locale. If the wind in a given place is blowing up-River at 15 mph, it will probably always blow that way.

was running things had considered him no better than anybody else. Bewildered, Gillot continued to pray for enlightenment.

Exactly one year after Resurrection Day, he was visited by a shadowy figure who said was a representative of "the Ancients," and that he had been "sent to deliver the Truth." Dressed in shining silver clothes, the visitor was clearly something very unusual, and his message of nonviolence and redemption convinced Gillot totally. He explained that the planet had been created to give a "second chance" to those who were willing to take advantage of it.

This visitor was in fact Loga. In defiance of the Council's rule against non-intervention, he wanted to spread some half-truths about The Project among the Valleydwellers, hoping that the strength of the religious impulse would help them become more "ethical." Loga gave La Viro a golden helix as "proof" of his authenticity. This helix is represented by the hornfish-vertebra emblem now used by the Church.

Now calling himself only La Viro (Esperanto for "the man,") Gillot began spreading this new gospel. Between his natural gift of persuasion, and the physical evidence of the miraculous golden helix, he made many converts, who in turn went out and recruited others to spread the word. The homeland of La Viro (who is also called La Fondinto, "the founder,") became the nation of Virolando (see sidebar.)

Joining the Church

Player characters converting to the Church of the Second Chance must become Totally Non-Violent; this is an acquired disadvantage and is worth no character points (a PC who *starts* as a member can get points for the disadvantage). The PC must practice the teachings of the church, and should spend much of his adventuring time spreading its message to others (including fellow PCs).

Those who wish to join the church undergo a ritual baptism, a submersion in the River. After this, the new *frato* (Esperanto for "brother") is draped in a robe and presented with a necklace — a cord from which is suspended a single spiral vertebra from a hornfish. All Second Chancers (as the church members are often called) can be identified by this necklace.

A member who wishes to devote himself fully to the church may receive advanced instruction, at Virolando or elsewhere, and become an initiate, or *teacher* (Esperanto: *instruisto*). Full "bishops" (Esperanto: *eskopiso*) wear three spirals.

An *initiate* of the Church has the advantage of Clerical Investment, gaining a -4 to +4 reaction, depending on the encounter. Initiates must know Esperanto with a skill of 10+ (see sidebar, p. 38) and have a Theology (Second Chance) skill of 12+.

While there are exceptions to every rule, most people who accept the teachings of the Church become (or already were) genuinely more loving and civilized. All true Church members react at a +2 to others, and a +4 to other Church members, in almost all circumstances. Church members get a -2 to +2 reaction from others, depending on the circumstance. They are greatly disliked in militaristic states; not only do they refuse to serve, but they encourage others to quit the army! Often this leads to the martyrdom of the Second Chancers, but (at least while the resurrections continued) this does not deter them. As Frato Hermann Göring said, "Murder has spread our faith up and down The River far faster than any conventional means of travel."

The Nichirenites

This Buddhist sect is the chief "rival" of the Church of the Second Chance, in terms of strength among the Riverdwellers. However, its followers are very

Virolando

When La Viro met the Visitor, he was living in a wide lake area of the River, very near the headwaters. The hourglass-shaped lake was dotted with exactly 100 tall rock spires. Its populace was made up mostly of *rivertads*, humans who died between the ages of five and seven. This area became Virolando, a peaceful "headquarters" for the church.

La Viro erected a temple here, and began dispatching missionaries throughout the Valley to spread the teachings of the church. Virolando has taken on a mythical quality to the Valleydwellers, many of whom doubt the place actually exists. However, many converts to the church seek it out as Moslems do Mecca.

The people of Virolando use hang-gliders and balloons — not for war or for any "practical" purpose, but for recreation. Since Virolando is one of the rare places where pigment-bearing ores can be found, the gliders and balloons are multi-colored and beautiful.

The showpiece of Virolando is the huge red-and-black stone temple. The gold helix given to La Viro by the Ancient is still on display there.

Downriver from Virolando, to the east, are a number of peaceful nations. Upriver is a lake, and then an area of rapids so fast-moving that only a motorized craft can pass it in either direction. Past this natural barrier lies the land of the titanthrops.

La Viro (Jacques Gillot)

La Viro, formerly known as Jacques Gillot, is the leader of the Church of the Second Chance. Anyone having any business in Virolando will probably meet him, and many come there just to learn from him.

Appearance: Physically imposing: 6'6", very dark-skinned, with piercing eyes and an eagle nose. Like all Valleydwellers, he seems to be 25 years old.

ST 12, DX 10, IQ 14, HT 13.

Advantages: Charisma +3, Clerical Investment, Reputation (variable but usually strongly positive) as founder of the Church, Strong Will +4, Voice.

Disadvantages: Fanatic (for his Church), Pacifism (total non-violence), Sense of Duty to church.

Quirks: Loves debate; Respects education; A natural schemer, though honest and nonviolent.

Skills: Bard-17, Cooking-12, Esperanto-14, French-14, Leadership-16, Theology (Catholic)-15, Theology (Second Chance)-16.

River Maps

On the next three pages are maps of typical areas of the River. The GM can use these as they are, and draw as many others as may be needed to the same general plan.

Buildings are not shown; the GM may add these as necessary for the specific campaign. Almost every grailstone will have huts around it. Many are protected by walls, stockades or actual forts.

Page 25: The upper section is a *very* typical stretch of Rivervalley, with a mile-wide River and mile-wide plains areas.

The lower section is also fairly typical, except that the river is wider here. Rarely does the river exceed 1½ miles wide.

Page 26: The upper section shows an area that is unusual in two ways. Toward the east, this part of the Valley is rather narrow, with no highlands between the plains and mountains on the north side. As it flows to the west, the River widens and forms a small bay. This area is not stagnant; it will be kept in a constant, gentle clockwise flow by the passing River. This lake will be a very good place to fish; that, and the large number of grailstones concentrated in a small land area, guarantee a high population density here.

The center section is a typical "narrow lake" area, with large islands complete with grailstones. Such an area might be encountered every few hundred miles.

The lower section is a spot where the River enters a narrow stretch and forms rapids. There are no plains here; the valley may constrict further and flow between nearly sheer cliffs. There would still be grailstones along the narrow, rocky bank, but there will be no one there to use them.

Page 27: A large lake, with a very wide section of valley around it. Such an area might be found only once in every thousand miles.

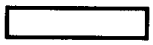
Map Key

Scale: 1 hex = 1/3 mile

Direction of River flow 

Grailstone ●

Irontree (only shown when near River; there are many in the highlands and mountains, especially near the base of the cliffs.) 

River 

River rapids 

Plains 

Hills 

Highlands 

Sheer cliffs 

much like Second Chancers in that they are pacifist and believe in resurrection by the Ethicals as agents of a higher power. Members of the two religions get along very well.

The Dowists

This sect was founded by Lorenzo Dow. Unlike the Second Chancers, he did not believe that in "ultimate absorption in the Godhead" in any form. Rather, he taught that the Riverworld was a sort of purgatory, in which everyone had been given another chance. Those who attained the appropriate change of spirit here would be physically reborn a third time, into eternal life. Those who failed would die forever. (Interestingly, at least as far as the Ethicals' original plans were concerned, Dow was absolutely right . . .)

Dowists tend toward a preachy attitude, and are very interested in gaining new converts. They mask some of their beliefs in confusing cant. For instance, they refer to their critics as "A, double-L, part people." They intend this as a rebuke, but since they refuse to explain what it means, nobody is especially abashed by the description.

Nevertheless, the Dowists share the pacifist beliefs of the Second Chancers and Nichirenites, and are a force for peace along the Rivervalley.

New Christians

This is a general term for a number of pacifist, tolerant sects which have applied the teachings of Christianity to the new environment of the Riverworld. Like Dowism and the Church of the Second Chance, most New Christians abhor excessive use of alcohol, and any use of other drugs. There are many "New Christian" sects on the Riverworld, with names such as the "Revised Free Will Baptists."

"Old" Christians and Moslems

Especially in the first years after the Resurrection, many areas were dominated by the prosletyzing, intolerant medieval versions of Christianity and Islam. These religions were marked by a "convert or die" attitude, a willingness to fight for every little detail of their own beliefs, and a profound hatred for those of different creeds — especially Jews. One such area is described at 1/126. Note that the term "medieval" indicates an attitude more than a time period; the people and leaders of such areas might not be from the Dark Ages at all!

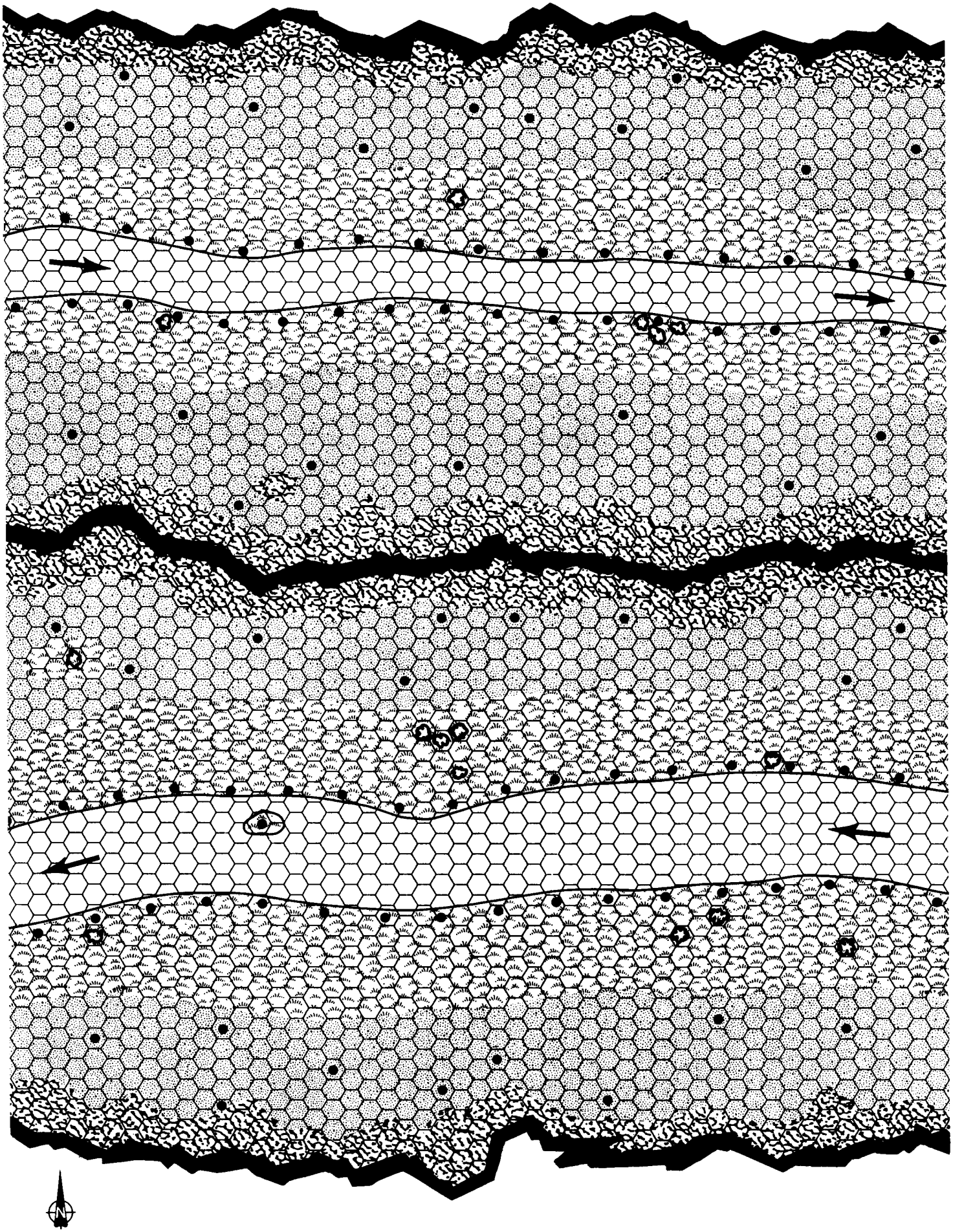
Totemists

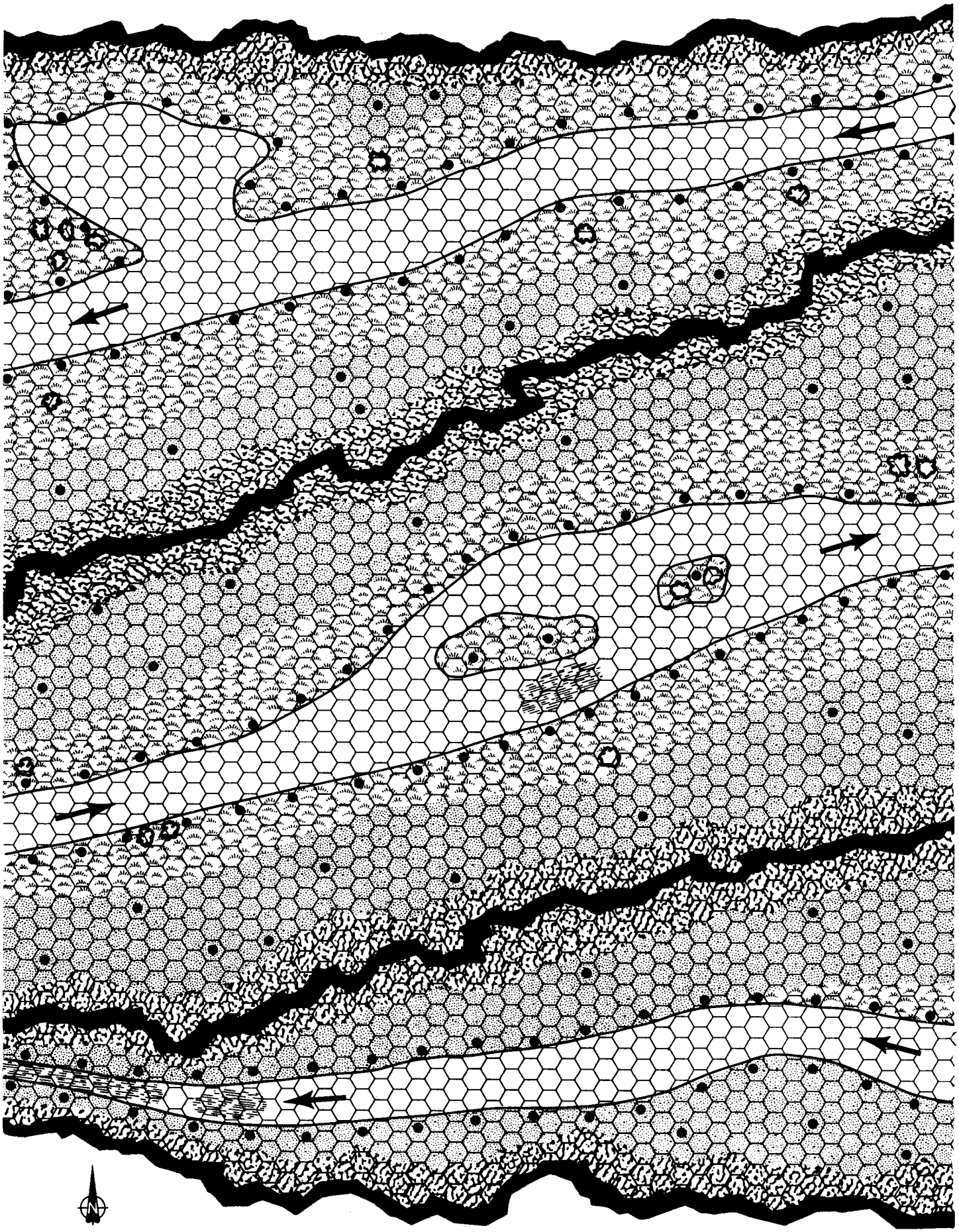
Those religions which believed in totem spirits are inconvenienced by the lack of animal life on the Riverworld. Some adopt the more important Riverfish as totems. Others, often with the help of drugs, are "visited" regularly by their totems.

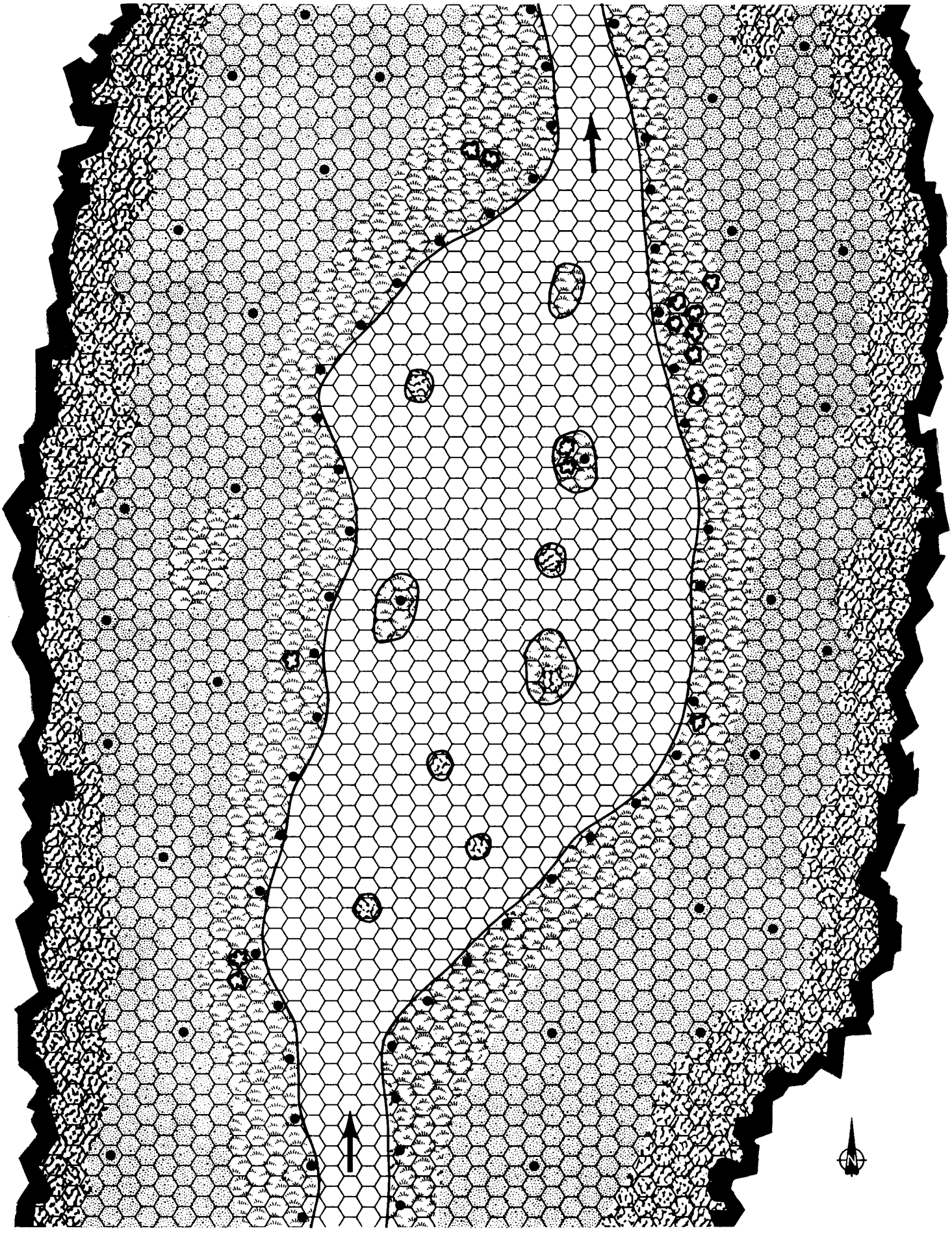
Other Religions

Every religion ever known on Earth is, of course, present on the Riverworld . . . in its pure version as taught by True Believers, and in various sects by those who have attempted to revise it to fit present circumstances. And in many nations, the religious authorities will be the true decision makers.

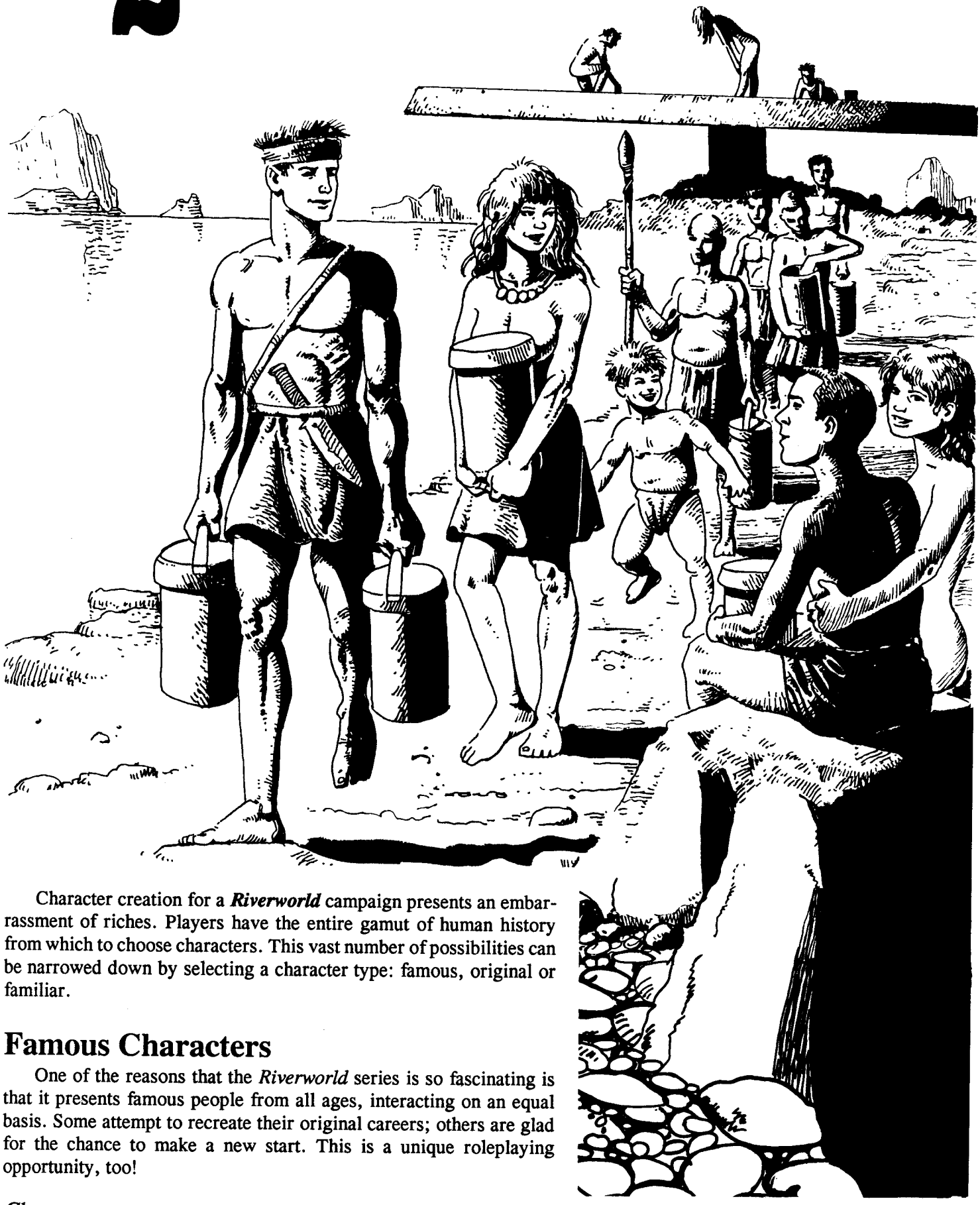
Some of these religions will be peaceful and orderly. Others will seem quite senseless to the traveler from another time and place. Others will seem harmless, until a visitor unknowingly breaks some taboo — at which point an expensive penance (or a bloody one) may be demanded. And some will call for the immediate sacrifice of any stranger who appears, whether by Rivercraft or resurrection. Every stop along the River is an adventure . . .and every stop is a risk.







2 CHARACTERS



Character creation for a ***Riverworld*** campaign presents an embarrassment of riches. Players have the entire gamut of human history from which to choose characters. This vast number of possibilities can be narrowed down by selecting a character type: famous, original or familiar.

Famous Characters

One of the reasons that the *Riverworld* series is so fascinating is that it presents famous people from all ages, interacting on an equal basis. Some attempt to recreate their original careers; others are glad for the chance to make a new start. This is a unique roleplaying opportunity, too!

Therefore, many players will want to play famous historical personages. This type of character should be carefully chosen. They should be noteworthy enough to have "stood out" in the time period in which they lived, but not so earthshaking as to unbalance the campaign. Avoid the likes of Alexander and Einstein; few people are up to the challenge of playing such a superhuman. Consider the type of characters Farmer chose for his novels; Hermann Göring was prominent, but not Hitler.

Players should choose individuals in which they have a genuine interest. This also goes for the time period the character is from, since it will be important to know something of the historical background that shaped the person. It is the player's job to research and understand the person well enough to create a ***GURPS*** character based on his knowledge. The more thorough the work, the richer the character (and the campaign) will be because of it.

The following steps should be followed to create a roleplaying character from a famous individual:

Research

The best place to start research is a biographical encyclopedia. This reference work lists famous historical people in alphabetical order, giving a short, general biography of each. Reading the entry for a possible subject gives a good feel for the high points of his life, and most biographical encyclopedias will contain references to additional sources; these should be followed up. The player does not need to read an entire biography; skimming the table of contents and reading about key events in his life is enough for a start. (Obviously, the more detailed the research becomes, the more detailed the roleplaying can be.)

The next step is to learn a little about the subject's world. Start with the brief history descriptions given above and work from there. Some good encyclopedia research is all that's really needed, although it may be necessary to go to more specific historical sources, especially those that focus on the person and his role in history. It is also important to develop his "world view" at this time; see *Character Stories* in the sidebar on p. 32.

Determine Attributes

Using the knowledge gained from research, starting scores for the character's ST, DX, IQ and HT can be determined. The chart on page B13 can be used as a guideline. High scores will cost points, so the original estimates may need to be adjusted later. Remember that HT *must* be at least 12, and chances are that noteworthy individuals will have at least one other attribute at 12 or more. For a warrior, athlete or other kind of physical performer, it will be DX and/or ST. Writers, artists, scientists and the like will have a high IQ. A subject's longevity can be a clue to setting HT higher than 12, but remember that longevity has increased over time, so it must be considered in relation to the time period.

Determine Advantages, Disadvantages and Quirks

This should be easy, if the player has done his homework. Advantages are any innate talents possessed by the character, or ones gained very early in life. In general, the point total for disadvantages should be kept at the recommended -40; many character flaws have been exaggerated by biographers. Quirks should be the most fun; every great person had them, and they should be roleplayed to help bring the character to life.

GURPS Riverworld has numerous restrictions on advantages and disadvantages; this section should be read carefully. It is possible that many of the character's advantages and disadvantages have been "corrected" or negated by the Ethicals.

Character Point Value

Most PCs for ***GURPS Riverworld*** should be created with 100 character points. GMs may wish to make exceptions in the case of long-lived historical personalities. Similarly, familiar characters who "died" young may need to be built with fewer points.

Because characters have been resurrected with artificial, near-perfect bodies, certain requirements and limitations are necessary when creating characters. All PCs are required to have a minimum HT of 12, costing 20 character points. This cost is offset by the "automatic advantages" described on the next page.

Additional restrictions on advantages, disadvantages and skills are given elsewhere in this chapter.

Automatic Advantages

The following four advantages are inherent in the new bodies created for everyone on the Riverworld. Since all characters have these advantages, there is *no point cost* in a Riverworld campaign. Point values are given below *only for general reference.* Should a Riverworld campaign somehow "cross over" into another background, the total point value of these four advantages, inherent in any Riverworld body, is 125 points.

Immunity to Disease (10 points)

Note that there are no diseases native to the Riverworld, so this advantage will not become apparent unless diseases are somehow introduced or characters leave the planet. Nevertheless, Valleydwellers are totally immune to disease.

Regrowth (40 points)

The character can regrow lost body parts. A lost ear, finger or toe will regrow in 1d weeks, a lost hand or foot in 1d+1 months, and a lost eye, arm or leg in 2d+2 months. No Healing rolls are required.

Unaging (60 points)

Everyone is resurrected in the body of a 25-year-old (except those who were between the ages of 5 and 25; see *Youth,* below) that *never ages.* Therefore, aging rolls are unnecessary in ***GURPS Riverworld.***

Very Rapid Healing (15 points)

This is an enhanced form of Rapid Healing (p. B22). Between the minimum HT of 12 and the +5 bonus from Rapid Healing, Riverworld characters would fail healing rolls only on a critical failure, and the GM may simply assume success is automatic without unbalancing the game. When recovering lost HT, a successful HT roll heals *two* hits, not one.

Determine Skills and Skill Levels

Each character has had a lifetime of experience before entering the Riverworld, so many points should be spent on skills. Two or three skills will usually be prominent — these should be set as high as possible. Secondary skills should then be determined — these should be set equal to the controlling ability (DX or IQ), or perhaps a level or two higher. The remaining points can then be spent to round out the character. Remember that, to be realistic, some skills should be taken even though they will be useless in the Riverworld.

Once Basic Speed, active defenses and encumberance levels are calculated, the character is ready to play.

Footnote Characters

Many of the most interesting characters on the Riverworld are those who might be called "historical footnotes." They really lived, and they had interesting and distinguished careers . . . but from the vantage point of the 20th century, they are obscure. Researching and developing such people can be a good compromise between a truly famous character and a purely fictional one.

Simply thumbing through a biographical dictionary, or even an encyclopedia, will give literally hundreds of possibilities for this type of character — people who were prominent in their own day but who are not well known now. Two examples are found in the *Resurrection Day* scenario. Lord Kitchener was one of the movers and shakers of his day; Francisco de Orellana was not as distinguished, but his deeds were by no means trivial.

Research into this kind of character can actually be very educational; history teachers who enjoy role-playing might consider running a *Riverworld* adventure or campaign as "enrichment" material for their students.

Fictional Characters

With the GM's permission, the players can research and create "historical" characters who never actually lived, or whose reality is in some doubt. In many cases, the Riverworld version of such a character will be a far cry from the legendary or fictional one. King Arthur, Robin Hood, and Hercules are all examples of characters who might have been based on a historical individual.

Such characters are also very good NPCs, because the first reaction of those who meet them will be "I didn't think you

were real!" Cyrano de Bergerac, an important character in the books, falls into this category. Although he really lived, many people know only of the stories based on his exploits, and assume that he was purely fictional.

Or *entirely* fictional characters can be brought into the Riverworld. Again, this is up to the GM. If some justification is needed, assume that the campaign is set in an alternate universe where those people really lived. Once that is accepted, *any* fictional character is available . . .

Ancestors

There is also a historical character type who may not be at all famous, but can still be very interesting to play . . . namely, one of your own ancestors!

Players who already have an interest in genealogical research will find this easiest, of course, and will have a wide variety of ancestors to choose from. Others may wish to do a little investigation. The easiest way to begin to research your family tree is by talking to relatives; perhaps someone else has already compiled a lot of the information you need.

A campaign possibility: each player takes the part of one of his or her own ancestors. Almost everyone can find a potential adventurer within the last few generations of the family!

Original Characters

Players may create new characters from any time and place in human history. These would represent "real" individuals who did not rise to prominence and had no great fame or historical impact. This kind of character allows the most flexibility for the player.

In the sections below, human history has been divided into eight periods, each period corresponding to a different tech level. When developing a character from a specific period of history, all skills oriented to a tech level should be taken at the TL indicated. Naturally, some skills will not be available at all in certain periods (e.g. Electronics is not available until TL6). Use good judgment when choosing tech level skills.

For each period, a brief historical description is given, along with examples of characters that might come from the given time. It should be emphasized that these are very general overviews, intended as guidelines. An entire book the size of this one could be written for each period, so additional research is recommended to imbue a sense of reality into the character.

TL0: The Stone Age (97,000-3000 B.C.)

The period for which ***Riverworld*** characters are available starts at 97,000 B.C., when the Ethicals brought their *wathan* generators to Earth and mankind became self-aware.

Not all early men were created equal. Mankind's prehistory may be divided into three periods: the *Paleolithic,* which lasted until about 10,000 B.C., the *Mesolithic,* lasting until 5000 B.C., and the *Neolithic,* until 3000 B.C. Before the emergence of *Homo sapiens,* the Paleolithic saw two prototypes of modern man: the Neanderthals, who were thought to be the first to develop a spiritual awareness, and the Titanthrops, a subspecies that probably became extinct because they were too heavy to be bipeds. Both of these races can be played as PCs (see pp. 46-48). The Mesolithic is distinguished by migrations of tribes into northwest Europe. The Neolithic began in Asia and saw the emergence of agrarian civilizations in China and Mesopotamia.

GURPS Ice Age is an excellent source of information on roleplaying prehistoric man.

Who Was Resurrected?

When the Ethicals created the Riverworld, they resurrected everyone who had ever lived . . . almost. In the first place, only those who lived after 97,000 B.C. could be raised. People conceived before the Ethicals' first visit to Earth had no *wathans,* and could not be resurrected.

There was also a cutoff date; those who died after that date were not resurrected (they will populate the Riverworld in the second part of the Project). In the original books, that cutoff date was 1983. The GM of a ***Riverworld*** campaign may want to extend the cutoff to 2000 or so, both to create uncertainty and to give more of the players and their acquaintances a chance to qualify for inclusion.

Children five years old, or less, were not resurrected on the Riverworld. Instead, they were raised and trained on the Gardenworld (p. 88), becoming part of the Ethical culture.

The mentally retarded and incurably insane were not resurrected, either. However, most forms of insanity are curable with Ethical medical technology. People suffering from curable insanity were cured before their resurrection.

Everyone else was resurrected. Their new bodies were hairless; facial hair never returned, but other hair did. All significant deformities and abnormalities were corrected. The new bodies were sterile (due to contraceptive chemicals in their diets); male bodies were circumcised, and female ones were virgin.

Character Types: Primitive hunters and gatherers (including Neanderthals and Titanthrops); Asian and Mesopotamian farmers; early Sumerian citizens.

TL1: The Bronze Age (3000-1000 B.C.)

This period is marked by the first use of metals, specifically copper and bronze. The great ancient civilizations emerged at this time: Babylonia, Assyria, Egypt and Greece. The first use of bronze occurred in China, and the Shang and Chou dynasties were born from it. The Celts also exercised their influence over Europe and the British Isles.

Character Types: Babylonian and Assyrian warriors and scribes; Greek scholars, slaves, soldiers, philosophers, and politicians; Chou warlords and warriors; Celtic druids, farmers and warriors.

TL2: The Iron Age (1000 B.C.-500 A.D.)

Around 1000 B.C., iron was first forged into weapons. The technique of casting iron was invented by the Chinese around 300 B.C. This period is dominated by the rise and fall of the Roman Empire. Originally a tiny city-state founded (according to legend) in 752 B.C., Rome grew in power around 500 B.C. when it conquered central and southern Italy and defeated Carthage during the Punic Wars. Internal strife gave way to imperialism under Augustus, and *Pax Romana* (the peace of Rome) kept law and order for over 200 years. The empire reached its greatest extent around 100 A.D., when it began to give way to civil war and invasion by Visigoths and Vandals from the east. Civilization advanced greatly during this period as Roman roads and communication systems allowed new ideas (like Christianity) to spread rapidly.

Character types: Roman legionnaires, gladiators, senators and citizens; European barbarians and nomads; early Christian missionaries.

TL3: The Medieval Period (500-1450)

The fall of the Roman Empire left a void in Western civilization that was filled by the Christian Church and the Byzantine Empire. Politically, Europe was fragmented into small, feudal kingdoms, unified loosely by the Church. The Byzantine Empire was a bastion of Eastern Orthodox Christianity, its influence reaching across Russia, Northern Africa, and Asia Minor. Arabian culture thrived during this period with the rise of Islam; many of our modern scientific concepts were brought back from the Arabs during the Crusades. In China, barbarian invasions gave way to the law and order of the T'ang and Sung dynasties. In 1200 Genghis Khan and his Mongol hordes overran China and ruled for a century. The Medieval period is considered to have ended with the fall of Byzantium to Turkish invaders in 1453.

Character types: Feudal nobles and peasants; Church scholars and officials; Arabian merchants and scholars; Byzantine missionaries; Chinese warriors, sailors, philosophers and bureaucrats; Mongol warriors.

TL4: Renaissance/Colonial (1450-1700)

Two major technological innovations helped shape this period of history: the development of gunpowder and the invention of the printing press. The Reformation reshaped the Roman Catholic Church and gave birth to Protestantism. Florence and Venice became the centers of culture; this is the era of Leonardo da Vinci and the "Renaissance man." Universities, free-trade economics, and the modern concept of "nation" came out of this period. Columbus discovered the New World and opened it to colonization by Spain, England and France. In the Far East the Ming dynasty dominated China and saw the rise of the Manchus, while Japanese feudalism reached its peak.

GURPS Swashbucklers is a valuable sourcebook for Europe and the New

Character Stories

Whatever sort of character is chosen, the character story should encompass the PC's entire life on Earth. Dates of birth and death should be specified, and the player should decide where and how he spent his life. Of course, a famous or familiar character will already have his character story provided; the player should be very familiar with the story. The more that each player knows about the person whose part he is playing, the more interesting the campaign will become.

It is important to keep in mind that there were *two* resurrection periods on the Riverworld. The first, which is the subject of the books, encompassed all humans who died between 97,000 B.C. and 1983 A.D. It is assumed throughout these rules that the first period is the subject of the campaign, in which case the player characters had to have died by 1983. In the novels, the protagonists discovered that anyone claiming to have died after 1983 was probably an Ethical agent.

The GM may wish to adjust this "deadline" for several reasons. First, players who have read the book will be aware of the 1983 cutoff, and will be able to instantly recognize an agent by his claimed date of death. Second, characters based on personal acquaintances may have been too young in 1983 to have developed any significant skills. And, of course, nobody who plays this game died before 1983! Moving the deadline up (say, to 2000) gives the players more flexibility in designing modern characters.

World during this time, while ***GURPS Japan*** is recommended for information on the rulers and samurai of the period.

Character types: Florentine/Venetian artists and architects; European scholars, churchmen, explorers and pirates; French musketeers; New World natives and colonists; Japanese samurai.

TL5: Industrial Revolution (1701-1900)

This period sees the birth of steam power and mass production. The Spanish dominance of the previous period gave way to the British Empire, the most extensive regime in world history. A peasant revolution in France was followed by the rise of Napoleon, and the American colonies declared their independence, only to be torn by civil war in the next century. Russia was dominated by the Romanov tsars and a stagnation of living conditions, yet produced some of the world's greatest literature. Mass production created a working class and gave rise to Marxism and the Anarchist movement. The Far East became completely dominated by European powers.

Character types: Victorian explorers and scientists; North and South American frontiersmen, sailors, slaves and industrialists; European nobles and revolutionaries; Russian peasants and novelists.

TL6: The World Wars (1901-1950)

Tensions between rival power blocs in Europe erupted in the Great War when Austrian Crown Prince Ferdinand was assassinated by a Serbian nationalist. The Germany-Austria/Hungary bloc was defeated in 1918, and the Treaty of Versailles was drafted to curtail further German military development. Meanwhile, Russia was busy with the Bolshevik revolution which overthrew the Tsars' regime and established the first Communist state. After the Great War, prosperity fell to global depression, wreaking havoc on the German economy and giving rise to the National Socialist Party under Adolf Hitler. Hitler quickly rose to power and expanded German influence, annexing Austria and the Sudetenland and eventually invading Poland in 1939. The Axis powers (Germany, Italy and Japan) began a campaign of global conquest culminating in the largest war in human history. The United States entered the war in 1942 and helped Russia defeat Germany; it ended the war in 1945 by dropping the atomic bomb on Japan. The United States emerged from the war as the dominant economic power in the world.

Players choosing a character from this period should refer to ***GURPS Cliffhangers*** for more information.

Character types: Russian "reds" and "whites"; soldiers, sailors, spies and airmen from all nations in both world wars; depression-era unionizers; the "Lost Generation" of the 1920s and 30s; Nazi/Fascist party members; world travelers and adventurers.

TL7: Modern (1951-present)

After World War II, the globe was politically divided into three "worlds": the two superpowers of West and East, and the underdeveloped nations. Cold War, a period of mistrust, nuclear arms escalation, and small-scale flare-ups, becomes the *modus operandi* between the American and Soviet superpowers. Tremendous technological innovation occured: nuclear power, space travel, computers. Culture and society were shaped by mass-scale, instantaneous communication. The 1980s saw a cooling of superpower tensions and the emergence of Japan as an economic power.

Character types: This is the period that should be most familiar to players — look around and use your imagination.

Children in the Rivervalley

People as young as six years old were resurrected in the Valley. Everyone who died under the age of 25 were brought back to life with a body the same apparent age as they were when they died. Thus, on Resurrection Day, there were many children along the banks of the River. The youngest children, who cannot remember much about Earth, are called "Rivertads."

Except for the Rivertads, who are all grown up by 12 A.R., there are no children in the Valley. Most Riverdwellers believe that this is because their new bodies are simply sterile. In fact, this is not true. An additive in the grail food produces long-term sterility. If two people were to eat only "natural" foods for a year or more, they could conceive. A person in the Dark Tower, or otherwise in a position to command the Computer, could order a neutralizing agent, and have the sterility compound removed from his or her food in the future; this would allow conception immediately.

However, this would lead to tragedy. Humans have personalities, self-awareness and "souls" because of the *wathans* created by the Ethicals. There is no *wathan* generator on the Riverworld. Of course, the Computer could be commanded to create one. But unless that is done, any children born on the Riverworld would be healthy and physically normal . . . but they would be soulless automata, without self-awareness or personality.

Recreating Familiar Characters

Everyone who has ever lived is on the Riverworld . . . including friends, family, and even yourself! ***GURPS Riverworld*** gives players the opportunity to roleplay someone with whom they are personally acquainted. This can be almost as challenging as playing a historical person — or more so, since the "research" will not come from books but from association with the person.

The steps taken in designing a familiar character are the same as for a famous character. The "research" stage involves an inventory of personality traits. The player should endeavor to be honest, especially if he is playing himself. Abilities should not be exaggerated, and a balance between negative and positive traits should be attained.

Attribute scores, advantages, disadvantages and skills are assigned as for a famous character. Skill levels can be determined using the chart on page B45. Generally, points should be spent on skills of "average" ability (skill level 10) or better. If the character has a fairly high DX or IQ score, his skill defaults will be pretty good.

Alternate Selves

Another way to approach the "familiar" character option is to create an original character who is *loosely* based on an acquaintance (or yourself — this is what Farmer did with his character Peter Frigate). This means not having to worry about being 100% accurate in the inventory of traits. The character can share the same biography as an acquaintance, but differ in ways that make him easier to design or run. There is a lot of room for creativity here, by creating "alternate" versions of friends and family members.

It is *not* recommended that alternate versions of famous historical characters be created without the GM's permission. This could create paradoxes and conflicts with "real" Earth history for which the GM may not be prepared.

Impostors

Many people on the Riverworld are not who they claim to be. A traveler might meet any number of Napoleons, Nixons, Julius Caesars, Lincolns and Einsteins. As a rule, only very famous people will be imitated.

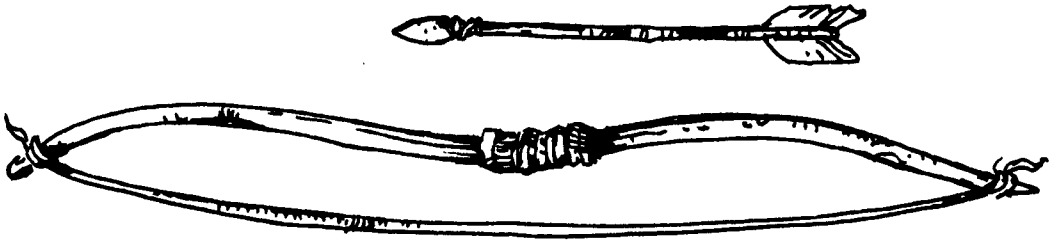
People like this may be convincing (after all, how many people know what Einstein looked like when he was 25) or pathetic. Either way, they make interesting encounters. A convincing impostor may be surrounded by a whole group or nation who believes his story. Unmasking such an individual can be very dangerous!

A PC might also be an impostor. This would be most likely in a campaign *other* than a Resurrection Day one. On Resurrection Day, no sane person would see any profit in pretending to be Jesus Christ or Ronald Reagan, and nobody on the Riverworld was insane on Resurrection Day.

Advantages, Disadvantages and Skills

The inhabitants of the Riverworld are far superior, physically, to their previous Earthly incarnations. Many of their terrestrial flaws have been eradicated, and they have been blessed with some godlike qualities. These are reflected in modifications to advantages and disadvantages.

Many of these changes refer to a "Resurrection Day campaign." These modifications apply if the GM is beginning his campaign on Resurrection Day, i.e. the day that humanity is raised on the Riverworld. They do not apply if the character is being created for an adventure taking place some time after Resurrection Day.



Advantages

Note that some of these advantages *can* be gained during play (an exception to the general rule on page B19).

The automatic physical advantages possessed by all Valleydwellers are listed in the sidebar on p. 30.

Animal Empathy ***see p. B19***

The only animals on the Riverworld are large, aquatic predators, small fish, and earthworms. The river predators react at +2 to anyone with Animal Empathy, in the unlikely event that they have time to "meet" the person. Note, though, that a riverdragon does not normally come to the surface except to eat something or at the end of a harpoon! Therefore, this advantage is merely a "quirk," worth 1 point, in this setting.

Allies ***see p. B19***

Allies can be taken in a Resurrection Day campaign, but must be limited to people the PC knew in life. In campaigns starting after Resurrection Day, a PC might have met and befriended a person from any background, so any sort of ally would be allowed. For instance, Sam Clemens and Joe Miller were Allies!

Clerical Investment ***see p. B19***

Characters who had this advantage on Earth may take their reaction bonuses with them to the Riverworld, since most religions have been around a long time and most people will recognize them. Of course, the GM may always declare that the natives of a particular area do not recognize (or do not care for) a particular religion.

The teachers and bishops of the Church of the Second Chance, a religion native to the Riverworld, gain this advantage upon their initiation. PCs may join this church as well. See p. 21.

Legal Enforcement Powers ***see p. B21***

This is an advantage given by a society, so it is not available at the beginning of a Resurrection Day campaign. However, it can be gained as Riverworld societies develop.

Literacy ***see p. B21***

The great majority of all humans who have ever lived are *illiterate*. Therefore, Literacy is an advantage, worth 10 points. It *must* be taken by anyone who was (or would have been) literate in real life. However, there will be nothing on the Riverworld to read until someone writes it.

Military Rank ***see p. B22***

This is another socially-created advantage that is not available at the beginning of a Resurrection Day campaign. However, it could be gained as nations and armies are created.

Patrons ***see p. B24***

Patrons are not appropriate in a Resurrection Day campaign, unless the PC in question is an Ethical agent (see below). They may be gained later in play, at the GM's discretion. If the party, or some of its members, make themselves very useful to a powerful nation along the Rivervalley, that nation or its leaders may be taken as a Patron by paying the appropriate character point cost. Such patrons will normally be useful only to PCs who are staying around the same part of the Valley, though!

The Ethicals as Patrons

For a PC who is an Ethical agent (see p. 109), the Ethicals themselves must be a Patron. This automatically gives the agent access to the wonderful Ethical gadgetry described on pp. 92-93.

The base point value of the Ethicals as a patron is 40 points (organization of incalculable worth, with extraordinary powers). However, in any reasonable

Psionics

The GM may want to experiment with incorporating the ***GURPS*** psionics rules into his Riverworld campaign. While the Valleydwellers would rarely possess any psi ability with a Power over 5, Ethical characters may possess higher Power ratings. The mysterious race of Monat might have greatly developed psi skills. The use of psi in ***GURPS Riverworld*** implies an ability to briefly "glimpse" the *wathans* of others.

If the GM allows Valleydweller PCs to take psi powers, he should limit their choices to ESP and possibly Telepathy. Sir Richard Burton himself coined the term ESP and claimed to have had several psychic experiences in his own Earthly lifetime. Both Clairvoyance and Clairaudience can be expressed as a sophisticated *wathan* sense that allows the user to "tune in" to specific *wathans* over a short distance. Psychometry involves inanimate objects, which have no *wathans* — consequently, this skill could be prohibited. Precognition could be explained by the extraphysical nature of the *wathans* — perhaps they offer glimpses into the structure of time.

Telepathy skills can be described as a complex union of *wathans* occurring across time and space. Most of these skills are simply limited "Read *Wathan*" abilities, but the telepath may not necessarily be aware of the *wathan's* existence. Mental Blow, Mind Shield, Sleep, Mindwipe, and Telecontrol imply a special control of the *wathan*, which can be mastered only by Ethicals.

The use of Psionics by Ethicals (including Ethical PCs) is less restricted because of their knowledge and understanding of the *wathan*. The Ethical has available to him all ESP skills (except Psychometry) and all Telepathy skills. Psychokinesis skills can only be employed only against living things possessing a *wathan*. Teleportation cannot be explained in terms of the *wathan* — its availability to Ethicals is up to the GM. Healing and Antipsi skills can be used without restriction.

Several limitations on psionics can be creatively employed to reflect the Riverworld milieu. A good limitation to consider is that Ethicals may only use certain skills if they can see the *wathan* (by using Ethical technology). This would be a ⅓ cost limitation. The One Skill and Untrainable limitations are also a good option — perhaps the Gardenworlders were limited in their psionic training.

campaign, the Ethicals not appear often. Remember that the Ethicals will not intervene in a situation that would tend to expose their secrets. In many cases, the agent's duty will be to suicide with his death sphere, and then report in person when he is resurrected at the Dark Tower.

Renegades as Patrons

It is also possible, with the GM's approval, to take renegade Ethicals as Patrons. This will only work if the campaign's renegades are more activist than Loga was in the original books. Loga usually limited his interventions to one or two for each of this "chosen" — not enough to justify Patron status.

However, more active renegades might be willing to help their Valley-dweller agents out of an occasional scrape. In playing such a Patron, the GM should keep in mind that the first priority of any renegade will be to avoid detection. Only if he can aid a Valleydweller *safely* will a renegade offer any help whatsoever. Renegade aid is more likely to take the form of information (e.g., about raw materials or conditions ahead on the River) than of any physical item. Should physical aid be required, it will most likely be in the form of self-destructing devices. It would be very unusual for any renegade to swoop down in his flyer to break his "friends" out of imprisonment; such a move would invite exposure.

The base point value of a renegade or renegades as a Patron is the same as for the Ethicals — 40 points. Though they are a smaller organization, they are hidden within the larger one and have access to its facilities.

Dreamgum

The Ethicals have created a drug called *dreamgum* that sharpens the senses, reduces inhibitions, causes hallucinations, and invokes subconscious thoughts and feelings. It is similiar to terrestrial hallucinogens such as LSD, but much more potent.

Dreamgum arrives in the grail in the form of cubes of chewing gum. One cube is included with each evening meal; it has a slight odor and taste of coffee. When the gum is chewed, saliva carries the drug into the system. About 10 to 15 minutes after chewing the gum, the subject notices an intense sharpening of the senses — sounds are louder and clearer, colors deeper and more vibrant. During this initial period, effective IQ is at +4 when making Sense rolls.

Continued on next page . . .

Reputation ***see p. B17***

For a Resurrection Day campaign, "people affected" should always be a "small class of people," referring only to the people of the character's native time and place. After all, in the context of the more than 36 billion inhabitants of the Riverworld, nobody's contemporaries are more than a comparatively small number.

However, in addition to a regular Reputation, a character may also have a *historical reputation,* extending far beyond his own lifetime. For example, many people knew of King John Lackland's treachery, even if they lived hundreds of years after he died. Almost all truly famous people will have some sort of reputation; that's how they became famous!

A PC with a historical reputation will affect the reaction rolls of NPCs he encounters just as regular reputation does. Use the standard point costs for type of Reputation (every +1 bonus costs 5 points, and every -1 penalty cost -5 points). You must then determine the *historical extent* of your reputation:

Everyone you meet who lived in your time or afterward has probably heard of you: use listed value.

A sizeable group has heard of you (everyone living in the two or three centuries after your death, all citizens of your country, etc.): ½ value (round down).

A small group of people has heard of you (everyone within one century of your death, citizens of your city, etc): ⅓ value (round down).

A regular Reputation only affects your contemporaries (the number of which is defined by the point cost), while a historical reputation may affect *all those who lived in your time or after you.* Note that it is possible to have several different Reputations, both regular and historical, not all of which may necessarily be true.

Aliases

Famous characters may wish to avoid dealing with their historical reputations, either because the reputations are bad, or because they are tired of

notoriety. Such characters may live and travel under false names, as Jack London and Tom Mix did in the books.

This option is open to both PCs and NPCs. If a PC is a famous character using a false name, he will have to decide whether to reveal his true identity to the other PCs, or to keep it a secret (which can be a Disadvantage; see p. 40). If the GM introduces a famous NPC using an alias, he should provide enough clues to let the PCs have a chance of figuring out who they are really dealing with. When someone is flying under false colors, they usually have a very good reason for doing so; a threat to reveal their true name will not be taken lightly.

Status ***see p. B18***

Status reflects social standing and does not apply to a Resurrection Day campaign. However, Status on Earth may become a *Reputation* on the Riverworld, at the GM's discretion.

Once civilization emerges, though, Status can again come into play. In fact, many nations along the Rivervalley came into being largely because the founders wanted to enjoy the "perks" of high Status . . .

Wealth ***see p. B16***

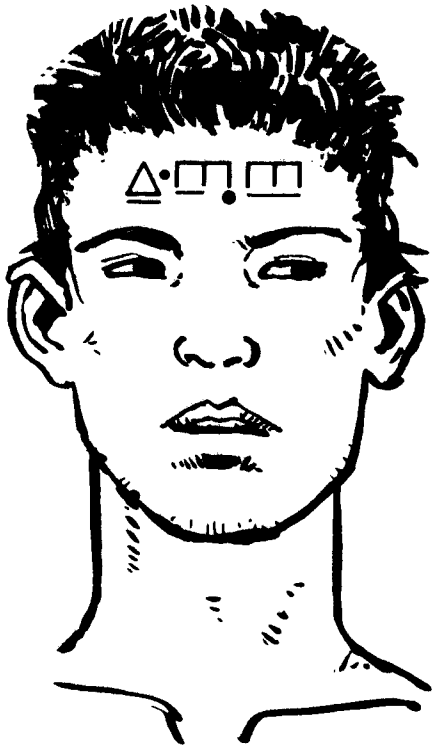
PCs enter the Riverworld without even the clothes on their backs. Characters may not begin with Wealth (or Poverty) in a Resurrection Day campaign.

As for later campaigns, see p. 43.

New Advantage

See Ethical Markings ***15 points***

When the Ethicals made body recordings of the humans to be resurrected, each was given a special identifying mark on the forehead — a "serial number." This mark is invisible to most people, but some have an innate ability to see it in proper lighting conditions. The Ethicals thought that *nobody* could see this mark except their own agents.



Dreamgum (Continued)

This period of heightened awareness soon gives way to a loss of conscious inhibitions. What happens then largely depends on the subconscious thoughts and desires present in the individual. Essentially, the subject loses all self-control, either hallucinating the "demons" of his subconscious mind, or performing uncivilized acts. PCs under the drug's influence cannot make Will rolls to overcome mental disadvantages, and cannot use the Common Sense advantage. The drug lasts several hours, after which the subject remembers only a vague, dreamlike experience (an IQ roll is needed to remember specific details).

On Resurrection Day, many Valley-dwellers ingested dreamgum, thinking it was merely chewing gum. The result was a "mass madness" of violence, carnality and insanity. The PCs may or may not participate in this event, depending on whether or not they chew the gum. If they elect not to chew the gum, they may be extremely confused about what is happening and what its cause is.

Dreamgum can be used as an interesting vehicle for the GM. When a player character chews dreamgum, he effectively becomes an NPC under the GM's control. Decide what the character's subconscious desires and fears are (use Disadvantages and Quirks as guidelines), and create an appropriate reaction. After the drug wears off, if the PC makes an IQ roll, he will remember specific experiences (and may even learn something from them).

Dreamgum is highly addictive. Dreamgum addicts chew it every day and live on the edge of sanity. They never sleep and are constantly plagued by "demons." Use the regular rules for withdrawal (p. B30) when attempting to end a dreamgum addiction. If a campaign is started after Resurrection Day, a PC could begin with this addiction; it is worth -15 points as a disadvantage. Note that death and resurrection does not break the addiction; it is mental.

Whenever you wish to use this advantage, the GM makes a Vision roll modified by the degree of darkness (-1 to -9). A successful roll indicates that you see whether the mark is present or not (thus, you can never be sure if the mark is absent or you failed your roll). The GM must also inform you if anyone you see regularly does not have a mark; over a period of more than a few days, its lack would certainly be noticed.

An Ethical who sees the mark can read the number. To anyone else, it is just an interesting pattern.

The lack of an identifying mark usually means the subject is an Ethical (although you can never be positive). Note that you will not be able to *read* the mark unless you know the Ethical language, and that after a few years A.R., the Ethicals learned that some Valleydwellers had this ability. At that point, they started putting marks on their agents.

A renegade would probably have forehead markings, if only to protect him against exposure if he was seen by a loyal agent. Of course, the markings would be false; that is, they would not tell who he really was! They would also be washable, so he could appear in his "true identity" when he returned to the Tower to report.

Neanderthal characters and Ethical agents are required to take this advantage. Other characters may choose to take it. Ethicals who have access to a link to the Computer may make a positive identification of anyone whose mark they can see.

Esperanto

Esperanto was first described (Esperantists prefer to avoid the term "invented," since most people seem to feel that an artificially constructed language is somehow inferior to a naturally evolved one) in 1887 by Ludovic Zamenhof, a Polish oculist. He envisioned his language as a secondary means of communication among the peoples of the world, and thus made it very easy to learn. The vocabulary is drawn mostly from Latin and Germanic stocks, with a few Slavic words, and the grammar is completely regular and follows 16 simple rules. For instance, all words are accented on the next-to-last syllable. All nouns end in the letter "o." The plural is formed by adding a "j," pronounced like the English "y." Thus: *amiko* (pronounced ah-MEE-ko), friend; *amikoj* (pronounced ah-MEE-koy), friends.

Because much of Esperanto's vocabulary is derived from Latin roots, speakers of Latin or any Romance language (e.g, French, Spanish, Portuguese, Italian) have a default skill of (Language-3) to understand spoken or written Esperanto. Speakers of Slavic and Germanic languages, including English, have a (Language-6) default skill for older forms of the languages (spoken before 1550) or (Language-4) for modern forms. This default skill only applies to *understanding* the language, spoken slowly and carefully.

On the Riverworld, Esperanto is promoted as a means of intercultural communication by the Church of the Second Chance. To become a teacher in the Church, one must gain Esperanto skill of at least 10. Esperanto is a Mental/Easy language for anyone from a Romance or Slavic language background, Mental/Average for others.

See the next sidebar for some suggestions on using Esperanto in the campaign.

Disadvantages

Physical Disadvantages

Most physical disadvantages are prohibited in a Resurrection Day campaign, and many are not allowed at all in ***GURPS Riverworld.*** Age, Bad Sight, Epilepsy, Hemophilia and Anosmia are prohibited in any ***GURPS Riverworld*** campaign, no matter when it takes place. Blindness, Deafness, Eunuch, Hard of Hearing, Lame, Mute, One Arm, One Eye, and One Hand are prohibited in a Resurrection Day campaign, but are allowed for characters created for a later campaign (through combat or some sort of accident). However, the Regrowth advantage means that any such disadvantage is purely temporary, and would have to be bought off within a few months!

All other physical disadvantages can be "brought with" a character from Earth. Note that Youth is permitted, but all characters must be at least six years old.

Mental Disadvantages

Genuinely insane people were almost all cured by the Ethicals, to be resurrected without their insanity. Those who could not be cured were resurrected on the Gardenworld or not at all. Therefore, characters who have mental disadvantages must be defined in such a way that they are not "insane." Most mental disadvantages can still be treated as willful behavior rather than compulsions (e.g., Kleptomania and Sadism), or as eccentricities (e.g., Delusions or Obsessions). But if it is desired to recreate a historical person without some particular character flaw, the explanation "This was insane behavior, caused by a chemical imbalance in my Earthly body and cured by the Ethicals" is perfectly acceptable.

It is also possible for a Valleydweller to *become* insane, especially through abuse of dreamgum.

Addiction ***see p. B30***

Several addictive substances are supplied to the Valleydwellers by the grails: alcohol, marijuana, tobacco and dreamgum. All of these are considered "cheap"

(-5 points) and "legal" (*plus* 5 points). Dreamgum (see sidebar, p. 36) is considered highly addictive and hallucinogenic.

Dependents ***see p. B38***

Possible dependents in ***GURPS Riverworld*** include children (in the early part of the campaign), spectacularly incompetent people, Valleydwellers who lose their grails, and people from TL0 Earth.

Duties ***see p. B39***

Earthly Duties become meaningless on the Riverworld, although they might become a Sense of Duty, depending on how seriously the PC takes them. Duties may be allowed in a later campaign.

Enemies ***see p. B39***

You can never evade your enemies, even in death. Enemies *can* be created for a Resurrection Day campaign; if so, it must be assumed that the Enemy is resurrected in the same vicinity as the PC, with the GM deciding just how frequently he appears (GMs not comfortable with this rule may simply prohibit Enemies in a Resurrection Day campaign). Enemies that are made on the Riverworld can be created using the normal rules.

Poverty ***see p. B16***

This disadvantage will not exist at the beginning of a Resurrection Day campaign, though poverty becomes a grim reality once again as civilization evolves.

Primitive ***see p. B26***

Because of the nature of the Riverworld setting, the GM may rule that this disadvantage is worth no points. No matter what your native tech level, there is a place where you will fit in. Nevertheless, characters from primitive TLs should follow the rules on p. B26 when dealing with high-tech equipment.

Since the tech level of a later Riverworld campaign will vary widely with the territory, the GM can allow this disadvantage to have some value in special cases. But in general, primitives can adapt to improving technology as fast as the engineers can build it, as long as they have teachers.

Reputation ***see p. B17***

Bad reputations, as well as good ones, can be carried to the Riverworld; see above (p. 36) under *Advantages*. A person with a bad reputation, or even a good one which could become a nuisance, may conceal his Earthly identity. This is a *Secret* — see below.

Social Stigma ***see p. B27***

Remember that most "minority" groups on Earth will find themselves in the majority in some places on the Riverworld. Special cases of the Social Stigma disadvantage will vary from campaign to campaign, and the GM must use his judgment. In a Resurrection Day campaign, some terrestrial Social Stigmas may still affect reaction rolls.

Youth ***see p. B29***

Humans who died before the age of 25 but after the age of five *are* resurrected on the Riverworld. Young resurrectees (known as *Rivertads*) age until they are the equivalent of 25 years old, at which point the aging process stops (see *Unaging*, sidebar, p. 30).

Esperanto in the Campaign

GMs may use Esperanto terms to add flavor to the campaign. Some useful Esperanto words for Valleydwellers include:

abundoŝtono (ah-BOON-do-SHTO-no): grailstone (literally, "plenty-stone").

abundujo (ah-boon-DOO-yo): grail (literally, "plenty-holder"). Often just "ujo" (OO-yo), or "container."

aeroplano (ah-ehr-o-PLAH-no): airplane.

amiko (ah-MEE-ko): friend.

balono (bah-LO-no): balloon.

episkopo (eh-pees-KOH-po): bishop (a Second Chance title).

estro (EH-stro): boss, leader.

Ĝis revido (dzhees reh-VEE-do): Goodbye (literally, Until re-seeing).

instruisto (een-stroo-EE-sto): teacher (a Second Chance title).

jes (yes): yes.

lando (LAHN-do): country or nation.

mi (mee): I.

malamiko (mahl-ah-MEE-ko): enemy (literally, "opposite-of-friend")

ne (neh): no, not.

nutraĵo (noo-TRA-zho): food.

Pacon al vi (PAH-tson ahl vee): Peace be unto you (a Second Chancer greeting).

rivero (ree-VEH-ro): river.

Saluton (sah-LOO-ton): Hello, greetings

Sinjorino (seen-yo-REE-no): Ms.

Sinjoro (seen-YO-ro): Mr.

ŝipo (SHIH-po): ship or boat.

vi: you.

virino (vih-RIH-no): woman.

viro (VIH-ro): man.

zepelino (zeh-peh-LEE-no): dirigible.

For more information, visit your local library (books about Esperanto are shelved in the 490s under the Dewey Decimal system) or write to one of the following:

Esperanto League of North America (ELNA)
P.O. Box 1129
El Cerrito CA 94530
(415) 653-0998

British Esperanto Association (BEA)
140 Holland Park Avenue
London, W.11
England

Universala Esperanto-Asocio
176 Nieuwe Binnenweg
NL-3015 BJ Rotterdam
The Netherlands

New Disadvantages

Obsession ***-5 to -15 points***

Your will is fixed upon a single goal. Everything you do is in furtherance of this goal. This differs from Compulsive Behavior in that it is not a daily habit, but rather an overpowering fixation which motivates all your actions. It also differs from Fanaticism in that it does not necessarily imply a single belief or system of beliefs.

To play an obsessed character, you must be able to rationalize all of his actions as an attempt to reach his goal. A Will roll is required any time the character is requested (or forced) to do something that does not further the goal.

The point cost depends on how short or long term the goal is. Assassinating someone or successfully seducing a particular person would be -5 points, while larger goals like getting to a hard-to-reach place or becoming president would merit higher point values. Some obsessions may cause others to react to the character badly; if so, an Odious Personal Habit or Delusion may also be required (the Obsession cost only covers the obsessive behavior).

Farmer's *Riverworld* characters are typically obsessive. Examples of Obsessions include reaching the River's source, building a riverboat, or meeting a particular famous person.

Ethical Characters

The GM may wish to have cooperating players take the part of Ethicals, the beings responsible for the Riverworld. This requires the creation of both the Ethical character and a "disguise" character from Earth's history. Depending on the campaign, an Ethical character may or may not be an Adversary; in some campaigns, an agent can be a fully cooperating member of the party, who happens to have his own agenda. Ethicals as player characters are fully discussed on p. 109.

Secret ***-5 to -30 points***

A Secret is some aspect of your past that you must keep hidden. Were it made public, the information could harm your reputation, ruin your career, wreck your friendships and possibly even threaten your life! In game terms, a Secret is essentially a set of "latent" disadvantages (usually Reputations, Enemies, Social Stigmas or reduced Status). Most Secrets on the Riverworld, at least at the beginning of the campaign, will be *identities*. Many people who were famous or notorious on Earth will not wish to be recognized on the Riverworld.

The GM may wish to restrict or even prohibit Secrets if he feels they would disrupt the flow of his campaign.

Severity

The point value of a Secret depends on the consequences if the Secret is revealed. The worse the results, the higher the value, as follows:

Serious Embarrassment. If this information gets around, you can forget about being trusted or liked by those who know it. Alternatively, exposure of the Secret could mean you will be bothered by people who want to talk about your Earth life. -5 points.

Utter Rejection. If your Secret is discovered, your whole life will be changed. You will probably be rejected by friends and loved ones. Alternatively, for someone who was famous on Earth, you might be constantly hounded by "fans," making it impossible for you to live a normal life. -10 points.

Imprisonment or Exile. If your Secret becomes known, you'll be imprisoned for a long time (GM's discretion) or driven away. -20 points.

Possible Death. Your Secret is so terrible that you would be executed by the local authorities or lynched by a mob if it were ever revealed. -30 points.

Revealing a Secret

If a Secret is ever made public, there will be an immediate negative effect, as described above, ranging from embarrassment to possible death. Furthermore, there is a lasting effect as well — you suddenly acquire new, permanent disadvantages whose point value equals twice that of the Secret itself! The points from these new disadvantages go first to buy off the Secret, and may then (at the GM's option only) be used to buy off other disadvantages or (rarely) to buy new

advantages. Any unused points are lost, and the character's point value is reduced.

The new disadvantages acquired must be appropriate to the Secret and should be determined (with the GM's assistance) when the character is created. Most Secrets turn into Enemies, bad Reputations or Social Stigmas. They might also reduce your Status or Wealth — going from Status 4 to merely Status 2 is effectively a -10 point disadvantage. Some Secrets could even turn into mental or physical disadvantages, though this would be rare.

Similarly, if the GM allows you to buy off old disadvantages with the new points, these too must be appropriate to the Secret. The most common disadvantages that could be bought off are Duties and Dependents.

GMing Secrets

In general, a Secret appears in a particular game session if the GM rolls a 6 or less on 3 dice before the adventure begins. However, as for all other disadvantages of this type, the GM need not feel constrained by the appearance roll — if you think the Secret should come into play, it does!

When a Secret appears, it is not necessarily made public. The character must somehow prevent the Secret from being revealed. This may require him to cave in to blackmail or extortion, to flee the area, or even to kill the person who knows the Secret. Regardless of the solution, however, it's only temporary — the Secret will appear again and again until it is finally bought off. Secrets may be bought off either automatically through exposure (see above), or with character points over the course of play.

Skills

This section will discuss those ***Basic Set*** skills which have especially important or unusual applications on the Riverworld. Note that many Earth skills will never be useful at all (e.g., animal skills, most agricultural skills), while many others will become valuable only in those rare Rivervalley nations with high technology. Nevertheless, for proper conception of characters, such skills should be taken at realistic levels!

Remember that characters must start with all of their TL skills at their native TLs, except in campaigns that begin after Resurrection Day. In that case, skills of a higher TL might have been learned elsewhere. The GM can require payment of points for Unusual Background if he feels that players are abusing this loophole.

Chemistry/TL ***see p. B60***

This skill, for anyone with a native TL of 4 or more, can be used to make gunpowder, a mix of potassium nitrate, charcoal and sulfur. A roll is first made to figure out *how* it is made, then a second roll is necessary to "get the mix right." A critical failure on the "mix" roll should have disastrous results. When gunpowder is manufactured, tremendous care must be exercised at all times; a stray spark will eliminate the stock-in-trade, the plant, and the manufacturer, all in one cloud of smoke.

Chemistry allows the production of many other commodities once enough power is available.

Engineer/TL ***see p. B60***

Engineers may specialize in Aircraft, allowing the player to design and build airplanes. A specialization in Airships allows the designing and building of balloons, blimps and zeppelins. The Mechanic skill is a prerequisite for both of these specializations.

Languages

The Riverworld, at least for the first few years, makes the Tower of Babel look calm and orgnized. Multilingual characters will be at a great advantage.

The Esperanto language is a popular "common language," especially since after 1 A.R. it is taught by missionaries of the Church of the Second Chance to facilitate communication between the Valleydwellers. See the sidebars on p. 38-39 for details and some sample terms. By A.R. 10, a working knowledge of Esperanto will let you talk to *someone* in almost every part of the Valley; by A.R. 25, almost everyone you meet will be able to get along in the language.

Several other languages can be useful. English will let you speak to most Westerners of the 18th through 20th centuries; educated Europeans will know English. Spanish is also widespread. And Latin will allow communication with chruchmen of all ages and with educated medieval and renaissance Europeans, as well as with Romans!

Various pidgin languages are common in the Valley; most of these are Mental/Easy. Often, these are combinations of the languages of two or more different groups thrown into proximity — for instance, Chinese-Spanish, with Gothic loan words . . . These can be created by the GM at need.

The Ethical Language

The Ethical language of Ghuurkh (the native language of Monat's race, also spoken by the human Ethicals of Gardenworld) is considered *hard*, since it is not related to any human tongue. It is doubtful that an Ethical can be coerced into teaching this; therefore, the only place it can be learned is at the Dark Tower.

Trained engineers will be in great demand on the Riverworld. Depending on the local level of industrialization, experience at anything from TL4 to TL7 may be most highly prized. Teams of engineers with experience spanning several tech levels can name their own terms.

Riverworld Resources

Resources on the Riverworld are very limited . . . but a great deal can be done with them. GMs should give character points generously to reward those players who rise to the challenge.

Animal

Riverfish: Two species of large predators inhabit the River: dragonfish and hornfish. The ribs from each kind of fish can be used to make bows. Fish bones do not make good weapons, but can be used as decorative bodywear. The horn from the hornfish can be an effective weapon — treat it as a stone dagger for all purposes. The intestinal linings can be stretched and tanned, or spun into thread, to be used as clothes, boat sails, etc. Several species, especially riverdragon and redfish, yield skins for leather. With local Power technology at TL5 or better, a trained chemist or biochemist can extract some interesting substances from some fish.

Human bodies: An environment with limited resources demands that nothing be wasted. Human bodies can be used to produce items similar to those listed for riverfish. Hair can be spun and woven, and the skin can be stretched and tanned to produce a thin leather. The bones can also be used to make knives and arrowheads, as well as jewelry for adornment or trade. Tendons can provide sinewy material for binding. Even teeth have trade value; some cultures use them for decoration.

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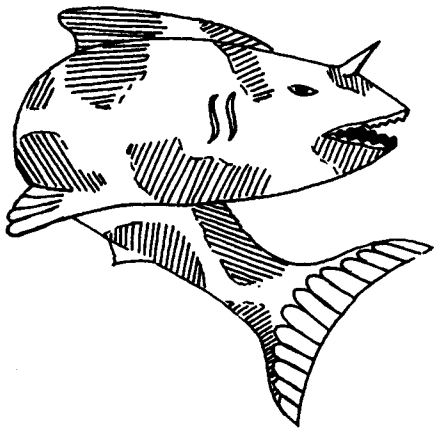


History ***see p. B61***

The History skill will be very useful to anyone on the Riverworld. Initially, your History skill is only useful for periods you could have known about . . . that is, chronologically before your time, and known to your people. However, if you find an appropriate teacher, you can learn the history of times after your own. 200 hours of study under the teacher is worth one character point towards History for the teacher's time period.

Those who have never studied history will default to IQ-6. The GM may allow rolls against Anthropology when dealing with primitive or prehistoric people. Players who think their other skills may give them clues are welcome to try to persuade the GM. For instance, anyone with skill in Performance or a hobby skill in Cinema would know something about the history of Tom Mix!

Even those with little skill in History will develop more; the Riverworld is a giant, ongoing history lesson. Every six months of life along the River is worth one character point toward History skill; the GM determines whether you have had appropriate teachers to let you use your skill in "future" situations. Double this learning rate for travelers, or for those who stay at home but make a point of meeting travelers. Halve the rate (or less) for those who are unable or unwilling to meet new people.

History skill can be valuable in both general and specific instances. In general, a History roll can give you information about groups of people you may encounter. As long as you have enough information to give a clue as to who you are dealing with, History skill can tell you what to expect from them. If your clues are limited ("Dark, big-headed people who worship an idol that looks like a distorted cat.") you will roll at a GM-determined penalty to your skill.

In a specific instance, a History roll, at a -1 penalty per hundred years remove from your own time, can tell you something about the Earthly life of any person who was at all well-known. In general, making the roll exactly will let you recognize the name; the greater the margin by which the roll is made, the more you will know about them. Very famous people give a bonus on the roll.

Navigation/TL ***see p. B57***

This skill can be applied to navigating airships as well as watercraft. A character who has learned to navigate one type of craft can navigate the other at -2. However, if the stars are used to navigate, success rolls are at -5 until the navigator becomes familiar with the Riverworld sky.

Piloting/TL ***see p. B69***

Pilots may specialize in Airship Piloting. This class of aircraft includes any self-propelled, lighter-than-air vehicle. If you have Piloting skill for another type of aircraft, Airship Piloting can be learned beginning at a -4 default.

Note that no flying skill at all is required in order to control the Ethical flyers (see p. 89). They are commanded by voice. Commands will be accepted in any language, since the Computer knows them all. However, it is possible that some commands (e.g., "Take me to the Dark Tower") must be given in Ghuurkh, or must be accompanied by passwords.

Seamanship/TL ***see p. B57***

Sailors should specialize in Wind-Powered or Self-Propelled craft when taking this skill. Seamanship in Wind-Powered craft implies abilities in shiphan-

dling, maintaining the rigging and sails, etc. Self-Propelled craft include steamships and electrically-powered ships. Each specialty defaults to the other at -4.

Theology ***see p. B62***

Characters may specialize in the theology of the Church of the Second Chance (except in a Resurrection Day campaign). It is a requirement for anyone wishing to be a Teacher of the church.

New Skills

Airshipman/TL (Mental/Hard) ***Defaults to IQ-6***

This is the ability to perform the tasks of an airship crew member. It represents experience on the zeppelins and blimps of the 20th century. An airshipman opens and shuts gas cell valves, releases ballast, drops mooring lines, etc. Having this skill does *not* mean you can pilot airships or balloons (that requires the Piloting skill).

An Airshipman roll is required when the airship taking off and landing, and when maneuvering in foul weather, high altitude, around mountains, or in battle. A failed roll generally means only a waste of hydrogen or ballast, with results adjudicated by the GM (see Chapter 3), but a critical failure could mean a disastrous loss of maneuverability, sudden altitude drop, or loss of tack, depending on the circumstances.

Read Wathan (Mental/Very Hard) ***No default***

This is the ability to read the "waning, waxing, and writhing" of a person's *wathan*. The *wathan* appears as a whirling, multi-colored globe attached to the head of every human being. As the emotions and psyche of the person fluctuate, the *wathan* changes color and shape, and emits hexagonal tentacles in a patterned fashion. The complex interplay of colors and shapes can be "read," and the person's conscious and unconscious thoughts and feelings can be determined.

Reading a *wathan* first requires *seeing* the *wathan*. This can only be done with Ethical devices; observers in the Tower, watching through the grailstones, can see *wathans* if they choose. The GM makes the success roll; only a critical success will give a 100% accurate reading, while regular success will still have some errors. Failure indicates little information, while a critical failure produces completely inaccurate information. This is an *extremely* difficult skill, learnable only from Ethicals or the Computer, and very few PCs should be allowed to master it.

However, any level of this skill at all will give the equivalent of the Empathy advantage, as long as the subject's *wathan* can be viewed.

Economics and Wealth

Given the scarcity of raw materials on the Riverworld, economics and wealth will be very different from Earth. Everyone arrives on the Riverworld with equal "wealth" — a grail. As civilization emerges, human greed emerges with it, and grails and their provisions are monopolized. Grail slavery, in which slaves are sustained on the food from their grails while the slavers keep the luxuries, divide populations between the haves and the have-nots. "Freebies," grails usable by anyone, find their way into private hoards and become wealth.

As valuable materials are discovered, especially metals, economic systems are built upon their use and trade. Artisans and engineers create valuable items, and even knowledge of the Ethicals can become a bargaining chip.

There is no universal unit of currency in ***GURPS Riverworld.*** Most societies will rely on barter, trading grail items and resources between themselves. It would be absurd to waste precious metal minting coins, and any form of

Riverworld Resources (Continued)

Vegetable

Wood: The trees on the Riverworld are very fast-growing, replacing themselves in six months. Common oak and pine trees are found in the hillier portions of the valley. Wood can be used by carpenters to construct shelters and furniture; oak gives a tough, heavy wood, while pine provides long, straight logs. Yew is tough yet supple, good for bows and some tasks that high-tech machinists would use metal for. Irontrees are a new species. Their wood is almost impossible to cut, but worth the trouble because it is nearly indestructible. Rafts can be constructed from logs, and boats can be built from lumber. Wood can also be ground into pulp and pressed into paper. All forms of wood, when burned, can be compressed into charcoal.

Chemicals: Oak gives tannic acid, for tanning leather. With Power at TL5 or better, a chemist with TL6+ skills can use cellulose from plant material as the basis for a wide variety of synthetics, creating plastics, alcohol and so on. The difficulty of this task can be set by the GM.

Bamboo: Essentially a woody grass, bamboo is prolific in the valley. Its hollow stems can be used for blowguns and to pipe water. When trimmed, bamboo is very sharp and makes good javelins and arrows. Some species are tough enough to make crude knives and shovels, if metal and stone are not available. Bamboo stalks are tough; without at least a stone knife, little bamboo can be harvested. to cut and can be used to build shelters. Some bamboo fibers are strong enough to make good rope.

Vines: The irontrees in the Valley are covered with ropy vines bearing attractive flowers. These vines can be twisted and stretched into strong rope, and can be used as snares to trap the unwary. Strips of vine can be spun into a thread and used to string bows and weave cloth. The dried blooms of irontree vines can be used to flavor grog, giving it a purple color and a roselike fragrance.

Grass: The Riverworld's "grass" is actually a single huge organism. It grows short on the plains, tall in the hills. It even grows on the Riverbottom. It is hard or impossible to kill, but the individual stalks can be cut and woven.

Lichen: A blue-green lichen grows in huge patches on cliffs. It is marginally edible, and can be fermented to make alcohol.

Edible plants: Acorns provide a bitter but nutritious bread to supplement grail provisions, should that ever be necessary. Bamboo shoots are edible and delicious; lichen is edible.

Continued on next page . . .

Riverworld Resources (Continued)

Mineral

Mineral resources are the rarest, and are scattered very unevenly about the Valley (see sidebar, p. 19). Larger deposits of all sorts of metals are available deep underground (see p. 13), but finding these requires luck, high technology, or inside information.

Stone: Several types of stone can be found at the base of the high mountains forming the valley. Basalt, a dense volcanic rock, is most common. There is a 20% chance that any 50-mile stretch of valley will have useful deposits of flint or of chert, a flint-like quartzite, which can be chipped to form a cutting edge. Stone is the most basic material available. Stone tools and weapons will probably be the first equipment produced by the Valleydwellers. Stone can also be used to make wheels, grindstones and strong walls.

Metal ores: If discovered, metal can enhance technological levels greatly. It is the most valuable material resource on the Riverworld. Metal is extracted from ores using chemical processes, electrolytic techniques, or high temperatures. (Note that an indestructible grail makes an excellent small cauldron for melting any sort of metal.) It is then purified and cast into molds or forged into shapes. Alloys such as duraluminum and steel are made during the purification stage by mixing ores and minerals.

Aside from the obvious uses of metals (better weapons and armor), metals pave the way to new technologies. Metal tools can increase efficiency. New power sources can be devised when metal components are available. Plumbing and electricity can be delivered to homes. Aircraft and armored riverboats can be constructed. Radios, telephones and computers can be manufactured. Given enough metal and manpower, civilization can be raised to TL7, with all the benefits and hazards that go with it.

From the Grails

The objects provided by the grails (see sidebars, pp. 13-15) can have many uses — not all of which were foreseen by the Ethicals. The GM should be *especially* generous with character points when someone figures out a useful and legitimate way to "abuse" grailgifts, because that person is out-thinking the Ethicals!

"reserve bank" is ludicrous, given how rapidly the nature of wealth can change. However, for comparison, a full grail (the contents of a grail after one discharge) is considered to be worth $10. This means the average Valleydweller "earns" $30 per day (three grailstone discharges), without doing any work at all.

Buying and Selling

As stated previously, most trade will be done by barter of labor, handicrafts and grail items. For example, someone might save his unwanted cigarettes and alcohol to gain something better in return (like passage on a boat). Nations with mineral resources will be able to use their wealth to trade for other desirables. Trade routes can evolve between nations, each possessing a unique type of metal or other resource (like manpower, or certain citizens with special skills).

Therefore, the value of materials is based on their scarcity. The value of handicrafts is based on the time it takes to reate them, plus the value of the materials. On the average, Rivervalley "grunt labor" can be had for $2 to $2.50 per hour, with skilled labor bringing $3 to $4 per hour, and rare expertise commanding whatever the market will bear. The following table lists relative values of common trade goods in the Rivervalley. (Weapons and armor are listed on pp. 49-50.)

Remember that the "$" is artificial, since most trade is by barter; consider $1 to be "one kiltcloth" if a specific comparison is needed. Also, because trade along the River is irregular, the value of unusual items will change *greatly* with supply and demand; all the metal prices shown here assume that a significant deposit is locally available. *Usually that won't be true!* The farther away a copper-producing area is, the more expensive copper becomes.

Grail-produced items will have the same value everywhere, based on the frequency with which they appear in the grails, and the general demand for the item. Note that dreamgum is no less common than liquor, but there is less demand for it (many Riverdwellers won't touch it under any circumstances). Therefore, it's cheaper.

Grails themselves are a special case. "Freebie" grails are incredibly valuable. Unowned "regular" grails still have value, even though once closed they cannot be opened. A closed grail can still be used as a weapon, building block, etc. An opened one is an excellent container, as long as nobody closes it! The *charruzz* cups from the grails are also useful; when someone dies, if his grail is open, the cups are immediately taken.

Item	*Value*
Cloth kilt	$ 1
Cube of dreamgum	1
Soap, comb, or shampoo from grail	1
6 oz. of lichen grog	1
6 oz. of average-quality liquor	2
10 cigarettes or equivalent	2
Bamboo (one dozen stalks)	2
Average grail meal, food only, no luxuries	3
10-foot bamboo-fiber rope	4
Teeth from one person, for ornament	5
Polished oak ring or ornament	8
Flint or chert (1 pound)	8
Grail contents after one avg. discharge	10
Grail with no owner, closed	10
Grail cup	10
Half-pound stone tool or weapon	10
Bone knife or spearpoint	15

Item	*Value*
Hornfish horn	$ 15
Copper ore (1 lb.)	15
Firestarter	20
Silver ore (1 lb.)	20
Hornfish or riverdragon tooth knife	20
1-lb. stone tool or weapon	20
Bamboo raft, 6' × 6'	30
Bamboo canoe	40
Grail with no owner, open	50
Gunpowder (1 lb.)	50
Bamboo hut, two-person	50
Aluminum ore (bauxite and other silicates, 1 lb.)	50
Copper, refined (1 lb.)	50
Phosphorus (apatite, 1 lb.)	80
Silver, refined (1 lb.)	90
Polished semiprecious stone	100 and up
Dead hornfish	100
Brass or refined aluminum (1 lb.)	100
Iron ore (1 lb.)	100
Nickel, refined (1 lb.)	300
Steel (1 lb.)	400
Hang glider (wood or bamboo)	500
2-man sailboat, 4 yards long	750
Dead riverdragon	2,500
Wooden building (1,000 sq. ft.)	8,000
"Freebie" grail	25,000

For large buildings, rivercraft or aircraft, determine how long the desired item wouldtake to build (see Chapter 3) and how much the materials would be worth, and compute a value. This will be the value in the area building it. The farther away it is from the source, the more it would be worth . . .up to the point where some items become useless because fuel, ammunition, etc., cannot be obtained.

Making Equipment

Most equipment the PCs will want (especially in a Resurrection Day campaign) will have to be made by hand. The Ethicals have provided basic provisions, but the rest is up to the Valleydwellers. There is a limited variety of raw materials in the Rivervalley, and the PCs will have to be creative in employing them to manufacture equipment.

The sidebar on p. B93 provides the rules for constructing items. Each item is considered the product of a *task* made up of *materials, man-hours, and success rolls*. The amount of material required for an item is equal to the item's weight on a pound for pound basis (ignore wooden hilts and so on.). For example, making a large knife, which weighs 1 pound, requires 1 pound of metal.

The *type* of materials is determined by the players and the GM. If an item requires more than one type of material, the GM decides what fraction of the total weight each type makes up.

Man-hours are divided into different skill requirements. Most tasks require a number of hours of ordinary labor (requiring either DX or ST rolls) in addition to hours devoted to skills. At the end of each 8-hour period, rolls are made by all participants and hours are accrued toward the project's completion. See p. B93 to determine working time, success and fatigue.

Manpower

People are perhaps the single most valuable resource on the Riverworld, given the rarity of minerals and metals. With the entire spectrum of human experience from which to choose, it is also the most abundant commodity. Player characters may seek out NPCs with special skills, or they may wish to hire themselves out to others.

The *Job Table*, p. 49, lists most types of work to be found in a civilized area of the valley. With the wide range of skills and tech level backgrounds available, the GM will have to be flexible in judging prerequisites. Note that there are no "Poor" jobs, since everyone's income (except grail slaves) is assumed to start at $900 a month, the value of the goods produced by their grail. Thus, job income levels are *in addition* to regular grail "income." The type of income is also variable; Valleydwellers may work for additional grail provisions, better living quarters, metal weapons and goods, or perhaps passage on a boat or airship.

The Job Table is explained on pp. B192-193.

Social Status

Social status will not exist on Resurrection Day (much to the chagrin of those who formerly had high status!). But as societies and nations develop, status will reappear.

The criteria for social status, and the requirements to maintain status (see p. B191) will vary from one society to the next. Some societies may be entirely cooperative and have no uneven distribution of wealth. In such societies, no one will have to spend their wealth in order to maintain position, even if they are important people within the society.

Larger societies, especially those with a purpose (e.g., to build some large craft), will probably be more socially stratified. The following table gives examples of social standing in a typical, fairly advanced Riverworld society. "Expenditures" includes one's own grail provisions, as well as luxury items, valuables and trade goods.

Level	*Expenditures*
-1: Grail slave	$ 0
0: Ordinary citizen	400
1: Soldier/craftsman	900
2: Trader/councilman	1,200
3: Scientist/engineer	2,000
4: Ruler (up to 1,000 people)	3,000
5: Ruler (1,000+ people)	5,000

In societies as small as those on the Riveworld, higher levels of status are both unnecessary and unlikely.

Below is a list of sample tasks and the man-hours required to complete them. The GM should use this list as a guideline when determining requirements for other tasks. The larger the task, the more people can effectively cooperate; the GM must use common sense. Two people could make a ten-foot rope in an hour. But 20 could not make it in six minutes. *Note that this is the time required to build something when the procedure is well known, not the time to invent it!* For rules on inventing new items (or, as will usually be the case on the Riverworld, re-inventing old ones with the materials at hand) see p. B186.

Task	*Hrs. required*
Make a 10-foot rope	2 hrs. DX *or* 1 hr. Survival
Make simple tools	2 hrs. DX *or* 1 hr. Survival
Make a simple weapon (spear, knife, etc.)	3 hrs. DX *or* 1 hr. Armoury
Make a complex weapon (bow, net, etc.)	12 -50 hrs. Armoury (much more for fine quality)
Make a suit of armor	50 hrs. Armoury
Build a small hut	8 hrs. Carpentry and 16 hrs. DX
Cut down a ton of lumber	15-25 hrs. DX *or* ST (see p. 61)
Build a set of furniture	16 hrs. Carpentry *or* Woodworking and 8 hrs. DX
Build 100' fort wall	60 hrs. ST and 12 hrs. Engineering
Make a small raft	24 hrs. DX *or* 8 hrs. Survival *or* 6 hrs. Carpentry
Build a larger boat	See pp. 60-61.

To get the value of a low-tech metal item, add the value of the time needed to make it (derive this from the Job Table, or just use $20 per day of unskilled labor, $30 for skilled labor, more for specialists) to the value of the metal. Usually the cost of the metal will outweigh the value of the labor!

For high-tech goods, there is no fixed rule; it depends on who is making the goods and why. Always, though, the price gets higher as the source becomes more distant.

Ethical Equipment

It is possible that some Valleydwellers will obtain devices made by the Ethicals. These are treated extensively in Chapter 4.

Prehistoric Human Races

Players may choose to create characters from one of two prehistoric races, variants of *homo sapiens* that either became extinct or are ancestors of modern man (no one knows which). Prehistoric humans are created in the same way as regular characters, but a race is bought as an advantage. Attributes are purchased normally, then modified by the race type (for example, a Titanthrop's ST is multiplied by 2.5; round down). Each race also has "automatic" advantages and disadvantages that must be taken when the race type is selected. These do not count against the normal limit for advantages and disadvantages, and they are *in addition* to the "free" advantages every ***GURPS Riverworld*** character gets.

Neanderthals ***15 points***

Neanderthal man (*Homo sapiens neanderthalensis*) thrived in Europe and the Middle East from about 125,000 B.C. until about 35,000 B.C., when he disappeared rather suddenly. The Neanderthal represents everyone's common perception of prehistoric man: powerfully built, living in a glacial environment,

ier than modern humans, and more heavily muscled, but no more so than many amateur weightlifters today. Their facial features are distinguished by exceptionally large jaws and beetle brows.

Advantages and Disadvantages: Neanderthal man is considerably more robust than modern man. Neanderthal characters have ST+2, IQ-1, and normal HT and DX. They have the disadvantage of Sense of Duty toward their religious beliefs. In a ***Riverworld*** campaign, all Neanderthals possess the advantage See Ethical Markings (see p. 21).

Skills: Neanderthals will be proficient in weapon skills, especially spears (both melee and ranged). They were great hunters, so Tracking and Stealth should be considered. Their language is more complex than earlier humans, but a Neanderthal's language skill cannot exceed 10. They learn other languages using the normal rules.

Psychology: Neanderthals were organized into tribes or bands, usually with a leader. Sex roles were defined by the situation, but usually men hunted and women gathered food and cared for the young. Great hunters and the elders were the most respected in the tribe.

Neanderthal man is the first hominid to practice what might be truly called an animistic "religion." They were connected to the spirit world through their shamans, and their environment, especially animals, had symbolic significance. They believed in a spirit or soul which survives the body's death. It was thought to inhabit the head of the body (the head was often separately buried after death). Their lives were marked with rites and celebrations at birth, puberty, marriage and death.

On the Riverworld, Neanderthals will at first be at an advantage since they will be able to readily adapt to the planet's primitive conditions. The lack of animals means they can turn their hunting skills towards self-defense. Their ability to see the body markings on the foreheads of others will support their view that the soul resides in the head. They will have a difficult time fathoming any concept of artificial souls or bodies, maintaining that the spirits placed them here in a land of abundance and little danger.

Titanthrops — *100 points*

The Titanthrops (*Titanthropus clemensi*) were a massive human species that became extinct some 50,000 to 100,000 years ago. Their extinction was probably due to the fact that they were 800-pound bipeds, and could not efficiently migrate because of sore feet. They were never numerous, and no fossil evidence of their existence was ever discovered on Earth. It was only on the Riverworld that they became known to the rest of humanity.

Titanthrops are huge, stocky fur-covered men, averaging eight feet or more in height. Their faces are surmounted by a low forehead and a bony ridge that circles the eyes. The most distinguishing facial feature of the titanthrop is its large, long nose, rivaling that of the proboscis monkey. Despite their appearance, titanthrops are fairly intelligent and capable learners, and some of them (like Joe Miller) are smarter than most *Homo sapiens.*

On the Riverworld, the titanthrops occupy a territory just north of Virolando and stretching into the colder areas; their greater bulk makes them more cold-tolerant than men (treat any cold temperature as 10° warmer, but any hot temperature as 10° hotter as well). Their grails are, of course, huge, but they fit the same grailstones; they produce great quantities of simple food and no tobacco or alcohol.

Advantages and Disadvantages: Titanthrops have 2.5×ST. Add 2 feet to average height based on unmodified ST. Average weight for an 8-foot titanthrop is 800 lbs.; adjust up and down at 20 lbs. per inch. They are also +2 on HT due

Kazz

Fictional; born 79,163 B.C., died 79,110 B.C. (TL0).

Race: Neanderthal.

ST 16, DX 11, IQ 9, HT 14

Basic Speed 6.25; Move 6

Dodge 6

Appearance: 5'4", 180 lbs; squat, burly, low forehead.

Advantage: See Ethical Markings (see p. 37).

Disadvantages: Odious Personal Habits (see below); Unattractive by *Homo sapiens* standards.

Skills: Armoury/TL0-15; Axe/Mace-16; Gesture-10; Shipbuilding/TL0-10; Spear-14; Spear Throwing-14; Survival (Forest)-16; Survival (Plains)-13; Tracking-15.

Language: Neanderthal (his tribe)-8.

Kazz (Kazzintuitruaabemss: "He-Who-Slew-The-Long-White-Tooth") was a Neanderthal hunter, living in what is now France. He lived to a ripe old age by the standards of his kind, eventually dying during a cold winter.

He was one of the first people Richard Burton met on his resurrection, and became a loyal follower. Burton had to break him of certain uncivilized habits, including public urination and cannibalism.

Burton valued Kazz both as a loyal thug and as a useful expert on primitive handicrafts. In return, Kazz accepted Burton as his chief, and was always loyal. Kazz often showed more guile than modern men expected of a "primitive." At one point, when Burton's party was captured, Kazz was offered the chance to join the captors. He did so, apparently without a second thought, but later came to free Burton; it had all been a ruse!

Joe Miller

Fictional: lived sometime before 50,000 B.C. (TL0)
Race: Titanthrop.
ST 30, DX 13, IQ 13, HT 13
Basic Speed 6.5; Move 6
Dodge 8
Appearance: see *Titanthrops*, p. 47.
Advantages: Acute Taste and Smell +2; Ally (Sam Clemens); Charisma +1; Toughness +1.
Disadvantages: Gigantism; Hideous Appearance; Stuttering (lisp).
Quirks: Fond of stupid jokes; very proud of his huge nose; extremely loyal; likes beer; does not like to fight but does so very effectively.
Skills: Axe/Mace-16; Brawling-16; Diplomacy-12; Survival (Plains)-15; Tactics-14; Tracking-14.
Languages: Ancient Egyptian-11; English-12; Esperanto-11; Titanthrop-11.

Joe Miller (the name he was given by Sam Clemens), was resurrected near the headwaters of the River along with the rest of his species, the titanthrops. He primarily lived as he had on Earth, sleeping, eating, mating, etc., until the appearance of a large, dragon-shaped boat on the river. The boat was manned by ancient Egyptians led by the Pharoah Ikhnaton, who was seeking the River's source. They convinced Joe to come aboard, calling him "Tehuti" after his resemblance to one of their gods. The group was able to reach the Polar Sea, where Joe caught a glimpse of the Dark Tower. Before they reached the cave provided by Loga, Joe slipped and fell into the sea.

He was translated among a group of 10th-century Norsemen and met and befriended Sam Clemens. He became Sam's loyal bodyguard, and remained so until Sam perished in the Battle of Virolando. He then joined Burton's expedition to the Polar Sea as a guide, and, ironically, fell into the sea once again.

Like the others of his race, he does not enjoy fighting but becomes very violent when the need arises. He does 3d thrust damage, 5d+3 swinging. His preferred weapon is a huge club or axe; as Sam's bodyguard aboard the Riverboat, he carried an axe so huge that ordinary men had trouble lifting it. With that axe, he would do 6d cutting damage!

Joe is tremendously loyal and sincere. Whether or not he is typical of all titanthrops is uncertain. It is rare that PCs will encounter him outside the company of Sam Clemens. Joe was quick to criticize Sam's driving obsessions, and he may be the easiest route to appeal to Sam's better nature.

to their size. They have 1 point of Toughness, and possess Acute Taste and Smell (+2). IQ is at -1; DX is normal.

They have the disadvantages, relative to the human pygmies who dominate the Rivervalley, of Gigantism and Hideous Appearance. Because they are massive bipeds, all titanthrops have flat feet, and fatigue twice as fast as normal when traveling on foot (see p. B134).

Skills: Titanthrops come from hunter/gatherer tribes; their skills should chiefly be Survival, Tracking and other skills related to day-to-day survival at TL 0. Their tremendous ST is a weapon in itself.

They are as intelligent as most humans (and more so than many), and can learn any skill if they set their mind to it. Their native tongue is primitive, but they can become proficient with any human language, albeit with some sort of speech impediment.

Psychology: Titanthrops are highly tribal and territorial. Large groups of them will tend to fight among themselves; their battles are very destructive. This territorial imperative is primarily due to their incapacity for long travel. Single titanthrops isolated from others will find it easy to coexist with humans. They are tremendously loyal, and anyone befriending one has a friend for life. They are also great mimickers and will take on the personality traits of those close to them.

In spite of their massive strength, titanthrops are not bullies, and will avoid a fight if they can. *All* of the titanthrops who were exposed to Second Chancer teachings joined the Church. But once titanthrops enter battle, they become mindless killing machines (Berserk is a recommended, but not required, disadvantage). They will always defend an offspring, mate or close friend. Remember that titanthrops are basically human — just a little funny-looking.

Job Table

In addition to the income shown here, everyone with a grail gets $30 worth of food and goods per day, or about $900 a month. Subsistence would require some $300 worth of this. This means that anyone who saves all the luxury goods from their grail has an extra "disposable income" of trade goods worth $600 per month. A person who has had the ill fortune to lose his grail will have an extra expense of at least $300 per month for food, soap, and so on.

Job (Required Skills), Income	*Success Roll*	*Critical Failure*
Struggling Jobs		
Unemployed* (none), $0	IQ	2d/3d
Grail slave (none), subsistence only	IQ-1	2d/3d
Hired hand/bodyguard (ST12+ and/or weapon skill 13+), $600	PR-1	LJ, 3d/LJ, 6d
Laborer (ST 10+), $500	ST-1	LJ
Local courier (ST 10+), $550	ST	LJ/3d, LJ
Average Jobs		
Soldier (Weapon skill 14+), $750	PR	3d/LJ, 5d
Sergeant (Weapon skill 16+, Leadership 14+), skill × $50	Best PR	2d/LJ, 4d
Long-distance courier (Weapon or Diplomacy skill 14+), $800	PR	3d/LJ, 5d
Artisan* (Craft skill 12+), Skill × $50	PR	LJ/-1i, LJ
Fisherman* (Fishing 12+), $650	PR	2d/3d, lose boat
Boat/airship crewman (Seamanship or Airshipman at 14+), $800	PR	LJ,2d/LJ, 5d
Teacher* (Church of the Second Chance) (Second Chance Theology 12+), $600	PR	-1i/mob attacks, 4d
Merchant* (Merchant 13+), Skill × $60	PR	-1i/-2i
River Pirate* (Weapon, Seamanship, Leadership all 14+), $500 × Reputation	Worst PR	-3i, 2d/4d, lose boat
Comfortable Jobs		
Shipbuilder (Shipbuilding or Airship-building 12+), $800 + [$200 × (PR-11)]	PR	-3i/LJ
Skilled Craftsman (Craft skill 16+), Skill × $80	PR	-1i/LJ
Technician (appropriate skill 15+), Skill × $80	PR	-3i/LJ
Pilot (Pilot aircraft 13+), $1,000 + [$100 × (skill-11)]	PR	3d/LJ, 5d/LJ
Diplomat (Diplomacy 12+, Status 1+), effective skill × $100	PR	LJ/LJ, 1d
Administrator (Administration 12+, Diplomacy 10+), $2,000	Worst PR	LJ
Spy (Acting 12+, Stealth 10+, IQ 12+), $2,000	Worst PR	-2i/LJ, 4d
Military Leader (Leadership 13+, Strategy or Tactics 11+), worst skill × $100	Best PR	2d/4d, LJ
Wealthy Jobs		
Grail Slaver* (Politics 12+), $400/slave	PR-2	-2i/LJ (slaves escape)
Ship Captain (Leadership 12+, Seamanship/Airshipman 12+, Status 2+), $300 × (Status + Leadership)	Worst PR	-3i/LJ, 4d (mutiny)
Area leader (Politics 13+, Administration 12+, Status 2+), $500 × (Administration + Status)	Worst PR	-4i/LJ, 4d

*Freelance occupation — income is earned when roll is made exactly. See p. B193 for more information on jobs.

Equipment

Melee Weapons

In a non-metal-using area of the Valley, the commonest melee weapons would be clubs and quarterstaffs (as per the ***Basic Set***) and stone knives, swords, spears and axes (see the table below). Bone and hornfish horns are also used, but are treated as "stone" for the purposes of this table. PCs can develop other weapons (e.g., bone stilettos, two-handed stone axes), and assign stats by analogy with those on the table.

In an area that does not even have flint or chert available, knives and spears can be made from bone or bamboo.

In a metal-using area of the valley, any low-tech weapon from the ***Basic Set*** might exist. Use the other stats given there, though cost will fluctuate with the local economic situation. The value of low-tech metal weapons, as a rule, is 110% of the value of the weight of metal they contain.

Primitive Weapon Materials

Bamboo is treated as "average" for determining breakage. A bamboo weapon loses its edge quickly (after a day's use) and must be resharpened by an hour of rubbing it on rock; after three resharpenings, the weapon is worthless. The cost given for these weapons is ***higher*** than for stone or bone, because they are harder to make! Thus, they're never seen in an area that has other materials available.

Stone and bone are treated as "cheap" for determining breakage — and, of course, cannot be melted down and recast when they break. Flint, obsidian and similar materials actually take a very good cutting edge, but they are brittle. Bone is not as sharp but is much more workable.

Hand Weapons

Weapon (Skill)	*Dmg. Type*	*Dmg. Amt.*	*Reach*	*Cost*	*Wt.*	*Min ST*	*Notes*
Stone knife (Knife)	cut	sw-3	C,1	$10	½	—	Max. dam. 1d+1
Bamboo knife (Knife)	imp	thr-1	C,1	$20	½	—	Max. dam. 1d+1
Stone-headed spear (Spear)	imp	thr+2	1,2*	$20	4	9	
Bamboo spear (Spear)	imp	thr	1,2*	$15	3	9	
Stone axe (Axe/Mace)	cut	sw+1	1	$40	4	12	1 turn to ready after use.
Stone sword** (Shortsword)	cut	sw-1	1	$80	2	7	
	cr	thr	1				
Stone sword** (Broadsword)	cut	sw	1	$100	3	10	
	cr	thr+1	1				
Grail (DX)	cr	special	1	$10	1	—	Damage depends on contents.
Firestarter (Knife)		special	C,1	$20	neg.	—	see below

*Must be readied for one turn to change from long to short grip or vice versa.
**A "stone sword" is made by edging a fire-hardened wooden blade with sharp stone chips.

Notes

Grail: A grail can be swung by its handle or strap to hit a foe. It is a clumsy weapon; the "to hit" roll is made on basic DX. Damage is crushing; swing-1 for an empty grail, up to swing+1 for a grail full of rocks. It can also be used to bludgeon opponents, doing thrust+1 damage. The price given for a grail is the cost for a closed, unowned one.

Firestarter: Firestarters (see p. 15) can be used as weapons, with Knife skill. A successful hit burns the affected area for 1d-3 damage (no minimum).

Ranged Weapons

Most of the low-tech ranged weapons on p. B207 can be made by enterprising characters and will be widely available. Stone knives will do one point less of damage than listed when thrown. An excellent bow can be made from the mouth bones of the Riverdragon; treat this as a compound bow. Its value is $500.

Guns require metal and gunpowder. Most guns listed on pp. B208-209 (TL7 or less) can be made by a skilled armourer, given the proper materials. Players and GMs may invent and build their own variations on standard firearms. See p. 45.

Lead is expensive, and rarely wasted as ammunition. Many rifles use wooden bullets. Parolando pistols use a big, slow, short-ranged plastic round that leaves a smoke trail, giving a +1 to a target's Dodge roll. It also acts as a "tracer," giving a +1 to hit for any shot made within 2 seconds of a previous shot.

High-tech metal weapons are extremely valuable, both for their metal and for the labor that went into them; their value varies so widely along the River that the GM may set it as he likes. The weapons described below are those built by Clemens' nation of Parolando, and the prices are Parolando trade prices. Ammunition might average around $10 per shot, when it is available at all.

The Ethicals' weapons are discussed on p. 92.

Gunpowder

Gunpowder is available in many places along the River. Of the three basic components, *charcoal* is easily made from wood as soon as a stone oven can be built; very small amounts can be made by filling a grail with wood chips and cooking it in a fire. *Saltpeter* occurs naturally in a few areas, and is also deposited as the end-product of the "powder worm," which feeds on human excrement. *Sulfur* is somewhat more rare, but small deposits exist in many areas, and their distinctive color makes them easy to recognize. Black powder, the simplest form of gunpowder, is easy to make — though there are risks; see *Chemistry*, p. 41.

Gunpowder can be used for simple bombs, for rocket propulsion and warheads, or for gun ammunition.

Weapon	*Malf*	*DMG*	*SS*	*Acc*	*½D*	*Max*	*Wt.*	*RoF*	*Shots*	*ST*	*Rcl*	*Cost*	*TL*
Parolando Mark I pistol, .60, BP, FL	14	1d+1	12	1	30	50	3	1/8	1	10	-1	$2,500	5
Parolando Mark II pistol, .69	15	1d+2	12	1	40	100	4	3~	4	10	-1	3,000	6
Parolando Mark III pistol, .69	crit	1d+2	11	1	40	120	3	3~	4	10	-1	3,200	7
Parolando Mark IV pistol, .69	crit	1d+3	10	1	50	120	2.5	3~	4	10	-1	3,500	7
Parolando Rifle, .48, BP, FL, BL	14	1d+2	14	4	40	150	8	1/10	1	12	-2	4,500	6
Parolando Heavy Rifle, .80	crit	3d	14	6	50	200	10	1/4	1	12	-3	6,000	7

Armor

The "towelkilt" cloths provided to the Valleydwellers are of a very tough, though light, material. Worn as ordinary clothing, they have no PD. However, cutting or impaling attacks which roll less than 6 hits of damage will not break the material; instead, they are converted to crushing attacks. Figure damage normally, but do not multiply it. Attacks which do 6 or more hits of damage will penetrate the cloth and do normal damage.

Valleydwellers who make a point of wearing layered cloths (as armor, or just for protection against the morning chill) have the equivalent of armor with PD 1; cutting or impaling attacks which do less than 8 hits of damage are considered crushing. Enough cloth to give more protection than this would limit the wearer's mobility unacceptably.

Any leather armor listed in the ***Basic Set*** can be fashioned on the Riverworld; use the same costs, weights and statistics. Leatherworking is a valued skill!

Where metal is available, metal armor may be made. Base cost on local value of the metal; other stats are as per the ***Basic Set***. To recreate the "duraluminum" created by Parolando's engineers, use the "durasteel" stats from the ***Basic Set***.

Noteworthy Personalities

This section describes some of the major characters of the *Riverworld* novels. Among the dozens of personalities with which Farmer filled his books, these have been chosen either for their influence in the events of the story, or the likelihood of player characters encountering them on their own adventures. Each one is designated as either a historical figure or a fictional creation of Farmer.

These characters are primarily intended for the GM to use as NPCs. Some of them are quite suitable for player characters, and whole campaigns could be set up for such a situation. For example, Frigate, Nur, Mix and London spent many years adventuring on the *Razzle Dazzle* that were never chronicled by Farmer. Note that point totals are not given for these characters; the GM may modify them freely, depending on the use to which they will be put. In particular, the later the campaign takes place, the more likely it is that any individual will know Esperanto and have other "Riverworldly" skills unrelated to his life on earth. All skills are at the base TL given for the character unless specified otherwise.

Note to players: If you have *not* read the *Riverworld* books, *skip this section.* It contains information that would ruin your enjoyment of the novels and of the campaign.

Sir Richard Francis Burton

Historical: born 1821, died 1890 (TL5)
Nationality: English
ST 12, DX 14, IQ 15, HT 14
Basic Speed 7.25; Move 7
Dodge 8; Parry 16

Appearance: Tall (6'1"), broad-shouldered, commanding, with straight black hair, high cheekbones, and deeply cleft chin. He could pass for an Arab.

Advantages: Charisma +3; Combat Reflexes; Eidetic Memory (first level); Handsome; Language Talent (+3); Literacy; Strong Will +3.

Disadvantages: Dependent (Gwenafra, until 1 A.R.); Obsessions (to keep moving — "Allah afflicted me with a love of travel" and to enter the Dark Tower).

Quirks: Insomnia; loves to travel incognito or use false names; counts compulsively; has high, feminine, crystalline laugh; believes silver is good for him.

Skills: Anthropology-17; Area Knowledge (India)-17; Boating-14; Black Powder Weapons-19; Disguise-18; Fencing-21; First Aid-14; Guns-16; Hypnotism-15; Knife-14; Leadership-18; Linguistics-18; Literature (Arabic)-18; Occultism (Spiritualism)-14; Physician-12; Poetry-16; Savoir-Faire-15; Survival (Jungle)-17, Survival (Mountain)-16; Swimming-14; Theology-15; Writing-17. (Burton has many other talents at impressive levels; he was "a blaze of light without focus.")

Languages: Arabic-17; English-17; Esperanto-12; Hindustani-16; Persian-16; also knows many other Eastern languages at skill levels 12 to 17.

A man of remarkable personal achievement, Burton was highly regarded as an explorer, adventurer, linguist, translator, author, poet and swordsman. Although parts of his reputation were unsavory (one of his nicknames was "Ruffian Dick,") he was a man of great knowledge, and spent much of his life traveling as a British diplomat.

A scholar of Eastern and Islamic culture, Burton was the first European to enter the "forbidden" cities of Harar, Medina and Mecca. His famous quest for the source of the Nile (with John Speke) resulted in the discovery of Lake Tanganyika. Burton is most widely known as the translator of the definitive English version of *The Thousand Nights and A Night (The Arabian Nights)*, published in 16 volumes between 1885 and 1888. Burton died in Trieste, Italy, where he had been a diplomat since 1872.

On the Riverworld, Burton led a singularly important second life. He was awakened in the pre-resurrection chamber by Loga as a demonstration of the Riverworld's non-mystic origins. After his resurrection, Burton immediately sought explanations for the planet's mysteries. He explored the River for a time in his boat, the *Hadji.* When warned that he was about to be questioned by the Ethicals, Burton eluded capture by "riding the Suicide Express," i.e., killing himself time and time again in order to be translated elsewhere in the Valley. He died and was resurrected 777 times, creating the legend of the "Loping Lazarus" or "Richard the Rover." When he was finally captured and brought before the Ethical Council of Twelve, Burton's memory was scanned for clues to the identity of the renegade, but Loga had hidden parts of it through the Computer.

Returning to the Valley, Burton was reunited with his comrades and began discovering that many of them were Ethical agents. Managing to board King John's riverboat, Burton fought Clemens in the Battle of Virolando, duelled Cyrano de Bergerac, and organized a party to reach the Polar Sea.

After many adventures, Burton and his group reached the Dark Tower, discovered that its inhabitants had been murdered, and learned that the Computer was in trouble and all of humanity with it. Alice saved the Computer, and Burton's group began enjoying the immense power of the Ethicals. At the end of the saga, Burton was planning an expedition to the stars.

Burton is a born leader who is indispensable in any dangerous situation. He is driven by his desire to confront the Ethicals, and has a tremendous capacity for resourcefulness. He has a restless nature, and will seldom stay in one place for too long. PCs encountering him will find him strong-willed but compassionate. They would do best to follow him, if they can put up with his arrogance, impatience and driving need to travel.

Samuel Langhorne Clemens

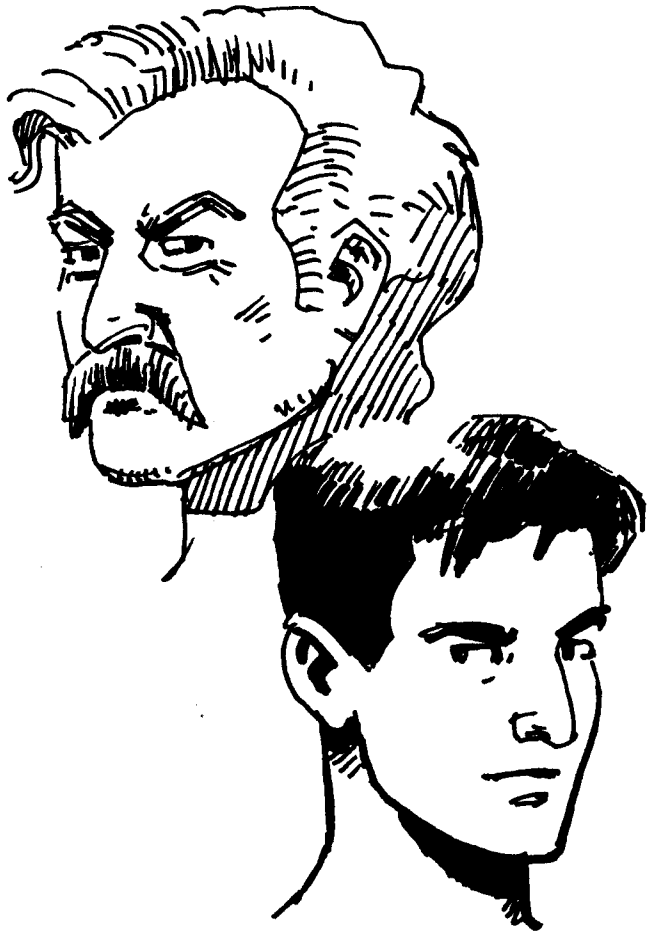
Historical: born 1835, died 1910 (TL5)
Nationality: American
ST 10, DX 11, IQ 15, HT 12
Basic Speed 5.75; Move 5
Dodge 5; Parry 5

Appearance: Medium height, with narrow shoulders and a large head; bushy reddish-brown hair and eyebrows; usually scowling; piercing blue eyes and Roman nose.

Advantages: Ally (Joe Miller); Charisma +2; Literacy. (In a campaign using the *Gadgeteer* rules from ***GURPS Supers*** or ***GURPS Cliffhangers,*** Clemens definitely has this advantage.)

Disadvantages: Addiction (tobacco); Cowardice; Obsessions (at different times, to seek his wife Livy, to build the greatest riverboat in history, to get vengeance on King John Lackland); Stubbornness.

Quirks: Pessimistic; guilt-ridden; authoritative but detests authority, especially religion; gregarious and loves to meet strangers and impress them; loves to play with and invent new gadgets.



Skills: Armoury/TL5-7, each at 16; Black Powder Weapons-16; Boating-16; Engineer (Boats)-18; Guns/TL5-12; History-14; Journalism (PS)-18; Leadership-14; Merchant-12; Printing (PS)-12; Public Speaking-16; Shortsword-10; Steamboat Piloting (Mississippi)-21; Strategy-12; Tactics-11; Writing-20.

Languages: English-18, Esperanto-10.

Sam Clemens was a noted American novelist and humorist. Born in Hannibal, Missouri, Clemens was a printer's apprentice until the age of 18. He then became a wanderer, a riverboat pilot on the Mississippi, and finally a journalist. He began publishing books in 1869 under the pen name of Mark Twain (a riverboating expression). The next twenty years saw the emergence of *The Adventures of Tom Sawyer, The Prince and The Pauper, A Connecticut Yankee in King Arthur's Court,* and his masterpiece *Huckleberry Finn,* widely regarded as the greatest American novel ever written. In the 1890s, Clemens attempted to patent and market an automatic typesetter, but failed and lost much of his fortune. His later works were characteristically pessimistic, reflecting the guilt-ridden conscience of their creator.

Clemens' Riverworld life was marked by single-minded ambition. After the Resurrection, Clemens was determined to find and be reunited with his wife, Olivia. He built a large sloop and teamed up with a 10th-century Norseman named Erik Bloodaxe and a titanthrop who Clemens dubbed Joe Miller. He was contacted by the Mysterious Stranger, who told him of a large quantity of metal to be found up-River. Clemens followed the lead and discovered a metal-rich meteor. There he founded the nation of Parolando by forming an alliance with King John Lackland, the sole purpose of which was to construct a large metal riverboat. After many trials and tribulations (including the appearance of his wife in the company of Cyrano de Bergerac), the riverboat was completed and immediately hijacked by King John. Clemens then swore revenge upon John.

Clemens built a second, even larger boat (this one equipped with a "secret weapon," a laser built by right-hand-man Milton Firebrass) and pursued King John up-River. He finally encountered him at Virolando and a cataclysmic battle ensued. Although he had a bigger, newer craft and more and better weapons, Clemens barely achieved a stalemate; as a war leader, he was indecisive and relatively unskilled. Clemens perished from a heart attack upon seeing his nemesis Bloodaxe, who Clemens had murdered in cold blood when Parolando was established.

Clemens is a passionate man, consumed by his will to triumph in whatever goal he has set for himself. He is ravaged by guilt, much of it revolving around his family. Paradoxically, he has a determinist philosophy, believing that everyone does things because they are destined to do them. His concern for the Ethicals and the purpose of the Riverworld is secondary to his personal ambitions. PCs will find him witty, ornery and obstinate. Anyone crossing him will have to answer to his titanthrop bodyguard, Joe Miller.

Gaming note: On Earth, Steamboat Piloting is a Mental/Hard professional skill, requiring detailed knowledge of a particular river. On the Riverworld, experience gained on any one Earthly river is as good as any other. The River has no sandbars and comparatively few snags, shoals, and so on.

Savinien de Cyrano II de Bergerac

Historical: born 1619, died 1655 (TL4)
Nationality: French
ST 13, DX 16, IQ 14, HT 14
Basic Speed 7.25; Move 7
Dodge 8; Parry 16

Appearance: Very tall and thin, with long arms. Hair and eyes are dark. His complexion is dark; his face is long and narrow, with a weak chin and a huge hooked nose that rivals a titanthrop's.

Advantages: Combat Reflexes; Empathy; Literacy.

Disadvantages: Code Of Honor (Gentlemen's); Ugly (large nose).

Quirks: Proud of his huge nose but sensitive about it; prefers to be called "Savinien" but will answer to "Cyrano"; speaks elaborately, with many French phrases in his English; very emotional, and cries easily; arrogant in his belief that he is the best swordsman in history.

Skills: Acting-14; Black Powder Weapons-14; Fencing-21; History-14; Savoir-Faire-14; Sex Appeal-12; Strategy-12; Tactics-14; Writing-16. (In Parolando, he learned to fly an airship: Airshipman-14; Pilot/TL7 (Airship)-16.)

Languages: French-16; English-12; Esperanto-12.

Cyrano was a famous author and dramatist. He spent the first part of his life in a distinguished military career, but turned to writing to expound his freethinking philosophy. He penned bitingly satirical works, and was one of the first "science fiction" writers, creating fantasies about lunar voyages. His reputation as a flamboyant swordsman comes chiefly from the play *Cyrano de Bergerac* by Edmond Rostand; however, it is likely that the fictional Cyrano had his roots in reality.

On the Riverworld, Cyrano played the part of the "complete swashbuckler." He met and fell in love with Sam Clemens' wife, Olivia. He later traveled to Parolando, looking for an industrial nation that could "put good steel in his hand" — without his rapier, he was incomplete. In Parolando he befriended Clemens (despite Clemens' initial jealousy) and aided him in his struggle against King John. He also helped Firebrass build and launch the *Parseval.* He was slain by Alice after a gentlemen's duel with Burton during the Battle of Virolando.

Cyrano possesses an innate scientific curiosity. He will aid anyone in the pursuit of truth, and is honorable and loyal. He considers himself the best swordsman in the Valley, and indeed, of everyone he encountered during his travels, only Burton gave him an equal match.

Peter Jairus Frigate

Fictional: born 1918, died 1983 (TL7)

Nationality: American

ST 11, DX 12, IQ 16, HT 12

Basic Speed 6; Move 6

Dodge 6; Parry 9 (Karate), 6 (sword)

Appearance: Tall (6'); looks very handsome, until he turns sideways to reveal a comically craggy profile. Dark hair with a reddish tint; squinty, hazel-green eyes. Thin lips; talks like Gary Cooper.

Advantages: Attractive; Common Sense; Language Talent +1; Literacy.

Disadvantages: Addiction (tobacco); Pacifism (self-defense only).

Quirks: Given to queasiness (not enough for a disadvantage); on Earth, was very interested in Burton; self-deprecating humor.

Skills: Airshipman/TL7-11; Black Powder Weapons-15; Bow-17; Fast-Draw (Arrow-16); History-14; Judo-19; Karate-14; Literature (Adventure fiction)-16; Piloting/TL6 (Single-engine prop)-15; Research-16; Seamanship/TL6-12; Shortsword-12; Theology-13; Writing-16.

Languages: English-16; Esperanto-10; Latin-12; at least two dozen others, including several American Indian languages, at levels of 4 to 8 (ability to recognize the language and use a few phrases).

Pete Frigate was born in Terre Haute, Indiana. His father was a traveling salesman, and Pete's youth was spent in various parts of the Midwest before settling down in Peoria, Illinois. He was a naval pilot during WWII before attending Bradley University to study creative writing. He spent his adult life in Peoria writing science fiction. One of his unrealized aspirations was to write a definitive biography of Sir Richard Francis Burton, and he was delighted and impressed to meet the real Burton on the Riverworld, seeing right through his disguise and alias.

Frigate wanted to reach the Polar Sea, and obtained passage on the *Razzle Dazzle,* captained by Jack London and Tom Mix. Despite their assumed names, Pete immediately recognized his childhood heroes. He kept this to himself for 26 years of travel, but eventually confronted them with their identities and learned from them of the Mysterious Stranger and his doings. When the *Razzle Dazzle* stopped in metal-rich New Bohemia, Frigate proposed building a balloon to more quickly reach the Polar Sea. During the voyage he became a student of Sufi master Nur el-Musafir. After a close encounter with the *Parseval,* the balloon crashed, but Frigate and his friends escaped unharmed.

Frigate then gained passage on King John's boat. He survived the Battle of Virolando and joined Burton's expedition to the Polar Sea. Once inside the Tower, Frigate utilized the Ethical technology to do scholarly and moral research. He also became close friends with Burton.

Peter Frigate is pacifistic and (at first) somewhat given to queasiness. Nevertheless, he fights fiercely when he has to. He has a tremendous interest in history and religion, and views the Riverworld as an academic opportunity.

Frigate's Riverworld life was confused by the fact that an Ethical agent was posing as him (in fact, the real Frigate does not appear until late in the series; the character in *To Your Scattered Bodies Go* is the impostor). Frigate theorized that the Ethical was his older brother who died as a baby. Since his brother would have been resurrected on the Gardenworld, it is possible that he was recruited by the Ethicals to spy on Burton.

The Frigate impostor, who stuck close to Burton until he was unmasked, is as brave and talented as the real one. He should be played exactly like the original Frigate except for the fact that he is a loyal Ethical agent.

Hermann Göring

Historical: born 1893, died 1946 (TL6)

Nationality: German

ST 10, DX 12, IQ 13, HT 12

Basic Speed 6; Move 6

Dodge 6; Parry 6

Appearance: Medium height, blond and blue-eyed, round-faced, with Aryan features.

Advantages: Attractive; Clerical Investment (Church of the Second Chance, after 20 A.R.); Eidetic Memory (first level); Literacy; Strong Will +1.

Disadvantages: Bad Temper; Historical Reputation (-4 as Nazi war criminal), Stubbornness. At various times during the story, he was afflicted with Addiction (Dreamgum), Gluttony, Megalomania and Paranoia.

Quirks: Guilt-ridden.

Skills: Administration-16; Economics-14; Gunner-18; Leadership-14; Piloting/TL6 (Single-engine prop)-18; Politics-16; Shortsword-12; Tactics (Aerial)-17; Theology (Church of the Second Chance)-13.

Languages: English-10; Esperanto-13 (after 20 A.R.); German-15.

Göring was born in Bavaria, the son of a colonial official. He was separated from his parents at an early age. At ten years old, he acquired a glandular condition, and when World War I started he developed arthritis, which kept him out of infantry service. He joined the Luftwaffe, and by the end of the war had shot down 30 enemy planes. After the war, he became a flight chief in Sweden, and in 1923 joined Hitler's National Socialist party. Göring was wounded after the unsuccessful Munich Putsch and became addicted to morphine, a habit to which he would return at intervals for the rest of his terrestrial life. He rejoined Hitler in 1931, and when Hitler rose to power he was chosen to reform the Luftwaffe. In 1939, he was promoted to Field Marshal and Economic Minister of The Reich. When Germany had advanced to its greatest extent, he was named Hitler's deputy, the one to succeed him after death. By the time Berlin fell, Göring had been blamed for the Luftwaffe's inability to stop the Allied bombings. He attempted to flee but was arrested and tried at Nuremberg. After being sentenced to hang for war crimes, Göring swallowed cyanide capsules in his cell and died.

On the Riverworld, Göring quickly sought and found power, becoming a grail slaver. When his "mini-empire" crumbled, he was killed and translated many times (usually in the vicinity of Burton) and developed an addiction to dreamgum. He almost lost his sanity to the mind-altering gum, but instead converted to the Church of the Second Chance. He made a pilgrimage to Virolando and became a missionary. After carrying the message of the Church to many parts of the Valley, he returned to Virolano to act as a liaison in the dispute between Clemens and King John. After the battle, he tried to join Burton's expedition but was refused. He followed Burton's group alone and made his way into the Tower. He volunteered to breach the Computer's defenses to save the *wathans*, but perished in the process.

Göring's disposition will vary with the time period. Initially ruthless and opportunistic, he became half-crazed (almost pathetic) once the dreamgum took over his psyche. After his conversion, Göring was a devout follower of the Church's teachings and was filled with remorse over his past. The GM should modify his disadvantage list depending on the time period of the campaign.

Jill Gulbirra

Fictional: born 1953, died 1983 (TL7)
Nationality: Australian
ST 13, DX 14, IQ 16, HT 14
Basic Speed 7; Move 7
Dodge 7; Parry 12 (fencing), 10 (quarterstaff), 9 (karate)
Appearance: Very tall, slim but wide-hipped, deeply tanned, with russet hair and eyes, buck teeth and a hawk nose. Her smile is wide and pleasant, but rarely seen.
Advantages: Alertness; Literacy; Strong Will +3.
Disadvantages: Intolerance (men); Odious Personal Habit (preaches feminist dogma at the drop of a hat); Overconfidence; Stubbornness.
Quirks: Cold demeanor; doesn't easily trust others; speaks with a pronounced Aussie accent; lives to fly; militant feminist.
Skills: Airshipman/TL7-18; Bard (specializing in invective)-14; Black Powder Weapons-14; Boating-13; Bow-15; Chess-14; Engineer/TL7 (Aircraft)-16; Fencing-19; Judo-15; Karate-14; Musical Instrument (Flute)-13; Quarterstaff-15; Piloting (Airship)-20, Piloting (Multi-engine prop)-18, Piloting (Hot-air balloon)-17.

Jill Gulbirra was born in Queensland, Australia. She was schooled in Australia, then attended the Massachusetts Institute of Technology where she obtained a master's degree in aeronautical engineering. She acquired a commercial aviator's license and a balloonist's license, and spent her adult life piloting blimps, logging 8,342 hours of airship flight time. She died in an auto accident in England.

During her Earthly life, she was constantly in competition with men, making of herself living proof that a woman could do anything that a man could. She never bent and never compromised. She made herself physically fit and tough, as well as intellectually well-trained, and took the name "Gulbirra" after a mythical species of dog-eating kangaroo.

Her aspiration on the Riverworld was to pilot an airship. Having heard that one was being built in Parolando, she traveled 20,000 miles by canoe to get there. She was an officer on the *Parseval*, and was in command when the ship attacked King John. The airship was destroyed by Loga (posing as Barry Thorn) and Jill perished with it.

Gulbirra is a determined, strong-willed woman who has had bad relationships with both sexes. She is especially distrustful of men, but generally keeps her distance from everyone. Her closest friend on the Riverworld was Piscator, a Japanese Sufi. She thinks of herself as a pilot, engineer and technician, even though she is a very competent fighter with many weapons. Despite her prickly personality, she is a hard-working and trustworthy individual, and those who gain her trust are very fortunate.

Alice Pleasance Liddell Hargreaves

Historical: born 1852, died 1934 (TL5)
Nationality: English
ST 10, DX 13, IQ 13, HT 12
Basic Speed 6.25; Move 6
Dodge 6; Parry 7
Appearance: Medium height, with strong features; dark hair and eyes.
Advantages: Beautiful; Charisma +2; Empathy; Intuition; Strong Will +2.
Disadvantages: Code Of Honor (Victorian mores); Honesty.
Quirks: Secretive; speaks proper English; enjoys high-tech luxuries; dislikes "roughing it," ill manners and violence.
Skills: Black Powder Weapons-12; Literacy; Literature (classics)-14; Mathematics-14; Musical Instrument (Piano)-12; Savoir-Faire-13; Shortsword-14.
Languages: English-14; French-14; Greek-13; Latin-13.

Alice Liddell Hargreaves is best remembered as the inspiration for the title character in Lewis Carroll's *Alice's Adventures In Wonderland* and *Alice Through The Looking Glass.*

Born in London and raised in Oxford, England, Alice's life was largely influenced by her father, Henry George Liddell. Liddell was the vice-chancellor of Oxford University and dean of Christ Church at Oxford. He edited the Scott-Liddell *A Greek-English Lexicon,* which is still considered the standard Classical-Greek-to-English dictionary.

Alice Liddell led an upper-class, academic life, and was steeped in the Victorian traditions of the time. In 1880, she married Reginald Hargreaves, a country squire, and lived a quiet life until her death at the home of her sister in Kent.

Life on the Riverworld was at first a shock to Alice, but it eventually changed and shaped her character beyond her terrestrial limitations. She met Burton on Resurrection Day and was attracted to him, but behaved with Victorian propriety despite the circumstances. Then the two of them used dreamgum without knowing its effects, and Alice's Victorian inhibitions temporarily vanished. They began a lengthy love-hate relationship that would last until they reached the Dark Tower. Alice supported Burton loyally, and fought at his side like a tigress even though she detested violence.

When the Computer was dying, it was Alice's intuitive reflection on Lewis Carroll's stories that inspired her to save it (and the *wathans*) from disaster. Alice created her own version of Wonderland in the tower, and it was during a party there that the sabotage on the Computer vividly manifested itself.

Alice is an attractive, intelligent woman possessing a multilayered personality. She is very loyal to Burton, even at times when their relationship is troubled. Most everyone will be drawn to her indefinable air, best expressed by Lewis Carroll when he described her as the "child of pure unclouded brow and dreaming eyes of wonder."

Kazz see p. 47

Kazz is Burton's loyal Neanderthal henchman.

King John Lackland

Historical: born 1167, died 1216 (TL3)
Nationality: Norman English
ST 12, DX 13, IQ 13, HT 12
Basic Speed 6.25; Move 6
Dodge 6; Parry 10
Appearance: Short (5'4") and broad-shouldered; tawny hair and blue eyes; broad, cheerful features, condescending expression.
Advantages: Charisma +2; Literacy; Strong Will +3.
Disadvantages: Bad Temper; Greed; Historical Reputation (-4 as treacherous murderer); Lecherousness; Stubbornness.
Quirks: Spoiled; avoids putting himself at risk but fights viciously when cornered; maintains "regal" airs; does evil things and then brags and smirks about his "cleverness"; swears by God's teeth, God's wounds, and so on.
Skills: Acting-14; Detect Lies-16; Diplomacy-18; Fast-Talk-15; Fencing-16; Leadership-16; Politics-20; Strategy (Land)-16; Tactics-15.
Languages: English-14; French-13; Latin-13.

John was the youngest son of King Henry II, and succeeded Richard the Lionhearted to the throne in 1199. He refused a papal nomination as archbishop of Canterbury and was excommunicated in 1209. Facing invasion by Philip II of France (after losing England's French possessions, hence the nickname "Lackland"), John raised an expensive army and alienated the barons. In 1215, they revolted and failed to provide troops, eventually forcing John to sign the Magna Carta, which guaranteed baronial privilege and feudal rights. John repudiated it and engaged in a one-man struggle against the barons, who had summoned French support. He died before the conflict was resolved. His reputation as a greedy monarch was so bad that no royal prince has been named John since.

John quickly established a small but powerful nation on the Riverworld. When Sam Clemens saw John as a threat to his metal reserves, he formed an alliance with him and combined forces to build and defend the riverboat. When the boat was completed, John hijacked it and renamed it the *Rex Grandis-*

simus (The Greatest King). John was pursued by Clemens to Virolando, where the two boats fought. John was captured by Sam, but perished when the *Not For Hire* sank.

John is a talented intriguer, who will surround himself with henchmen and bully-boys; some of them may conspire against him, but he is always confident that he can outmaneuver friend and enemy alike. He is ruthlessly opportunistic, greedy and corruptible. In that, he was like most monarchs of his time. His historical reputation is accurate but unfair; historians have emphasized his faults while downplaying those of (for instance) his brother, the "Lionhearted." Nevertheless, PCs encountering him have three choices: join and obey him, fight him or get out of his way.

Li Po (Tai-Peng)

Historical: born 710, died 762 (TL3)
Nationality: Chinese
ST 12, DX 14, IQ 14, HT 13
Basic Speed 6.75; Move 6
Dodge 6; Parry 12

Appearance: Medium tall (5'10"), with an athletic build. "Devil-faced," with flashing green eyes and black, unruly hair (worn down to his waist)

Advantages: Charisma +2; Handsome; Literacy; Voice.

Disadvantages: Alcoholism; Laziness; Lecherousness; Odious Personal Habit (constantly brags in a loud voice).

Quirks: Composes extemporaneous poetry; energetic, excitable and uninhibited; very poor at diplomacy (skill 7); usually speaks in a high, shrill voice out of keeping with his appearance; has incredible capacity for liquor.

Skills: Artist-12; Carousing-18; Chemistry-13; Diplomacy-7; Fencing-18; Literature-17; Physics-13; Poetry-21; Theology (Taoism)-14.

Languages: Mandarin Chinese-16; Esperanto-11.

Li Po is considered by many to be China's greatest poet. He left his home at Ch'ang-ming in 720 and became a wanderer. He enjoyed favor as a court poet in 742 at the the capital, Ch'ang-an, but soon resumed his wanderings. In 758, he was involved in the revolt of Prince Lin and and was almost banished before receiving a pardon. He was a notorious drunkard and womanizer, two habits he did not break on the Riverworld. Although he is capable of speaking very melodiously, and does so when reciting poetry, his normal speaking voice is a shrill, excited screech.

After his resurrection Li Po resumed his terrestrial lifestyles: wandering, drinking and womanizing. He was visited by Loga and assumed the alias Tai-Peng. He joined Burton's expedition to the Polar Sea and was the first to begin resurrecting acquaintances once the Tower was taken.

Li Po is a brilliant poet, a great swordsman, and an excessive carouser. He was not one of Loga's original choices, but when the renegade Ethical was stranded without a flyer, he recruited the Chinese swashbuckler as a companion because of his resourcefulness and combat abilities. PCs encountering him will either be drawn by his charisma or repelled by his habits.

Loga

(a.k.a. "X," the Mysterious Stranger, Odysseus, Barry Thorn, Ah Qaaq)

Fictional: born 12th century B.C., died at age five (TL1)
Nationality: Trojan
ST 15, DX 14, IQ 18, HT 13
Basic Speed 6.75; Move 6
Dodge 7; Parry 13 (fencing), 9 (sword or axe)

Appearance: Loga is a master of disguise; everything about his appearance can change except his basic husky physique. Undisguised, he has strong, irregular features, pale skin, green eyes and fox-red hair.

Advantages: Alertness +2; Combat Reflexes; Literacy; Patron (Ethicals); Strong Will +4.

Disadvantages: Compulsive Lying; Enemy (Monat); Obsession (insuring immortality for his family); Paranoia.

Quirks: Self-destructive; dislikes violence but believes the end justifies the means; likes complicated puzzles.

Skills: Acting-22; Astrogation (Ethical spacecraft)-20; Axe/Mace-17; Beam Weapons-18; Boating-14; Bow-20; Breath Control-16; Computer Operation/TL15-25; Computer Programming/TL15-20; Disguise-16; Fencing-18; Mechanic/TL15 (Ethical technology)-18; Read Wathan-15; Shortsword-16; Stealth-20.

Languages: English-14; Esperanto-14; Ghuurrkh-18.

Loga was born in ancient Troy, a grandson of King Priam. At the age of four, he was slain by a Greek soldier during the fall of Troy. Because he died at less than five years of age, he was resurrected on the Gardenworld by Monat's race. He became interested in the Riverworld project and joined the Ethical Council of Twelve. Working from within the Council, he engineered a plan to sabotage the operation in an effort to provide immortality for his family, whom he loved deeply. Loga felt that the Council was unfairly keeping the secret of immortality from the human race, and he was determined to have humanity take it for themselves.

In his very long life, Loga had gained many abilities; now he put them to work. Assuming various identities, he recruited

selected Valleydwellers and provided means for them to enter and take over the Dark Tower. Using the Computer, he murdered all of the Ethicals in the Tower and stopped their resurrections (along with everyone else's). Later, he killed other Ethicals in the Valley, including his own wife Siggen (also a Council member) and Monat, the Operator. He was consumed with guilt for each of these deaths, but continued on his course.

When Burton and his party entered the Tower, Loga realized that Monat had placed a failsafe in the Computer to prevent further resurrections. Since the Computer needed repairs urgently, yet the failsafe prevented entrance to its chambers, the *wathans* were in danger of being lost forever. After Alice's ingenious rescue of the *wathans,* Loga faked his death and disappeared, "testing" Burton's group with their new-found powers. After he reappeared, Burton decided he was insane and "suspended" his *wathan* indefinitely.

Loga is playing a dangerous game, and has played it most of his adult life. For this reason, he is extremely untrustworthy and rather paranoid. The motive for his scheme seems to be his love for his family, but it is possible that he has lied about this as well. The GM should feel free to develop other possible motives for Loga's actions. PCs who are contacted by Loga will be in great danger, and they should find little comfort in an ally who is basically crazy.

Loghu

Fictional: born 59 B.C., died 38 B.C. (TL2)
Nationality: Tokharian
ST 10, DX 12, IQ 10, HT 12
Basic Speed 6; Move 6
Dodge 6; Parry 6

Appearance: Medium height (5'6"), blonde, blue-eyed, full-figured.

Advantages: Luck; Very Beautiful.

Quirks: Enjoys a good fight; likes to travel but prefers the company of friends; loves children; enjoys salty repartee.

Skills: Black Powder Weapons-14; Climbing-16; Karate-14; Knife-15; Sex Appeal-16; Seamanship-13; Spear-14.

Languages: English-9; Tokharian-10; Esperanto-12. On Resurrection Day, she speaks only her native language.

Loghu was of an Indo-European people who lived some 2,000 years ago in the area which is now Turkestan. She married a rich merchant, but died fairly young, still childless.

On Resurrection Day, she chewed dreamgum like most of the people around her, but kept enough control to resist when she was attacked by a couple of men. She was rescued by Frigate (the Ethical agent), and the two became friends and lovers; she was part of the crew of the *Hadji.* She was very angry when "Frigate" fled with Monat. Later, when she met the real Frigate, she was incensed and attacked him immediately, but apologized once she was convinced that he was not the same man. On the *Rex Grandissimus,* she and Tom Mix became close.

Loghu knows she is beautiful and loves getting attention from men. She can be embarrassingly direct in her comments. She doesn't mind taking the initiative in a relationship, and was willing to seduce King John when that seemed to be the only way to get Burton's party aboard the Riverboat. But she is not promiscuous, and a man who assumes otherwise might pay a high price for his mistake! She thinks of herself as a warrior, and is happy to be a follower if she has a good leader.

Loghu is loyal, energetic and aggressive. She enjoys her life on the Riverworld, because it has let her become a warrior and traveler, instead of a rich man's plaything.

John Griffith "Jack" London

Historical: born 1876, died 1916 (TL5)
Nationality: American
ST 14, DX 12, IQ 13, HT 14
Basic Speed 6.5; Move 6
Dodge 6; Parry 7

Appearance: Medium height, with a muscular build; Irish features, with curly reddish-bronze hair and deep blue eyes; smiles often.

Advantages: Ally (Tom Mix); Danger Sense; Handsome; Literacy.

Disadvantages: Acrophobia; Stubbornness.

Quirks: Alternately jovial and cynical; enjoys philosophical and intellectual discussion.

Skills: Axe/Mace-15; Boating-16; Naturalist-14; Prospecting-14; Seamanship/TL6-16; Survival (Woodlands)-16; Tracking-16; Writing-18.

Languages: English-15; Esperanto-10; French-8.

Born illegitimately in San Francisco, Jack London quit school at 14 to seek adventure. He became a sailor on a sealing ship and traveled across the Pacific. He then traveled across the United States before returning to California to finish high school. He went to the Klondike around the turn of the century, during the Canadian Gold Rush. He returned to the States to write his famous novels *The Call of The Wild* and *White Fang,* among others. He became deeply involved with Darwinism and Marxism, which influenced his later autobiographical works such as *Martin Eden.* His later life was characterized by depression — it is believed he committed suicide.

On the Riverworld, Jack London met and befriended Tom Mix after both of them were contacted by Loga. They built the *Razzle Dazzle* and set out for the River's headwaters, London traveling under the name Martin Farrington, "The Frisco Kid." Others joining them included Nur and Frigate. London sailed up-River for 29 years before he reluctantly agreed to Frigate's plan to build a balloon to reach the Polar Sea. After the balloon crashed, he joined the crew of King John's ship and fought in the Battle of Virolando, but his fate after that is unknown.

London is a rugged adventurer and able sailor. It is a tribute to his abilities that he and his crew sailed the *Razzle Dazzle* for so long without losing their ship or their lives. A devoted sailor, he distrusts flight and will avoid it if possible. He is very cautious about his contact with Ethicals and it will be difficult to gain his trust. He became very loyal to Tom Mix, and the two will rarely be apart.

Joe Miller see p. 48

Joe Miller, the titanthrop, is Sam Clemens' faithful friend and bodyguard.

Tom Mix

Historical: born 1880, died 1940 (TL5)
Nationality: American
ST 13, DX 14, IQ 11, HT 14
Basic Speed 7; Move 7
Dodge 8; Parry 8

Appearance: Medium tall (5'10"), lean and muscular, ruggedly handsome. Straight, dark hair; could pass for an Indian if he were slightly darker; disarming smile.

Advantages: Ally (Jack London); Charisma +2; Combat Reflexes; Handsome; Literacy.

Disadvantages: None (an alcoholic in his later days on Earth, he did not become addicted on the Riverworld).

Quirks: Wears the best approximation of Western gear he can manage (high-heeled leather boots and a straw ten-gallon hat); speaks in a slangy Southwestern accent.

Skills: Acrobatics-16; Acting-16; Animal Handling-16; Axe/Mace-15; Boomerang-16; Carousing-14; Diplomacy-14; Gambling-14; Guns/TL5-17; Guns/TL6-16; Lasso-18; Literature-13; Performance-18; Riding-20; Savoir-Faire-15; Seamanship/TL6-13.

Languages: English-12, Esperanto-12.

Tom Mix was the king of the silent cowboys, having made over 160 films. He is remembered for his white 10-gallon hat and the distinctive way he mounted a horse. Mix was born near Mix Run, Pennsylvania, and joined the army when he was eighteen. He served as a Texas Ranger during the Spanish-American War, but never saw action (although he probably looked for it). He deserted to join the Miller Brothers Wild West Show in 1906. During his stint in another show, he was signed to round up cattle for a film produced by Selig Polyscope. Between 1911 and 1917, Tom Mix appeared in over 100 short films for Selig, all action-packed westerns filled with incredible stunts that Mix himself performed. In 1917, he signed a contract with Fox Studios and became cinema's most popular cowboy. He appeared in over 60 features for Fox. In 1928, he retired from acting and did a two-year tour with Ringling Brothers' Circus before returning to cinema to appear in several sound westerns. He died in an automobile accident near Florence, Arizona.

In his first years on the Riverworld, Mix tried to reach the mouth of the River. He and six others built kayaks and paddled downstream, into a region of fog, long past the inhabited areas.

The grailstones continued for hundreds of miles. Then, past the last grailstone, the current began to increase. For the last fifty miles, it was so strong that they could neither reach the shore nor turn back. Finally the river entered a huge cave which gradually narrowed into a tunnel. The kayaks were sucked into the tunnel . . . and the explorers died.

Mix's later adventures paralleled those of Jack London's, whom he met shortly after his visitation by Loga. Mix traveled on the *Razzle Dazzle* under the alias Tom "Tex" Rider. His fate after the Battle of Virolando is also unknown.

Mix's best skills will never come into play in ***GURPS Riverworld*** because of the lack of riding animals (which frustrates him terribly). However, he is sociable and disarming, and is good with a rope even without a horse.

Monat Grrautut see p. 85

Monat, the Operator, is the extraterrestrial genius behind the Ethical Council of Twelve.

Nur ed-Din ibn Ali el-Hallaq el-Musafir

Fictional: born 1164, died 1258 (TL3)
Nationality: Moorish
ST 12, DX 13, IQ 17, HT 13
Basic Speed 6.5; Move 6
Dodge 6

Appearance: Short (5'5") but wiry; swarthy, big-nosed, with dark, piercing eyes amd a pensive expression.

Advantages: Alertness; Common Sense; Empathy; Language Talent +2; Literacy; Musical Ability.

Disadvantages: Pacifism (total non-violence).

Skills: Acrobatics-15; Chemistry-15; Climbing-14; Detect Lies-15; Literature (Arab)-16; Mathematics-16; Musical Instrument (Flute)-16; Psychology-18; Seamanship/TL6-13; Theology (Sufism)-21, Theology (Islam)-18.

Languages: Arabic-18; English-12; Esperanto-12.

Nur was born in Cordoba, which at the time was the center of Saracen civlization. The son of a tradesman, he was schooled in literature, music, mathematics and theology. In school he met the poet Muyid el-Arabi, and accompanied him on a pilgrimage to Mecca. While traveling in North Africa, Nur met a group of Sufis. He decided to become a disciple of Sufism but could not find a master. Nur wandered through much of the Arab world (gaining the sobriquet *el-Musafir*, the traveler) and eventually studied Sufism in Baghdad. He then traveled throughout Europe and even gained an audience with King John Lackland, who was fascinated by Nur's tales. Finding himself in Baghdad once again, Nur was killed when the Mongols stormed the city in 1258. Attacked by a Mongol warrior, the nonviolent Nur continued to play his flute until the sword came down.

After his resurrection, Nur began wandering throughout the Valley. He joined London and Mix on the *Razzle Dazzle*, hoping to learn the true nature of the Riverworld. When Frigate wanted to learn about Sufism, Nur finally agreed to become his master. He abstained from participating in the Battle of Virolando, then joined Burton's expedition. In the Tower, Nur proved able to pass the "ethical test" and cross through the force field. He was content to keep to himself and avoid the temptations of power the Ethicals offered.

Nur is a master of Sufism, a mystical Islamic discipline stressing personal communication with Allah and a transcendence of destructive thought and feeling. He is extremely perceptive and will provide great insight into problems the party may face.

AIRCRAFT AND RIVERBOATS 3

The desire to travel and to rebuild civilization will become paramount once humanity begins to settle into the Rivervalley. Central to both of these ambitions is fast transportation. Watercraft will be the obvious first choice, given the presence of the mighty River and its swift current. As mineral resources become available, however, 20th-century engineers will wish to meet the challenge of constructing aircraft.

Navigation Hazards

Although most of the River is ideal for sailing, certain sections are more dangerous. There are occasional areas (see lower map, p. 26) where the River narrows and the cliffs close in. The current is always fast here — perhaps 30 mph or more — and there are sometimes dangerous rocks. While there is no part of the human-inhabited River that cannot be traversed, there are several places that will rip the bottom out of a carelessly-handled boat.

When such an area is encountered, the pilot of the boat must make a Seamanship-2 roll every quarter-mile, or Seamanship-3 if going downstream. A failed roll indicates that the boat takes 1d damage; a critical failure is 2d damage. Even if the boat has heavy armor, each such scrape does a minimum 1 HT to the hull. Each time a roll is failed, another roll must be attempted *immediately*. Thus, a boat in trouble may get into worse trouble. Should a boat capsize in these waters, its crew may try to make it to shore — often the River is only a quarter-mile wide, or less, in these areas — but all Swimming rolls in such rough water are at -4 or worse.

Drowning, of course, is not the only danger. Closed grails will float unless they are full of something, but open grails will sink, and life without a grail is chancy.

A craft nearing the headwarters of the River will encounter some especially hazardous water right after passing Virolando (see p. 23). In all likelihood, no wind- or muscle-powered craft will be able to make headway past this area of 35-mph current. And any craft sailing far enough down-River is in trouble. See *Tom Mix*, p. 58, for a description of the fate of an adventurer who went too far toward the River's mouth.

This chapter presents rules for constructing and operating water and air craft. These are intended as general guidelines; the specific craft in a campaign may require the GM to make special judgements.

GMs who are not interested in the technical aspects of boats and airships — or who suspect that their players aren't interested — would do best to read this chapter for general ideas and **ignore** *all the charts and specific rules! Instead, just tell the players "You've got a boat" when the story calls for it, and "You don't have a boat any more," if they run into overpowering opposition. Don't force the details of vehicular combat on players who would rather be dealing with plots and personalities.*

Riverboats

Watercraft fall into three types: *wind-powered, human-powered,* or *self-powered.* Wind-powered craft require sails to catch wind. Human-powered vessels are propelled by oarsmen or mechanical paddles. Self-powered boats are propelled mechanically using an energy source, usually electricity or steam.

A riverboat is defined by seven attributes: *size, mass, tonnage, speed, maneuver, hull armor* and *hits.*

Size is the *length and beam* of the boat. Length is the distance from bow (front) to stern (rear). Beam is the widest part of the boat.

Mass is the ship's weight in tons.

Tonnage is the maximum weight (equipment, cargo and passengers) that the boat can safely transport. It is half the hull's weight in tons.

Speed is determined by propulsion system, size and current.

Maneuver represents the ability to tactically move the vessel in combat or to avoid hazards. When a Piloting, Seamanship, etc., roll is required to keep the craft out of trouble, its Maneuver rating is a bonus or penalty to that roll.

Hull armor is the ship's DR, and depends on the hull material and armor.

Hits is the boat's HT rating, the number of hits it can take before sinking.

Constructing Boats

Building a river vessel is considered a *task* (see p. B93) requiring resources, man-hours, and skills. The amount and quality of all these factors determine the boat's final attributes. Failed rolls during the building process will merely delay it, but critical failures may flaw the finished product. Critical successes will speed the completion of the product, or produce an exceptionally fine craft, or both, as determined by the GM. (The GM should base his determination on the attitudes of the *builders.* If they are most interested in speed, that is what a critical success will get them. If they want a fine ship, *that* will be what they get.)

The number of man-hours required is determined by the desired size and mass of the hull. The figures below are for a *wooden* vessel, and assume good stone tools are in use. Decrease time by 40% if metal tools are available.

For metal boats, metal tools *must* be available. Double the listed hull mass and increase the required man-hours by 50% for a boat of the same tonnage.

Length	*Beam*	*Tonnage*	*Hull mass*	*Man-hours*
10-15 yds.	2-3 yds.	25	50	1,500
15-20 yds.	4-6 yds.	50	100	2,500
20-30 yds.	5-8 yds.	100	200	4,000
30-40 yds.	7-12 yds.	200	400	7,000
40-60 yds.	10-15 yds.	400	800	13,000
60-100 yds.	15-20 yds.	500	1,000	15,000
100-125 yds.	18-25 yds.	1,000	2,000	25,000
125+ yds.	20-40 yds.	1,500+	3,000+	35,000+

A successful roll against Shipbuilding (TL5+ for a metal boat) is required to plan a boat; the effect of a failure should not become apparent until the boat is launched. The man-hours listed are for general labor, at least 25% of which must be by laborers with Shipbuilding, or Carpentry (for wooden boats) or Blacksmith (for metal boats).

These hours do *not* include those required to obtain and prepare the materials. For wooden hulls, if lumber must be cut and prepared, allow 25 man-hours per ton of *mass* of the finished ship, or 15 if metal tools are available. A quarter of this time must be by laborers skilled in Carpentry, unless the vessel is to be a simple log raft! For metal hulls, the acquisition of the materials will be an adventure in itself.

Likewise, these hours do not include time required to build the power source, weapons, armor, etc. to be placed on the vessel.

The Hull

The hull is the main body and frame of the boat. It includes the decks, keel, and anything else that holds the boat together. The size and material of the hull determine the vessel's tonnage and HT.

The hull's *tonnage* is equal to *half* its mass (given above). This is the amount of weight the boat can safely transport. Thus, a 100-ton boat can hold 50 tons of weight. This does not just include cargo and passengers, but also power sources, weapons and armor as well.

The table below gives the hull's HT attribute for different boat sizes and different materials. GMs may adjust HT to reflect different material quality.

Length	*Hull mass*	*Wood*	*Iron*	*Steel*
10-15 yds.	50	35	50	100
15-20 yds.	100	45	75	200
20-30 yds.	200	60	100	400
30-40 yds.	400	75	150	500
40-60 yds.	800	100	200	750
60-100 yds.	1,000	150	300	1,000
100-125 yds.	2,000	250	500	2,000
125+ yds.	3,000	500	1,000	3,000

Armor

Armor represents the basic DR of the hull material, plus that of any additional plating placed on the hull. Hulls without additional armor have the basic DR given below.

Hull material	*DR*	*Mass factor*
Wood	3	.002
Copper/bronze	4	.005
Iron	6	.01
Steel	8	.05

Each "layer" of armor provides additional DR based on its material. For example, a wooden vessel with one layer of iron armor would have a total DR of 9 (the wood hull providing 3, and the armor providing 6). Two layers of iron armor increases the DR to 15, etc.

Each layer requires material equal to the total mass of the hull times the *mass factor*. For example, a wooden boat weighing 800 tons would require 1.6 tons of wooden armor or 8 tons of iron armor. This assumes that all areas of the hull

Small Boats

Most of these rules pertain to large riverboats of 50 tons or more. PCs may be more interested in smaller craft, especially early in the campaign. A sailing boat of less than 50 tons is ideal for transporting a small party of adventurers, and requires less time and material to build.

Rafts are wide, flat watercraft that rely solely on surface area for buoyancy. A small raft can be made from large bamboo logs with about 24 hours of unskilled labor (see p. 46), which means three people can construct a raft in eight hours. Such a raft weighs less than a ton and can transport up to 1,000 pounds. Of course, some rafts are *huge*. Rafts can either flow with the current (being steered with a long pole) or carry a sail for wind propulsion.

PCs may also construct oar-driven boats, like canoes and rowboats. A canoe can be made by digging out and sealing a large bamboo log (eight man-hours, provided some type of sealant has been invented). This can carry three people and is not suitable for bulk cargo transport. Rowboats require 40 man-hours of labor and a successful Carpentry roll. A rowboat can safely transport up to 1,000 pounds of weight. Both canoes and rowboats can ride the current or be paddled. Up-river paddling is considered overexertion for Fatigue purposes, requiring 2 Fatigue points per hour.

Small sailing craft or *schooners* can mass anywhere from five to 50 tons, and can safely carry half of their own weight. Schooners are characterized by a fore-and-aft double mast, the forward mast having a smaller sail. They are steered with a *tiller*, which is a lever attached to the vessel's rudder.

A five-ton schooner can be built with 400 man-hours of labor, 25% of which must be Carpentry or Shipbuilding. Four people (provided tools are available and one of them is a shipbuilder or carpenter) could build such a craft in 12½ normal work days. Add 60 man-hours per added ton of the ship's size (remember, that five-ton schooner has a *mass* of 10 tons). See main text, above, if the builders have to start with living trees.

The HT value on schooners is generally between 20 and 35, with the wood providing a DR of 3. An explosion or fire will sink a schooner almost instantly.

Small boats can also be motorized. IC engines or fuel cells are best able to provide small boats with power. They will require a fraction of a MW (.01 at most) and can be built with a similar fraction of material. However, appropriate Engineer rolls are still required to construct small boat engines, and construction time remains the same. Motorized boats of this size can also be used as launches for large riverboats.

will be armored; if not, the GM will have to adjust accordingly. The added weight of the armor *does* count against the cargo weight that can be carried.

Power and Propulsion

Wind-powered boats require masts and sails. Masts can be fashioned from tall bamboo or pines, while sails can be woven from spun materials or made from pressed intestinal linings. One mast-and-sail assembly weighs .2 tons (the GM may increase this for larger vessels) and requires a successful Shipbuilding roll to design and 40 hours of general labor to construct. Larger boats require larger sails; consequently, the GM should use these figures as a base. Boats massing 800 tons or more require at least two masts, although smaller vessels may also have additional masts.

Man-powered vessels can be propelled by oarsmen (no additional man-hours) or by mechanical devices, such as pedal-wheels. These devices require 50 to 100 hours of Mechanic labor, depending on the complexity of the device.

Self-powered boats require a power source and at least one motor, both of which are impossible to build without metal. The type of power source available depends on the TL background of the builder. Power is measured in *megawatts* (MW) — as a comparison, the Niagara Falls power plant produces some 500 MW of power. Several power sources are listed below, and include the TL and man-hours required to create them (all Engineer man-hours require Vehicle specialization at the TL listed) as well as their power output. Note that this power does not go solely to the motors, but also to any other systems requiring power (such as lights, radios, instrument panels, etc.).

Steam Engines (TL5)

Steam engines require a burner for fuel (usually wood), a boiler to produce steam, and a turbine/generator system to produce the power. Their fuel consumption is enormous; boats using steam engines require 1% of their mass in fuel for every 24 hours of travel. They also require the same weight in purified water (dirty River water will clog the valves, requiring 10d hours of Mechanic work to clean them).

Thus, a 5-ton steam engine will produce 1 MW of power, and requires 100 lbs. of fuel and water every 24 hours.

Internal Combustion (TL6)

There are no fossil fuels available on the Riverworld, so internal combustion engines require other flammable fuels like Riverfish oils or alcohol. Internal combustion engines burn fuel and use the pressurized gases for power. To produce 1 MW of power, a 1-ton engine is required and 2 tons of fuel are needed for every 24 hours of use. Fuel consumption may vary with the quality of fuel, refined alcohol being more efficient than fats or oils (alcohol can be evaporated and collected from liquor, or made from wood). Internal combustion engines produce exhaust gases like carbon monoxide as byproducts. Construction time: 120 hours of Mechanic labor and 72 hours of Engineer labor.

Fuel Cells (TL7)

Fuel cells provide electrical power by sustaining a chemical reaction between liquid oxygen and hydrogen. The fuel is obtained through electrolysis, which breaks down water into its constituent elements. The problem here is that electrolysis requires electricity, which must either be separately generated or drawn from the power source. A 1-MW fuel cell weighs 5 tons and requires 300 tons of fuel (an 8-to-1 ratio of oxygen to hydrogen) for 1 month of operation.

Fuel cells are more efficient in smaller boats requiring less power for propulsion. Construction time: 96 hours of Mechanic labor and 48 hours of Engineer

Maintenance and Repair

Combat and general attrition will take their toll upon a riverboat. During a 100-day journey, 1 HT will be lost to the elements and day-to-day wear and tear. The GM may wish to increase this amount for unusual circumstances or if the captain runs the boat above cruising speed most of the time.

Repairing 1 point of HT, whether it is lost to attrition or in combat, requires man-hours of general labor equal to .1% of the number of man-hours that were needed to construct the hull. If half or more of the original HT needs to be repaired, a Shipbuilding roll is required as well. Boats at one-fourth of their original HT or less need to be completely rebuilt, requiring 75% of the man-hours needed to originally construct the vessel.

The materials necessary for repair will depend on what was damaged. Hull damage can be repaired with material equal to the percentage of the original HT that was lost. Damage to sails may require no additional material other than spun thread to sew them up. Power plants will need special metals; the details must be determined by the GM.

The quest to get materials or parts to repair a damaged craft can easily become an adventure in itself.

Salvage

Because of the great value of metal on the Riverworld, even a totally wrecked craft is valuable. See the table on pp. 44-45 for values of refined metals. A wrecked airship will be a treasure trove of aluminum and light metals. A destroyed metal-hulled riverboat will be almost as good as a mine! And, of course, it is possible that intact fittings can be salvaged from a destroyed craft, saving the time required to make them. King John's dirigible, the *Azazel,* was built largely from parts salvaged from the wrecked craft which Podebrad had tried to fly to the North Pole.

A "salvage" scenario, in which a strange craft crashes near the party's base of operations, is another way to get a supply of high-tech materials into a campaign (and possibly start a war over the booty, as well). If any of the crew of the wrecked craft survived, or if other craft come looking for it, that will provide an additional complication. Alternatively, especially if the party members are high-tech types, the strange craft could be in need of help and repairs, and the party might join as crew.

for the cells, and an additional 48 hours of general labor and 36 hours of Engineer (Electrical) for the electrolyzer.

Fuel cells produce pure water as a byproduct, which can be used for drinking water, or can again be electrolyzed.

Fuel cells are not practical without a base power station (for example, using paddlewheels to generate hydroelectric power from the River). Such a power station can use electrolysis to break down River water, producing the required hydrogen and oxygen. The fuel cell recovers this power with a 90% efficiency rate — to process enough fuel to give 9 MW for a month, one would have to expend 10 MW.

Batacitors (TL8)

Batacitors are a high-tech device, introduced to the Valleydwellers by Ethical agents and renegades. They are a combination capacitor and battery, retrieving and storing electricity like a capacitor but releasing it gradually like a battery. They can even draw power from the grailstone discharges.

A grailstone emits 1,000 MW/hour of power each discharge. A batacitor can store this entire amount and release it as needed. Batacitors weigh 5 tons, and include a crane-like projection that attaches to grailstones when power is needed.

As a bonus, a batacitor-equipped craft can recharge grails onboard, without need of a grailstone. The grailstone energy works perfectly well after being conducted through a batacitor, and will fill grails set on a copper plate on board. Unfortunately, this will only work at the time of the actual grailstone discharge, unless the *entire* batacitor is discharged. This is rarely worthwhile just to fill a few grails!

Construction time: 1,000 hours of general labor, 2,000 hours of Mechanic or metalworking labor, and 500 hours of Engineer labor.

Other Power Sources

The players and the GM may come up with other ideas for power sources, but most will be limited by the Riverworld's scarce resources. For example, fission power is certainly possible given the skills of 20th-century engineers, but there are no radioactives on the planet for fuel. Solar power is another possibility, but there is no fine sand available to make glass reflectors. In the event that players come up with a possible new power source, the GM should decide on production requirements, fuel and power output.

Motors

Motors can be built with Mechanic or Engineer skill. Most boats will be propelled by paddlewheels, each wheel requiring a motor. Vessels over 1,000 tons in mass require at least two wheels. Each motor/wheel assembly masses 50 tons and requires a successful Engineering roll and 800 man-hours of general labor.

To determine the total power required to propel the boat at cruising speed, divide the ship's total mass by 100. This is the number of MW required to keep the boat moving *for one hour*. Thus, a vessel massing a total of 800 tons requires 8 MW of power per hour.

Speed

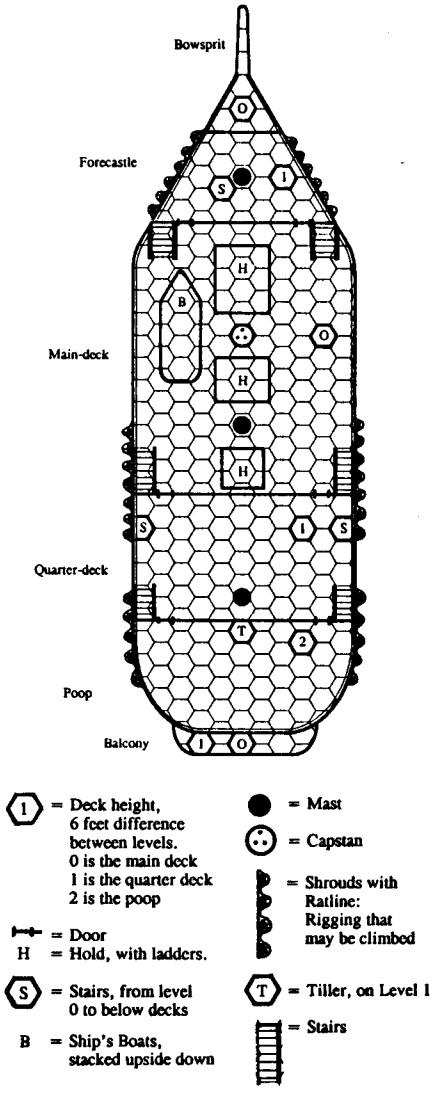
The speed of a boat depends upon its mass and power. The base cruising speed for a self-propelled vessel is assumed to be 30 miles per hour in still water, no matter what its size (however, the power required to keep it at that speed will depend on mass — see above). Additional power increases this: for each additional multiple of "cruising" power, the boat's speed increases by 5 mph. For

Deck Plans

The GM (or players designing their own boat) may wish to draw up deck plans for the vessel. Use the standard ***GURPS*** scale of 1 hex = 1 yard so that they may be used for advanced combat. Show partitions (be sure to indicate what material they are made of), apertures, ship-mounted weapons and special features. Decks are usually connected by ladders, but larger boats may have stairwells or even elevators.

Every boat needs a helm (where the ship is steered) and either masts or a power plant area. Large vessels (especially metal ones) will have a bridge, which contains the helm, navigational instrumentation, and weapons control. Be sure to have cabins or sleeping areas for all the crew, and remember to indicate where the cargo space is. Big, luxurious metal boats may have everything from a ballroom to a swimming pool!

GURPS Swashbucklers contains deck plans for two large sailing vessels that can be used on the Riverworld. A reduced version of one of these is shown below.



example, an 800-ton vessel requires 8 MW of power to sustain cruising speed. At 16 MW its speed increases to 30 mph .

The table below gives still-water cruising speed and maximum speed for wind-powered and man-powered vessels. The speed is given in miles per hour. The maneuver rating is explained in the combat section of this chapter.

Mass	*Wind-Powered*		*Man-Powered*		*Maneuver*
	Cruising	*Max.*	*Cruising*	*Max.*	*rating*
50-199	9	12	6	12	-2
200-399	8	12	5	10	-3
400-799	7.5	10.5	4	9	-4
800-1,499	7	9	4	8	-5
1,500-1,999	6	9	3	7	-5
2,000-3,999	5.5	7.5	3	6	-6
4,000-6,000+	4.5	6	2	5	-6

These figures assume a fair wind (for sailing vessels) and still water (which is rare on the River). The River current speed must be added to down-River speed and subtracted from up-River speed. Current will vary; in the center of the River it averages 15mph, at the edges it is 5 to 8 mph, and near the shores of large lakes, the currrent will be negligible.

Maximum speed can be attained by successful Seamanship rolls on sailing vessels (a critical failure will overload a mast or ruin a sail), or by fatiguing the crew on man-powered vessels (considered 1 fatigue point *per minute*).

Various improvements in design will make ships faster than the speeds shown. A two-masted ship adds 1 mph to cruising speed and 2 mph to maximum speed. A double-hulled, double-masted ship can safely carry more sail, adding 2 mph to cruising speed and 3 mph to maximum speed (-2 to Shipbuilding roll to design). A successful Shipbuilding-4 roll at TL7 or better, and a 30% increase in construction time, can produce a racing hull which goes over the water rather than pushing through it. Such a hull will be 20% longer than shown, for the same weight, and will add 3 mph to cruising speed or 5 to maximum speed. It is possible to combine all these factors.

Crew and Passengers

Much of a boat's space must be devoted to its crew and passengers. Five crew and their gear, or ten passengers with light luggage, weigh a ton. And at least 60% of a boat's total tonnage should be devoted to crew and passengers.

Crew requirements vary tremendously. Every vessel should have a captain and a pilot (who could be one and the same). Sailing vessels require about one person per 100 tons of mass, with a minimum of three. Man-powered vessels need a similar crew, plus at least one oarsman for every 2 tons of ship weight.

Self-powered vessels will require crewmen to maintain the power source, whether they are tenders on a steam engine or electrical engineers. Generally, self-propelled boats require fewer crewmen, about one person per 200 tons of mass. Large boats (1,000+ tons) may require a ship's doctor, engineers, service staff, gunners, etc.

Weapons

Large boats may be armed. Depending on the TL available, this could be anything from crossbows to machine guns to lasers. In general, use the ***Basic Set*** statistics for any mounted weapons, or draw additional descriptions from any worldbook that includes heavier weapons. Note where on the boat the weapon is

Piracy and Hijacking

Large river vessels, especially metal ones, are priceless commodities on the Riverworld. Anyone in possession of such a vessel must guard against loss of the boat during transit. Even ordinary boats have value. In fact, even the meanest raft carries something of value — the passengers themselves! Piracy is not uncommon on some parts of the River. PCs may find themselves either attacking or defending a rivercraft.

If the PCs own, operate, or are in some way allied with the ship's captain, they may find themselves under attack by hijackers. In addition to greedy, would-be boat captains, Ethical agents stranded in the Rivervalley may try to take a boat. They may have technologies at their disposal that the ship's defenses are not prepared for. Hijack attempts may also be made by enemies of the captain, some of whom may have infiltrated the boat's crew or marine units.

If the PCs are hijack*ers*, they should be well-armed and in league with others (it will usually take a small army to capture a large vessel). They may wish to recruit dissatisfied crewmen to act as spies or saboteurs. The objective of a hijack may be to get away with the cargo rather than capture the vessel.

In any case, the GM should determine how the captain will deal with the attack (unless, of course, the captain is one of the PCs). Perhaps he has prepared for just such a situation by maintaining a network of spies. He may also have a secret weapon at his disposal; a low-tech sailing vessel might have a high-tech weapon hidden in the captain's cabin.

Hijack attempts should always be played out as an adventure. If deck plans aren't being used, the GM should still have a good idea of the boat's layout, especially the location of the power plant (if there is one), the cargo hold, the helm, and the captain's cabin. The success or failure of a hijack attempt will depend upon organization, communication and skill. Either result means a new situation to be faced by the PCs, no matter which side they are on.

mounted and determine its arc of fire logically (e.g. weapons mounted on the aft starboard could fire off the starboard and starboard stern).

Cannons (TL4) are a special case. Mounting cannons on a wooden boat requires reinforcing the hull and decks to allow for recoil. It takes an additional 1% of hull mass (this is counted against tonnage) and a successful Engineer roll to reinforce a boat's hull. Cannons are defined by the weight of the ball used. Total weight of ammunition carried must count against tonnage. Cannons are fired by igniting a charge of gunpowder (which, of course, must be available). All cannons do crushing damage. A Gunner roll is required to fire a cannon. All the cannon listed are single-shot muzzle loaders.

For much more detail about the manufacture, care and use of cannon, see ***GURPS High-Tech.***

Cannon Type	*Dmg.*	*Acc*	*½ Dmg.*	*Max*	*Wt.*	*RoF*	*Crew*
7-pounder	6d×5	2	300	1,600	1,400 lbs.	1/20	3
9-pounder	6d×6	2	400	1,700	1,800 lbs.	1/20	4
12-pounder	6d×12	2	600	1,800	2,400 lbs.	1/30	6
16-pounder	6d×20	2	800	2,000	3,200 lbs.	1/30	7
24-pounder	6d×30	2	900	3,000	7,000 lbs.	1/40	9

Weapon statistics for some high-tech weapons (TL7) are given below. These weapons will not be extensively treated here; players planning on making use of these weapons are referred to ***GURPS Autoduel*** and ***GURPS High-Tech.***

Weapon	*Dmg. Type/Amt.*	*SS*	*Acc*	*½ D*	*Max*	*Wt*	*Shots RoF*	
Flamethrower	spcl/3d	—	6	—	70	52	1[1]	6
Rocket Lnchr	expl/3d×12	15	9	500	1,000	31	1/5	1
Grenade Lnchr	expl/2d+2	12	6	—[2]	400	7	1/4	1
Mortar (51mm)	expl/5d	—	6	—[3]	800	14	1/3	1
MG (.50 cal)	12d	—	8	1,200	5,000	212	8	—[4]
Laser Cannon[5]	imp/	10	6	3,000	5,000	1,000	3∿	—[5]

[1] The flamethrower can fire one stream of six seconds, or two streams of three seconds duration. Then fresh fuel and air bottles must be attached; this takes 10 seconds.

[2] Minimum range for the fuse to work is 14 yards. Below 14 yards the grenade hits for 1d-2 crushing damage.

[3] Minimum range is 50 yards for the fuse to work. Below 50 yards the mortar bomb hits for 1d crushing damage.

[4] Belt fed, normally from a 100-round belt. Loading a belt takes 3 seconds.

[5] Can only be built with Ethical aid. Must draw power from a batacitor or equivalent. Damage is 6d×MW/*hour* of power, up to 10 MW/hour per shot.

Radar and Communications

Radar and sonar are TL6 inventions. A radar detects objects at long range by bouncing radio waves off of them. A .1-MW radar system will have a range of 2 miles — increase the range by 2 miles for each additional .1 MW. Sonar systems require .1 MW and "paint" an image of the river beneath the vessel, showing river depth and the location of underwater objects.

Radio systems require .1 MW per 2-mile range (along the River only, not through the cliffs). Note that this does not imply intraship communication systems, which would require separate power.

Radars, sonars and radios can be built with Electronics man-hours, generally 100 to 200 depending on the complexity of the system and the quality of available components. If components are not available, the job will be a *long* one.

Riverboat Crew

The required crew on a riverboat will vary with the vessel's size and power capabilities. Below is a listing of the jobs to be performed on a fairly large riverboat. Generally, crew members should have a level of at least 14 in the skill(s) appropriate to their position. Of course, one person can do more than one job and at higher TLs computers can replace personnel in many of these areas.

Command: Every boat needs a captain. The captain calls all the shots — crewmen who don't like the captain's decisions can either jump ship or try to organize a mutiny. On large vessels (1,000 tons or more) with large crews, personnel will be divided into areas of specialty (engineers, gunners, etc.) with each section having a commander who answers to the captain. Command positions require Leadership and Diplomacy skills.

Pilot: A riverboat pilot mans the helm. He steers the vessel, applies power when necessary, and navigates the river. On small to moderate sized boats, the captain and the pilot will usually be the same person. Pilots will need either Boating or Seamanship skill, depending on the size of the boat.

Engineer: Self-propelled vessels require an engineer to maintain the power plant. Engineers require Mechanic skill, and do *not* necessarily need Engineer skill, since they will primarily be repairing and maintaining the power plant rather than building it.

Gunner: Every boat's weapon needs a gunner with Gunner skill. Remember, a gunner firing a weapon at a different TL than his skill will be penalized, so choose your weapons and gunners carefully.

Marines: An armed contingent is usually necessary when navigating strange waters in the Rivervalley. Marines can defend the boat against an attack, carry out attacks on other vessels, and launch assaults on the Riverbanks. A vessel's marines unit will have a commander and perhaps several small-unit leaders if the force is large. Marine troops should have weapon and combat skills appropriate to the tech level, and commanders should possess high Leadership and Tactics skills.

General maintenance: Large boats should have a "handyman" that can repair mechanical and electrical systems. Of course, Mechanic skill is required and several handymen may be needed to cover different specializations.

Service: Large riverboats carrying passengers will need stewards, entertainers, etc. All boats (whether transporting passengers or not) should have a medic, generally one for every 50 people aboard.

Luxury Boats

Apart from the basic provisions required on a riverboat, large vessels may be furnished with luxuries (ballrooms, swimming pools and the like). Luxuries add to the overall impression of a ship. The GM may make reaction rolls for NPCs encountering a large riverboat. Metal boats carry a +2 to reaction, and each weapon, powered system and luxury should count as a positive modifier depending on its quality. A roll of 13 or better means the NPC is impressed enough to respect the boat's creators, and a 19 or better means he will do anything he can to get on the boat (and perhaps attempt to hijack it, depending on his character).

Accessories

There is a wide range of other systems that a riverboat engineer may wish to install, most of which can be considered expensive luxuries. Computers (TL7) could provide fire control, library data, and computational analysis. They can be built using Engineer (Computers) man-hours; the amount will have to be determined by the GM based on the capabilities of the microprocessor (computers are extensively covered in ***GURPS Space***). Wired telephone systems are available at TL5, and video communications at TL7. All of these systems together would require 1 MW of power at the most, and, with the exception of extremely large computer systems, their weight is negligible.

On self-powered boats, systems may be installed to improve living conditions, such as lighting systems, air conditioners, water heaters, etc. These systems would rarely require power over 1 MW, but the GM may wish to rule otherwise in the case of extremely large vessels. However, it is rare that any single ship system will require more than 2 MW of power.

Other maritime considerations include lifeboats, anchorage systems, etc. Remember that heavy accessories will count against the total tonnage of the boat. Extra tonnage should be "saved" for any cargo the vessel may wish to transport in the future. This could include extra grails, weapons, raw materials, etc. Nations engaged in trade along the River may wish to build a fleet of merchant vessels whose tonnage is primarily dedicated to cargo, and a few specialized warships for escort duty.

Sample Rivercraft

The following boats are provided to illustrate the various concepts presented in this section. They may also be used by the GM in his campaign.

The Cutlass

The *Cutlass* is a small wooden sailing vessel that can transport a party of adventurers. Its length is 25 yards and its beam 7 yards, giving it a mass of 200 and a tonnage of 100. It will require 3,000 man-hours of general labor to construct. It has an HT score of 60, and is reinforced with one layer of wooden armor, giving it a total DR of 6. The extra layer masses at .4 tons (800 lbs.). Its single mast weighs the standard .2 tons and requires 40 man-hours of general labor. Its cruising speed is 8 mph; it can fly down-River at 20 mph or more, or creep up-River, near the banks, at an average of 2 to 3 mph. Two crossbows are mounted on the deck, one on the bow and one on the stern. The crew consists of one captain/pilot and four crewmen. The armor, mast and crew total 2 tons, leaving most of its 100-ton capacity available for cargo and passengers.

The Robert E. Lee

The *Robert E. Lee* is the kind of self-propelled metal riverboat that would be built by a metal-producing nation to transport passengers and cargo throughout a specific area of the Rivervalley. It is a steel-hulled vessel measuring 75 yards in length with a beam of 17 yards. This gives it a mass of 1,000 and a tonnage of 500, requiring 7,500 man-hours of general labor to construct. Its total HT is 1,000 and the hull is reinforced with two layers of steel armor, giving it a total DR of 24. The extra armor masses at 100 tons.

Due to Ethical influence in the area, the *Robert E. Lee* has some TL8 technology. It is powered by a batacitor weighing 5 tons and capable of storing 1,000 MW/hours. Two paddlewheels are necessary for its great mass, weighing a total of 100 tons and requiring 1,600 man-hours of general labor. 12 MW of power are required per hour to keep the boat at its cruising speed of 30 mph.

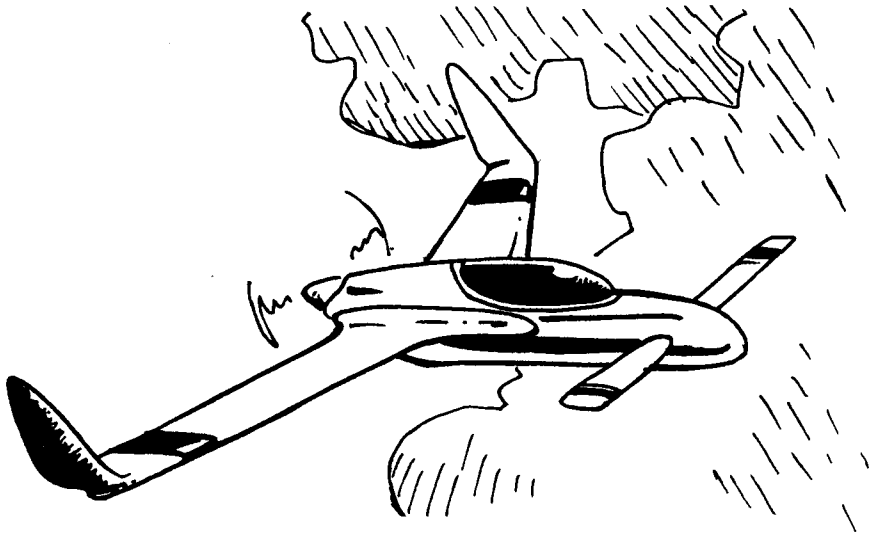
Each additional 12 MW will increase the speed by 5 mph. The boat will be navigating through hostile waters so it is armed with four .50-caliber MGs, four 16-pounders, and two 24-pounders (total mass of the cannons: 10.8 tons). The crew consists of a captain, a pilot, two engineers, ten gunners, and 20 crewmen (total mass: 6.8 tons). The ship is equipped with radar and radio (each with a 10-mile range — 5 MW), and a sonar system (1 MW). The vessel has lighting systems, air conditioning, and intraship telephones, totalling 3 additional MW. Total used tonnage is 226.6, about half of capacity.

Airplanes

Airplanes are an extremely complex subject that will be greatly oversimplified for game purposes. The intent of these rules is to allow the roleplaying of airplane design, piloting and combat, and not to create an intensive simulation of the mechanics of flight and aerial warfare.

In particular, the construction rules have been greatly simplified to give the *feel* of the design decisions that must be made, without involving players in higher mathematics.

An airplane is a self-propelled flying vehicle which attains lift via an *airfoil* or wing. When air passes around an airfoil, the air pressure from above is less than that from below, and thus lift is attained. An airplane must be in a constant state of forward motion to keep air moving around an airfoil; this is what distinguishes them from lighter-than-air craft or rotary-winged craft.



This section discusses the construction and operation of small airplanes intended for combat purposes. Players contemplating the design of larger planes for purposes of mass transport should look at airships instead; they are much more practical and require fewer resources. Many of the concepts of airplane construction have already been introduced in the previous section and will only be referred to here.

Constructing Airplanes

Airplanes are made of either wood or metal. Metal planes are heavier and require more power. Constructing a one-or two-seater wooden plane requires a successful Engineering (Aircraft) roll; a failed roll will become apparent when the airplane is first flown, which is why test pilots are highly paid. This roll is not necessary if a proven design is being used.

The actual construction of the plane requires 500 hours of general labor, with at least half from workers skilled in Carpentry. 50% more hours are required for metal planes, with at least half from workers with metalworking

Catapults

This is a good low-tech alternative to cannons. Catapults are a TL2 invention and require Engineer (Simple Machines) skill, or Armoury (Siege Weapons), to design and build. A catapult consists of a simple frame with a heavy crossbeam. The arm of the catapult is under tension; one species of Riverworld bamboo is especially stiff but flexible, and very good for this. When the tension is released, the catapult fires. See illustration, p. 16.

A more complex system uses a system of cords called a *skein*. A gear system is used to connect the skein to the frame, and the gears can be operated like a winch to create tension. A projectile is placed either directly on the arm or in an attached sling. A pawl holds the gear in cocked position; the pawl is knocked free to fire the catapult.

Catapults may be of almost any size. A 2-ton catapult might have a rectangular base 4 by 3 yards. At its highest point the arm is 4 yards tall. A wooden catapult this size has HT 60, but metal or ironwood would have HT 100. This catapult could throw a 30-lb weight for 400 yards. Building it would require 200 hours of labor, half using Carpentry skill (Blacksmith for a metal catapult). The skein used to create tension can be made from Riverfish intestines or (better still) human hair.

Firing a catapult requires a roll against Gunner (Catapult); this does not default to any higher-tech Gunner skill! A success indicates the missile was placed within 10 hexes of the intended target, with a critical success indicating a direct hit. A failure means the shot was way off, and a critical failure can mean anything from hitting friendly troops to a misfire, causing the missile to drop on the gunner! A fully-crewed catapult can fire *once every five minutes*. Most of the crew are there to crank the arm down. This requires a combined ST of 100. Time is increased by 5 seconds for each ST point less; the minimum ST to crank it down *at all* is 30.

The damage a catapult causes is determined by its ammunition. 30-pound rocks will do 6d×3 crushing damage, and javelins cause 3d impaling damage each (a bundle of a dozen javelins can be fired to scatter over the target area). Flaming projectiles do 1d-3 fire damage *plus* the damage of the missile itself, and may ignite a flammable target.

Other types of siege weapons are possible. The ballista is a huge crossbow that fires missiles directly instead of lobbing them. A trebuchet (TL3) is similiar to a catapult, but uses a counterweight for leverage. If a really large siege engine is desired, big trebuchets are easier to build than big catapults. Such a trebuchet might have a ten-ton counterweight and throw a 1,000-lb. missile.

quired for metal planes, with at least half from workers with metalworking skills. This does *not* include the propulsion system, which must be built separately (see below).

A wooden plane will weigh anywhere from .5 tons to 2 tons, and metal planes from 1 ton up to 6 tons. The engineer should decide on the weight of his plane before starting construction (this may be restricted by the amount of materials available). Heavier planes have higher HT scores, but require more power to lift. Multiply the weight in tons by 10 to obtain the plane's HT score. Thus, a plane weighing 1.5 tons has an HT of 15 (yes, this is less HT than some characters have, but remember, it doesn't take much damage to bring down an airplane).

HT is based on the weight of the *fuselage* of the plane (the main "body," wings, and tail assembly). Power sources, armor, weapons, and crew are *extra* weight that do not count towards HT.

Propulsion and Lift

The amount of lift a plane needs is equal to its mass. Thus, a heavier plane requires more lift, and in turn requires more power to generate the lift. Divide the plane's *total* mass (in tons) by 10 to determine power in MW required for lift. For example, a 2.7-ton plane would require .27 MW to sustain lift. This also determines its *cruising speed* (the speed needed to maintain lift). Cruising speed (in miles per hour) is the plane's *total* mass multiplied by ten. Thus, our 2.7-ton plane needs to maintain a cruising speed of 27 mph to generate lift. Cruising speed must always be at least 20 mph; planes weighing less than 2 tons still have the minimum cruising speed of 20 mph. If, for whatever reason, a plane's speed falls below its cruising speed, it *stalls* (see p. 70).

Different types of power sources can be used for airplanes, depending on the TL and Engineer skills of their builders. Use the power sources listed for riverboats when choosing airplane engines, but remember that an airplane will require much less power (1 MW at most). For this reason steam engines and batacitors are completely impractical for airplanes, due to their tremendous weight. Fuel cells and internal combustion engines are the best choices, especially the former, with their lower fuel requirements. Remember to add the weight of the engine and the fuel when computing the total mass of the plane.

Fuel cells and internal combustion engines are assumed to power propellers for forward motion. At TL7, jet engines can be constructed. These are advanced forms of internal combustion engines that heat compressed air to produce thrust. They weigh 1 ton, produce 5 MW of power, and require 5 tons of fuel (flammable liquids, similar to those used in a regular internal combustion engine) for every 24 hours of operation. To build a jet engine, a successful roll against Engineer/TL7 (Aircraft) is required in addition to 200 hours of Mechanic/TL7 labor in a fully-equipped machine shop.

An airplane's speed is increased by applying the throttle (increasing power). For each .1 MW applied, the plane's speed increases by 10 mph. Speed can be increased or decreased this way every 10 turns. Each plane has a maximum speed determined by its total mass, representing the amount of stress the aircraft can take. The chart below gives maximum speeds based on cruising speeds.

Cruising Speed	*Maximum Speed*
20-25	80
26-30	100
31-35	120
36-40	140
41-50	180
51-60+	200+

The Fabulous Riverboats

Sam Clemens' first riverboat, the *Not for Hire*, was the result of six years of work by the citizens of metal-rich Parolando. The great metallic sidewheeler was the first of its kind on the Riverworld, though far from the last.

The riverboat is 146 yards long with a beam of 31 yards, weighing in at 3,500 tons. The two 175-MW paddlewheel motors are powered by a batacitor delivering 500 MW. There is also a boiler that heats water and provides pressurized steam to power the steam guns (see below). The batacitor and boiler are on the lowest of four decks, the others being a main deck (passenger space and cargo), a "hurricane" deck (the pilothouse and captain's quarters), and a landing deck (with an aircraft hangar and heliport). There are 65 cabins and three lounges that include pool tables, card tables, gymnastic equipment, plus movie and stage theatres. The pilothouse contains the helm, radar, sonar and an autopilot computer. It carries a variety of auxiliary craft, including two fighter planes, a scout plane and a torpedo bomber.

The boat's armament includes 30 steam-powered .75-caliber machine guns. These use pressurized steam to provide the propelling force. They do 7d damage, have a maximum range of 5,000 hexes (½ damage is 500), and a rate of fire of 15 shots per turn. The 30 or so marines are armed with pistols, rifles and bazookas. The vessel's duraluminum hull has a DR of 16.

Sam lost the original *Not for Hire* when King John stole it and rechristened it the *Rex Grandissimus*. Sam then constructed a larger boat. The Parolando citizens voted to name it the *Mark Twain*, but when Clemens found out about John's name change, he changed his new boat's name back to the *Not for Hire*.

This second vessel is 183 yards long and 38 yards at the beam. It has five decks to provide for 228 cabins; it carries two launches (*Post No Bills* and *After You, Gascon*), a helicopter, two fighter planes, a scout plane and a torpedo bomber. Four motor/paddlewheels consume 380 MW of power delivered from the batacitor. A huge boiler provides auxiliary power. This second boat is much better armed, with 30 .80-caliber steam MGs (7d+2 damage), three 88mm cannon, eight 20mm cannon, and two batteries of heat-seeking missiles — plus a secret weapon, a laser. The hull has a DR of 20. All other instrumentation and luxuries present on the first boat were included on the second.

Weapons and Armor

Light weapons are favored on airplanes, especially machine guns and light cannons. Firearms with a recoil penalty of greater than -2 will cause serious problems to stability (requiring a Piloting roll at -4 to avoid loss of control). Bombs can also be carried; GMs should determine their damage based on their weight. To accurately drop a bomb, a Piloting roll is required, modified by target size and range (see p. B201). Remember, bombs and weapons with any substantial weight (.1 tons or over) will count against the total weight of the aircraft for purposes of lift and speed. ***GURPS High-Tech*** provides more information on bombs and air weapons.

Armor can be layered onto a plane to provide extra DR, but this generally adds undesired weight. If armor is needed, use the DR and mass factor figures from the riverboat section to determine the weight and protection of airplane armor.

Crew and Passengers

Every plane needs a pilot, who can serve as gunner on a single-seat plane. Two-seater planes (requiring a mass of at least 1 ton) can carry a separate gunner or bombardier. This second crewman can serve as an emergency pilot should anything untoward happen to the main pilot. People weigh .1 tons each.

Planes of this size will not carry passengers, although a two-seater could carry one passenger. Larger metal planes (5 to 6 tons) could provide interior space for perhaps 10 passengers, but passenger weight adds up fast. Players looking to transport large numbers of passengers should consider a riverboat or an airship.

Aerial Reconnaissance

The short-range airplanes of the Riverworld make great fighters, but are also useful for reconnaissance. Spying from the air is a science as old as aeronautics itself, and a successful aerial recon mission can make or break a future battle.

The degree of success of an aerial recon depends on the altitude of the spyplane and the size and visibility of ground objects. A Vision roll is required by an aerial spy, modified positively by Alertness and Acute Vision. Altitude also modifies the roll needed: Low altitude +3; Medium altitude 0; High altitude -2; Very High altitude -6. The size of the target object will affect the adjusted skill as per the chart on page B201. If the object is shrouded or camouflaged in some way, the GM should apply negative modifiers based on the quality of the subterfuge; really good camouflage will require a contest between Camouflage skill and the observer's Vision roll. The degree of darkness will affect skill from -1 to -10, depending on the time of day.

Of course, the targets of the recon also have a chance to detect the spy plane, using the same modifiers as listed above. Airplanes generally have a wingspan of 10 to 15 yards (size modifier: +5) and cannot be easily disguised or camouflaged. What's more, they make *noise*. Hearing rolls should be allowed for ground targets, modified by up to +4 for internal combustion engines (Hearing rolls should also be modified by altitude). If a spyplane is detected, the targets can attack it with ground weapons or scramble their own planes to engage it.

The potential targets of an aerial recon are many and varied. Nations that have erected fortification walls may be concealing a "secret project" like a riverboat or airship. Perhaps they are building an airstrip to receive planes from an allied nation. Treaty terms may be checked up on — if a nation promised to stop practicing grail slavery, aerial recon may show that they still have "prison camps" or similiar structures. And of course, any signs of the presence of metal would be valuable knowledge to anyone.

Accessories

Planes can be equipped with radios, radars, instrument panels (displaying altitude, attitude, airspeed, etc.), lights, and even heating and cooling systems. Any combination of these systems require .1 MW of power at most. Other accessories adding extra weight include landing gear (or pontoons), tow lines, and external lights (headlights and running lights). The GM should determine the weight of these objects depending on their size and material.

Flight

Most aircraft will have a ceiling of 20,000 feet. The height of the mountains lining the Rivervalley is 10,000 feet, which is also the altitude at which double Fatigue costs must be paid (see p. B139). For this reason, many voyagers will probably wish to navigate along the Valley and not over the mountains.

It is not necessary to keep track of exact altitude when determining airplane movement. A plane's distance from the ground can be simplified to Low (ground to 2,000 feet), Medium (2,000 to 5,000 feet), High (5,000 to 10,000 feet) or Very High (10,000+ feet). The time required to change levels depends on the plane's speed. An average "maximum rate of climb" is 20% of the plane's ground speed. An average maximum rate for safe altitude loss is 40% of ground speed. Of course, the plane is going forward while it climbs or dives!

Piloting rolls are required to operate a plane; the specialization is determined by the number and type of engines used. A successful Piloting roll is needed when taking off and when landing. See page B69 for the results of failures. Special situations that might require Piloting rolls during flight include navigating through mountains, flying at night or in a storm, attempting to cross the mountains dividing the Valley, flying extremely low (500 feet or less), or flying while concentrating on some other task. Piloting rolls are also required during combat (see below).

It is not necessary to mark a plane's position on a tactical map. Most planes will be moving too fast to remain on the map long enough as it is. Instead, keep track of its position relative to other planes and to things on the ground. Remember, faster planes require more of a turning radius (p. B139) and need to cover a wider area. Also, larger planes have higher cruising speeds and may not be able to stay in one place too long.

Stalling

If a plane's airspeed drops below its cruising speed (from lack of power, engine damage, etc.), it *stalls*. It noses down and drops one level of altitude; if the time required for this becomes important, use the time it would take the plane to fly 12,500 feet in level flight.

Once one level of altitude is lost, a successful Piloting roll must be made to recover from the stall; a failure means the plane drops *another* level. Repeat this procedure until a successful Piloting roll is made and the pilot recovers . . . or the plane crashes.

A crash results in a destroyed airplane. If flammable fuel was used, the plane may explode after 3d turns. On a roll of 12 or less the plane explodes, doing 6d of damage to anyone in or near it. The crash itself is likely to kill the occupants; the pilot has one last chance to make a Piloting roll. At this point, a critical success means those within will walk away (1d damage each) and a success means they are likely to live (3d damage each). A failure means, in effect, that the plane's crew and passengers fell from the plane's cruising altitude. Survivors may attempt to escape the plane by making an Escape roll (one attempt per turn).

Gliders

Like an airplane, a glider attains lift using an airfoil, but it is *not* self-propelled. It has to rely on wind currents to keep it aloft. Building a glider is a viable option for people or nations who do not have access to metal or advanced aeronautical engineering.

Building a glider requires a roll against Engineer/TL5+ (Aircraft) and 500 man-hours of labor (Carpentry). The material should be light wood (even bamboo), although aluminum can also be used if it is available. A one-seat glider should weigh a maximum of 500 pounds, and a two-seater no more than 800 pounds. Gliders are intended to carry one or two people and *nothing else.*

Gliders can be towed by powered aircraft and then released, riding the winds until the craft finally descends. Alternatively, they can launch from high places into the wind. A riverside precipice would be a good launching site; so would a thousand-foot irontree. In either case, provision must be made to get the glider up to the top before it can be launched!

A Piloting (Glider) roll is required to take off, land and adjust the craft to wind changes. A glider can only attain Medium altitude. Its airspeed is always equal to the wind current (anywhere from 15 to 50 mph). Whenever the pilot wishes to fly his glider to a specific spot or to perform a certain manuever, the GM should require a Piloting (Glider) roll with modifications based on difficulty and wind status. Other situations requiring Piloting rolls are similiar to those for airplanes.

Or *hang-gliders* could be built. A hang-glider is simply a large kite with a frame for suspending the pilot. A hang-glider can be constructed with 100 pounds of material and 50 man-hours of Engineering/TL6+ (Aircraft). Bamboo makes good frames, because it is so light. Hang-gliders take off from high places and ride the wind currents like a regular glider. Rolls against Piloting (Hang-Glider) skill (no significant default to or from other Piloting skills) are required to take off or land, and in any situation described for regular gliders.

Weapons cannot be mounted on gliders, but personal weapons may be used by the pilot. A Piloting roll is required to maintain control of the aircraft each time a personal weapon is used. Use the rules on p. B139 when glider pilots are involved in combat. For more details on hang-gliders as built and used by a primitive culture, see p. 37 of the ***GURPS Space*** adventure ***Unnight.***

Landing

To land, a plane must reach Very Low altitude, and then descend for five more turns. Airplanes require a long, level surface for landing. If no landing strip is available, the pilot will do the best he can. Make a Piloting roll, modified as the GM sees fit to account for the fitness or unfitness of the terrain. A critical success indicates a perfect landing; a success may do slight damage to the craft; a failure is a crash. For this type of crash, take the number of points by which the pilot missed his landing roll, and roll that many dice to determine damage to the craft. Roll half that many, rounding down, to determine damage to each person on board.

Dogfights

This is a simple system to resolve combat between two airplanes. If more than two planes are involved, or if other types of craft are involved (airships and riverboats), use the combat system presented at the end of this chapter.

Dogfights are divided into *rounds*, each representing one minute of time. At the beginning of the round, roll a Quick Contest of Piloting. Pilots get +1 to their roll if their plane's current airspeed is greater, and +1 if their turning radius is the lower. The winner of the contest is considered to have the *initiative* for this round and chooses a position from which to approach the enemy plane: *front*, *rear*, or *side*. Pilots may also elect not to approach the enemy plane, in which case the losing pilot has the option to approach.

Pilots that face the enemy plane may now fire their weapons. This is usually only the pilot that made the approach, unless he approached from the front, in which case both pilots may fire, the pilot with the initiative firing first. The attack roll is made against Gunnery skill, modified by relative speed (use the table on p. B201). Combat is assumed to take place at less than "½ Damage" range, so range is not taken into account. An Accuracy modifier may be obtained only by the pilot with the initiative. If both pilots may fire, the pilot with initiative must surrender his right to fire first if he wishes to to obtain the Accuracy modifier.

Pilots may make a defense roll instead of attacking by rolling against Piloting-4. A successful roll means the plane evaded the attack.

The location of a successful hit is determined by the approach. Roll one die on the appropriate column to see where the damage is applied.

	Front	*Rear*	*Side*
1	Fuselage	Fuselage	Fuselage
2	Fuselage	Fuselage	Fuselage
3	Weapon	Fuselage	Fuselage
4	Weapon	Stabilizer	Wing
5	Engine	Rudder	Wing
6	Pilot/Gunner	Wing	Pilot/Gunner

Hit location effects:

Fuselage: The damage is subtracted from the total HT of the plane, minus any DR from armor. When HT reaches 5, the plane stalls. If HT reaches 0, the plane is torn up in midflight.

Wing: Apply the damage to the plane's HT, with results as above. Furthermore, the pilot may not evade on the next round.

Rudder, Stabilizer: Apply the damage to the plane's HT. Furthermore, for the next round, the pilot may not evade and his Piloting skill is at -4 for all purposes.

Engine: Engines have separate HT, equal to their MW output times 10. Every hit on an engine reduces its power by .1 MW. If the power falls below that

Balloons

Balloons are gas-lifted aircraft that are not self-propelled. Balloons drift with the wind, but unlike gliders they can reach high enough altitudes to ride the prevailing winds, and thus have a longer range.

Balloons can be built from simple materials — wood or bamboo fiber for the gondola, and stretched intestinal linings or woven cloth for the envelope. Use the same material and man-hour requirements as for airships. Balloons are non-rigid and require no frame. Hydrogen gas can be used to lift a balloon (valving it for control, like an airship), or air within the envelope can be heated to make it lighter. 1K cu. ft. of hot air weighs 20 pounds and can lift 30 pounds.

In flight, a balloon ascends when ballast is released or air within the envelope is heated. Descent is achieved by valving off gas or cooling the air. At altitudes below 10,000 feet, the GM should randomly determine the wind speed and direction, since this will determine the speed and course of the balloon. Once above cliff level, the prevailing winds (see p. 22) will control the speed and direction of the aircraft. The skill necessary to fly a balloon is Piloting (Hot-Air Balloon) or Piloting (Gas Balloon), depending on how the balloon is lifted. Rolls are required for launch, landing and critical situations similiar to those affecting airships.

Balloons first appeared at TL5, pioneered by the French. The Montgolfier brothers are credited with the first hot-air balloon (and the first manned aircraft) in 1783. In the same year, the first gas balloon was devoloped by Jacques Charles. Two years later, Jean Blanchard piloted a balloon across the English Channel.

Parachutes

A parachute made of riverfish membranes costs $2,000; it is difficult and time-consuming to make. Nevertheless, it can save a pilot's life. Parachuting near the cliffs is dangerous (-2 to skill rolls), because there are updrafts, and a parachutist who hits the wall will probably spill his chute and slide a *long* way down.

Parachutes are very occasionally used to drop spies, saboteurs, etc., into enemy territory by night (-3 to skill).

required to keep the plane at cruising speed, the plane stalls. Also, combustible fuel explodes on a 10 or less whenever the engine is hit (see above for effects).

Pilot/Gunner: The hits are applied against the pilot. If there is a gunner, roll a die to see who is hit. Subtract the number of hits received from the pilot's Piloting skill. If the Pilot falls unconscious or dies, the plane immediately stalls, unless a gunner is present to act as emergency pilot.

Pilots may attempt to leave a dogfight by declaring so at the beginning of a round. Roll for initiative as normal, with the pilot intending to break off receiving a -3 on his roll. If he gains the initiative *and* has a faster plane (i.e., his plane's maximum airspeed is higher than his enemy's), he successfully breaks off the dogfight with no chance of pursuit. Any other situation means the dogfight continues as normal.

Helicopters

Helicopters are more difficult and expensive to build, and harder to fly, but they have their advantages. For purposes of this simple simulation, treat them as airplanes, with the following differences:

The skill of Pilot (Helicopter) is required; there is no default between this skill and aircraft piloting.

All rolls made while designing and building a helicopter are at a -1 penalty.

Any Piloting roll made when the craft is in danger is at an extra -1 penalty.

Aerial reconnaissance is at +3 because the craft can hover.

A helicopter can take off and land straight up. It can also stand still in the air, making it a better weapons platform and sometimes a better target.

A helicopter's forward speed is half that of an equivalent plane; for every .1 MW applied over that required for lift, the copter can increase speed by 10 mph.

Turning radius is zero.

A "wing hit" in combat is considered a fuselage hit.

Airships

Airships are self-propelled aircraft that generate lift via an envelope containing lighter-than-air gases. Airships are ideal for moving a large number of people and cargo a long distance without having to follow the Rivervalley.

Constructing Airships

It takes a successful Engineering/TL5 (Aircraft) roll to plan an airship. An airship is divided into three parts: the *envelope* (which may contain separate gas cells), the *frame*, and the *gondolas* (which contain motors, cargo holds, and space for crew and passengers). The frame and gondolas can be made from wood or metal, while the envelope requires thin, flexible material like bamboo-fiber cloth or pressed intestinal linings.

The Envelope

The volume of an envelope determines how much gas it can hold, which in turn determines the lifting power of the airship. The volume of an envelope is measured in units of 10K (10,000 cu. ft.); each "K" weighs 50 pounds and lifts .35 tons (helium, which has less lifting power but is not flammable, cannot be obtained on the Riverworld). Each 10K cu. ft. requires 100 pounds of material and 1 man-hour of general labor. The envelope's length is the K value divided by 50 in feet. For example, a 5,000K envelope is 100 feet long.

Airship engineers may wish to divide the envelope into separate *gas cells* for protection and control. This doubles the man-hours and material required to

Airship Terminology

The following terms are useful to understand when designing an airship. Anyone who has Piloting (Airship), Airshipman, or Engineer (Aircraft) skill at 12 or better will have a general understanding of all of these terms.

Aerostatics: The science dealing with the interaction and equilibrium of solid bodies immersed in gaseous fluids.

Aerostation: Type of aerial navigation involving the raising and guiding of balloons.

Airdock: A hangar in which airships are built.

Air scoops: Cylindrical scoops used on non-rigid airship propellers. Air from the propellers is blown through air scoops into ballonets to control stability, or "trim."

Ballast: Deadweight dropped by airships and balloons to allow ascent. Water stored in tanks is most commonly used as ballast.

Ballonet: Compartments used on non-rigid airships that vary in air volume, and help maintain trim, envelope pressure, and ascent/descent control.

Blimp: General term for non-rigid airships.

Blowers: Power units used to fill the ballonets with air.

Control car: Area of the airship containing the helm controls and instruments. It is most often part of a gondola, but can be housed inside the frame of a rigid airship.

Dirigible: Early term for an airship, from the French word *dirigeable*, meaning "capable of being guided or steered."

Dynamic lift: Force achieved by flying an airship at an angle to compensate for an uneven distribution of weight.

Elevators: Movable horizontal flaps on the airship's fin structure used to control ascent and descent.

Engine car: Gondola containing one or more engines.

Envelope: Any container used to house lifting gas.

Fins: Vertical and horizontal surfaces at the rear of an airship containing flaps for control of stabilization.

Girders: Light, triangular rigging used to construct the frame of a rigid airship.

Gondola: Anything attached to the hull of an airship used to house people, cargo or machinery.

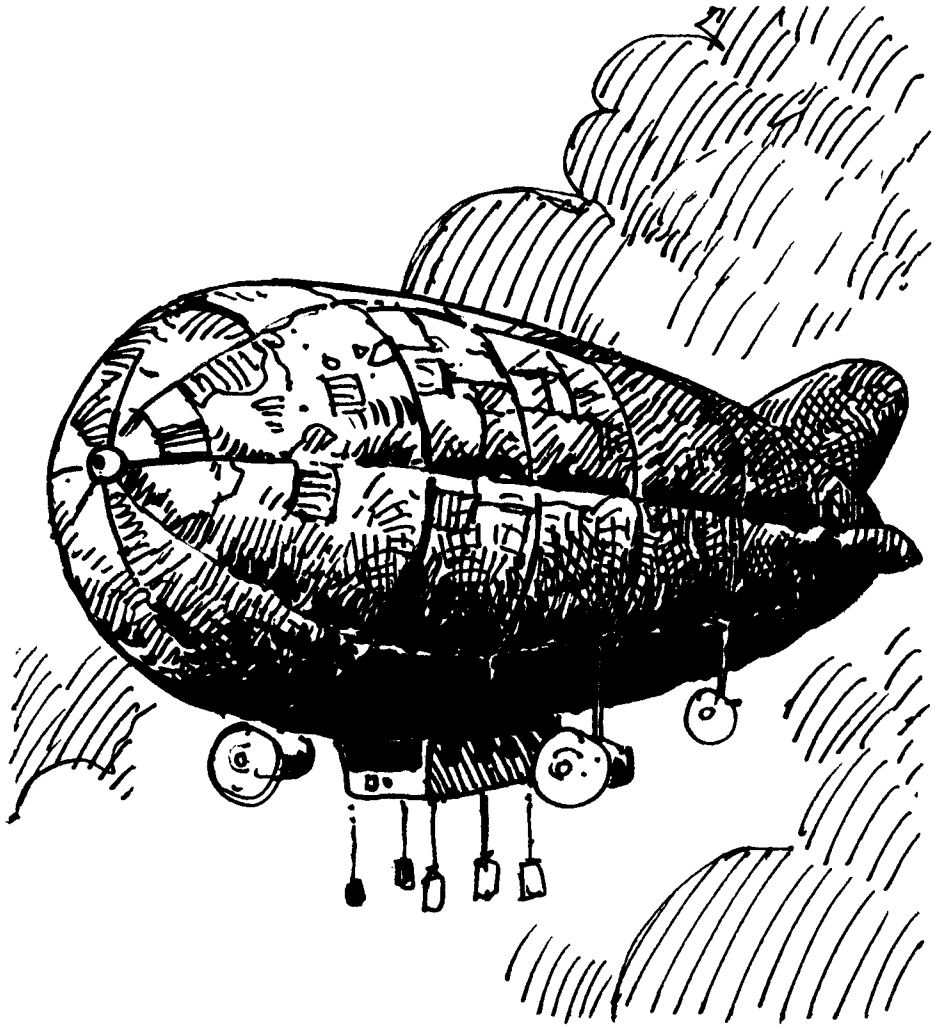
Gross lift: Total lift of the gas contained in an airship, equal to the weight of the air displaced minus the weight of the lifting gas.

Continued on next page . . .

make the envelope. For example, a 5,000K cu. ft. envelope containing gas cells requires 1,000 total man-hours and 50 tons of material. Note that rigid airships (see below) *must* be constructed with gas cells.

The Frame

Airships are divided into three types, each with a different type of frame. *Non-rigid* ships have no frame around the envelope and require netting or cables to suspend the gondolas. *Semi-rigid* ships have a keel-like beam running the length of the envelope, from which the gondolas could be suspended. *Rigid* ships have a complete skeletal framework around the entire envelope. Rigid ships are generally referred to as *zeppelins*.



The time required to build the frame varies with the type of airship. Non-rigid ships require no additional man-hours, since there is no frame. Semi-rigid ships require 1 additional man-hour per 10K cu. ft. to build the frame, while rigid ships require 2 additional man-hours per 10K cu. ft. Thus, a 5,000K semi-rigid ship will require 1,000 hours to build the envelope (without gas cells) and the frame, while a rigid ship requires 2,000 hours — 1,000 for the frame, 1,000 for the envelope, because the envelope of a rigid airship *must* have gas cells.

The type and size of frame determines the HT value of the airship. A semi-rigid ship requires 100 pounds of material per 10K cu.ft. to build the frame, while a rigid airship requires 250 pounds per 10K cu. ft. Because the frame is heavier on rigid ships, they should be larger; this allows them to hold more hydrogen to generate more lift.

Airship Terminology (Continued)

Hull: The envelope and frame structure of an airship.

Keel: Longitudinal girder affixed to the underside of the envelope on a semi-rigid airship.

Longitudinals: Structural girders running the length of a rigid airship.

Main rings: O-shaped structural components of a rigid airship braced with radial wires and used to support the longitudinals.

Nose cone: Rigid structure attached to the nose of a non-rigid airship.

Non-rigid airship: Pressure airship comprising an envelope made of a gas-tight fabric, the streamlined shape of which is maintained by the internal pressure of the gas and the expansion and contraction of ballonets.

Pressure airship: Term applied to non-rigid and semi-rigid airships, referring to the fact that the envelope shape is maintained by gas pressure.

Pressure height: Maximum altitude of airship before atmospheric pressure becomes so low that the lifting gas expands dangerously.

Rigid airship: Airship having a rigid, skeletal structure, formed by main rings, longitudinals, and angled crossbeams.

Rudder: Movable vertical flap used to steer the ship to port or starboard.

Semi-rigid airship: Pressure airship with a rigid keel structure running the length of the envelope, either suspended below it or installed in its underside. Gondolas are suspended from the keel on a semi-rigid airship.

Supercooling: Reduction in the buoyancy of lifting gas when it is cooled, usually when flying at night or at high altitudes.

Superheating: Increase in the buoyancy of lifting gas when it is heated, usually from the sun.

Trim: Attitude of an airship in flight. An airship is "in trim" when it is not inclined toward the stern, bow, port, or starboard.

Useful lift: Net lift of an airship after deducting the weight of the gasbag, frame, and gondolas from the gross lift.

Useful load: Disposable load equal to the useful lift, i.e., passengers, cargo, fuel, crew and ballast.

Weight empty: Total weight of the envelope, frame and gondolas, minus the useful load.

Zeppelin: A rigid airship.

Airship Weight Checklist

Designing an airship is tricky business because of the delicate balancing act between lifting power and weight. As you enlarge your envelope (and gas amount) to compensate for more weight, *further weight is added,* requiring more gas, which adds further weight, etc. To make this easier, weight considerations should be followed according to the outline below, which starts with the most important considerations and works down to the most adaptable and expendable.

Envelope: Consider the volume and weight of the envelope, and how much lifting power it will generate when full.

Gas cells: Adding gas cells increases the airship's survivability, and rigid airships require them.

The gas itself: Remember, the weight of the hydrogen gas must be considered as part of the airship's total weight.

Frame: Don't use a rigid frame unless resources are available to build a *big* ship.

Motors: Motors have a standard weight of one ton.

Engine: The lighter the power plant is, the better.

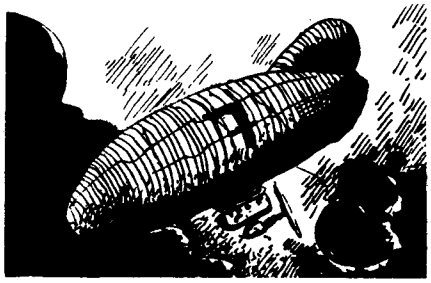
Fuel: The weight of the fuel depends directly on your engine requirements.

Main gondola: Decide on the *minimum* spatial requirements for the gondola, and construct it with the lightest material available.

Crew: It is best to recruit professional airshipmen who can do double duties. This saves crew requirement, i.e., weight. Allow one ton for every five regular crew and their belongings.

Passengers: Every ten people adds one ton of weight.

Cargo: Cargo is always expendable, and should be considered ballast in an emergency.



To determine the HT value of an airship, consult the table below. The envelope volume is cross-indexed with the type of frame to yield two values. The first is the HT score for a wooden frame; the second is for a metal frame (non-rigid ships have no frame, so only one value is listed). These HT values are for the *hull* (envelope and frame) of the ship only, and do not take the weight of the gondolas into account.

	Non-rigid	*Semi-rigid*	*Rigid*
10K-1,000K	50	75/100	100/150
1,001K-2,500K	75	100/150	150/200
2,501K-5,000K	100	150/200	200/300
5,001K-10,000K	150	200/300	400/800
10,001K-50,000K	200	400/800	500/1,000
50,001K-100,000K	400	500/1,000	1,000/2,000
100,001K+	500	1,000/2,000	2,000/4,000

Gondolas

A gondola is a compartment attached to the hull. Gondolas are usually mounted beneath the hull for stability. Gondolas for living and working space can be mounted *inside* the hull of rigid airships. It is best to keep gondolas as light as possible to keep the lift requirements at a minimum.

Gondolas can be made of wood or metal, the size and weight varying with the desired function. The GM will have to decide on the specifics of each gondola based on what the engineer wants. Gondolas intended for living and working space can be designed like small houses. The weight of gondolas that contain propulsion units and fuel should be based on the guidelines given for riverboats. Large weapons can be mounted on separate gondolas, their weights determined according to the weapons specifications. The man-hour requirements for building a gondola depend on the material used (Carpentry for wood, Engineer for metal), and are generally 100 hours per ton, in addition to whatever the gondola houses.

Each gondola should have a HT and DR rating, based on mass and armor respectively. Generally, 1 ton of material provides 1 HT. GMs should modify this upwards for metal and downwards for softer woods (or even bamboo). Armored gondolas require extra material to provide the DR; use the guidelines given for riverboats to determine extra mass.

Propulsion

Airships require power to move, based on their mass. To determine the amount of power required to move the airship at cruising speed for 24 hours, divide the *total mass* of the ship (in tons) by 20. This is the required power in megawatts. Still-air cruising speed for most airships is 50 mph; however, the GM may want to adjust this downwards for aerodynamic considerations, such as a large number of gondolas, etc. Increasing power increases speed at the same ratio given for riverboats (see p. 64).

Airships can utilize any of the power systems described in the riverboats section. Airships are propelled by propeller motors weighing 1 ton, requiring 200 hours of general labor and a successful Engineer roll. One such propeller-motor requires 5 MW of power. Therefore, a 10-MW motor weighs 2 tons and requires 400 hours, etc. 5 tons is the maximum weight of any one motor. Up to two propeller-motors can be placed in a separate gondola, which is considered to have a HT of 20. Motors can all be powered from a single power source mounted elsewhere on the ship.

If for some reason power to propel the airship is lost, it will drift with the wind like a balloon (see sidebar, p. 71) until it is brought down by releasing gas.

Flight

One thousand cubic feet of hydrogen will lift about 70 pounds. Therefore, when designing an airship, the engineer must take into account the total weight of the ship when deciding on the capacity of the envelope. Of course, a larger envelope adds more weight (in terms of the envelope *and the weight of the gas itself*). Once the proper gas-to-weight ratio is attained, the ship can lift and fly.

The physics involved in lifting an airship are complicated. The three most important factors to consider are *momentum, air pressure,* and *temperature.* Momentum is the tendency of a rising object to continue rising. Air pressure decreases with altitude, which causes the hydrogen gas to expand. Both of these factors are controlled by using valves that gradually release hydrogen gas when a desired altitude is attained. The other factor is temperature. Warm gas is lighter than cool gas; what's more, hydrogen expands when it is warm. For this reason, the gas is kept cool by making the envelope a light color (or better yet, reflective) and by installing cooling systems (power requirement: 1 MW).

Piloting an airship requires Piloting (Airships) skill. Rolls are made when lifting off and landing, and during any event that would change the lift conditions of the vessel: high altitude (colder air and lower pressure), storms, high winds, etc. An airship needs a crew (Airshipman skill, p. 43) — one crewman per 30 tons of mass — to valve off gas or release ballast.

Airships have a ceiling of about 30,000 feet. This is where air pressure becomes so low that the hydrogen gas expands enough to burst the envelope. Of course, oxygen masks are necessary past 10,000 feet!

Airships can rise fairly fast: about 2,000 feet per minute if unencumbered, half of that if at maximum load. When running an airship voyage, the GM should randomly determine air conditions that would affect flight, such as air pressure and temperature. Airship pilots with good instrumentation (radars, barometers, etc.) should be able to detect these changes and be able to respond to them (with skill rolls). Unpredictable changes can result in sudden lift or drop, which may be treacherous if navigating through high mountains. Remember that airship expeditions to the Polar Sea will be dealing with air that is much colder than that at the lower latitudes. This means that the gas must be kept cooler to control lift.

Airships will have an operating range anywhere from 1,000 to 3,000 miles, depending on the conditions encountered. This range is reached when enough gas has been valved off to prevent further lift (it can also be reached by running out of propellant fuel). When this occurs, more hydrogen or fuel must be obtained before the airship can again be operational.

The factors governing expenditure of hydrogen, ballast and fuel are difficult to predict even in the real world, and entirely beyond the scope of this roleplaying background. In general, every takeoff requires expenditure of fuel and ballast; every landing requires the valving of gas. Turbulent weather requires constant use of all three in order to maintain good trim. Level flight through calm weather uses up the least fuel, hydrogen and ballast. A pilot can extend a ship's operating range by disposing of unnecessary weight.

For gaming purposes, assume that two rolls are required for each landing, each hour of turbulent air, or each 8 hours of calm air. One is a Piloting roll, made by the ship's pilot. The other is an Airmanship roll, made by the person designated as crew chief. If both rolls are made successfully, 1d × 100 lbs. of lift are lost, and must be counteracted by dropping ballast (for a landing, the ballast is dropped on takeoff). For each point by which either roll is failed, an additional 1d × 100 lbs. of lift are lost. A critical failure loses an extra 2d × 100 lbs. of lift per point by which the roll was missed! When the ship's lift is reduced to the point where it cannot take off, even when all remaining ballast is dropped, the ship is in trouble. A good captain will make sure he is back at base before that point is reached.

Hydrogen Gas

Hydrogen is the most abundant element in the universe, but obtaining sufficient quantities of hydrogen gas to lift an airship is no easy matter on the Riverworld. Hydrogen can be obtained from three major sources: water, hydrocarbons and electropositive metals.

Obtaining hydrogen from water is done by separating it from oxygen. The best procedure for this is *electrolysis,* a chemical reaction produced when passing an electrical current through a conducting matter. Electrolysis requires the development of a *battery* to control the output of electricity (which can be obtained from the grailstones), which in turn requires metal, specifically zinc. Once a battery is constructed there is no limit to the amount of hydrogen that can be obtained, given the abundance of water on the Riverworld.

Hydrocarbons are organic compounds of hydrogen and carbon found in plant life. Hydrogen is extracted from hydrocarbons by using steam as a catalyst. Hydrogen can also be obtained from the action of a dilute acid on zinc or other electropositive metal.

All of these procedures require a successful Chemistry/TL5+ roll to perform. This assumes that the proper materials and equipment are available. If not, the chemist may wish to develop the tools or he can attempt the hydrogen extraction with heavy negative modifiers. Hydrogen is always extracted as a gas except at extremely low temperatures (around -420°, when it becomes a liquid. Proper facilities must be created to *store* the gas until is used to fill the airship's envelope.

Hydrogen is extremely flammable and explosive. When incinerated, it causes 6d×3 burning damage to the impact and adjacent hexes (see *Explosions*, p. B121). Therefore, hydrogen is best stored away from flame sources.

Hydrogen has uses other than lifting airships. It can be combined with nitrogen to make ammonium nitrate (an explosive). Other chemical combinations include methanol and hydrogen chloride. In liquid form it can be used as rocket fuel and a refrigerant.

Airship Combat

When an airship is hit by enemy fire, the damage will almost always be taken by the hull. Only aimed fire can place a shot on a gondola. Separate damage totals should be maintained for the hull and each gondola. When the total hits remaining in a hull *with gas cells* are at one-fourth of the original HT, the envelope ruptures and the airship rapidly falls. If gas cells were not installed on the ship, damage of only half of HT or less will cause rupture.

Incendiary ammunition and hits scored against the fuel tank have a chance of igniting the hydrogen if the hull's HT total is at half or less. For each full die of fire damage done (either by the ammo or an exploding tank), a roll of 12 or less on three dice means the hydrogen ignites. If the ship is aloft, no one on board has a chance of surviving except through the most outrageous luck.

Weapons mounted on an airship can only fire at targets level with or below the ship. Flamethrowers and other incendiary ordnance are *never* used on an airship.

Parseval

The *Parseval* was built by Parolando under the leadership of Milton Firebrass after Sam Clemens departed on his second riverboat. It was used on a marginally successful polar expedition before it was sabotaged by Loga. It was the largest airship ever built, either on Earth or on the Riverworld.

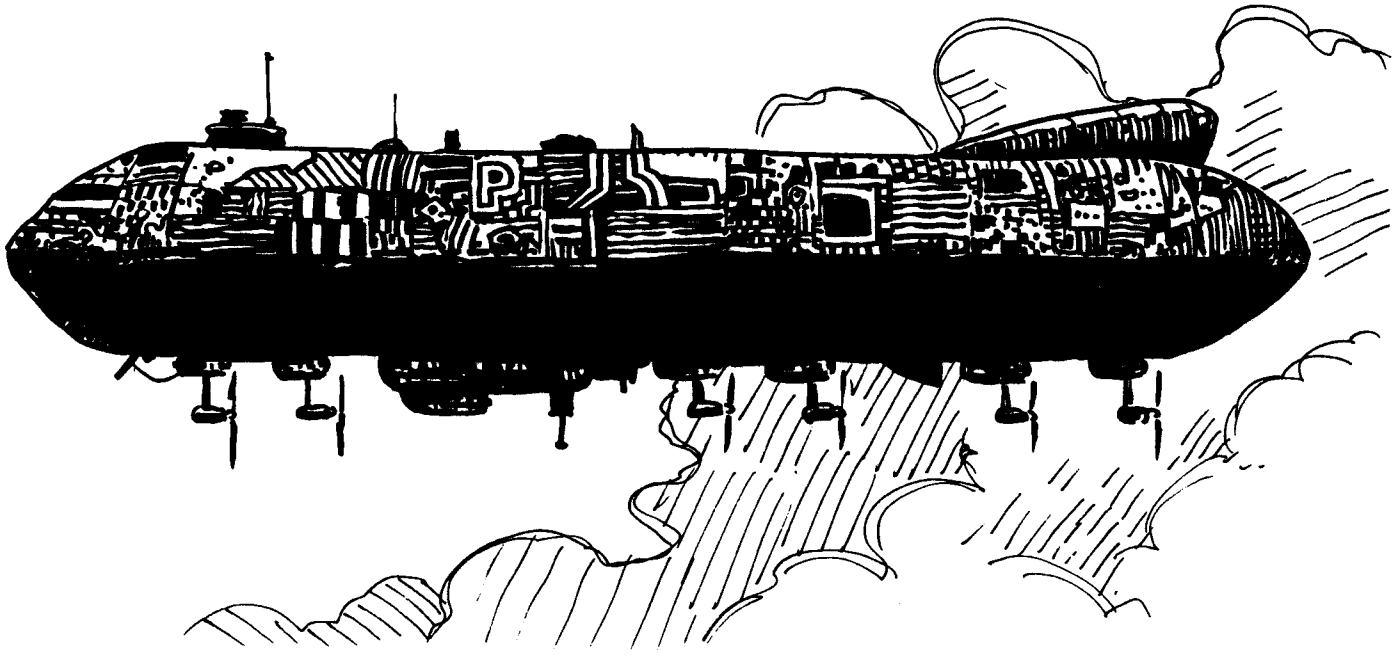
The *Parseval* is a rigid airship with a 120,000K cu. ft. envelope 2,680 feet in length. This gives it a lifting power of 4,200 tons. The envelope/gas cell combinations weighs 1,200 tons and required *24,000 man-hours* to build. The rigid frame masses 1,500 tons, and the complete hull has an HT of 4,000. The *Parseval* requires 220 MW of power to propel it at cruising speed. This is delivered from a 250 MW internal combustion engine, weighing 250 tons and requiring 500 tons of fuel. 24 motors weighing two tons each and requiring ten MW of power propel the airship. The control gondola houses the helm and crew cabins and weighs 180 tons. The *Parseval* also carries two ten-ton helicopters, a two-seat glider, four 40-ton bombs, and one nine-ton rocket. The mighty ship has a crew of 100.

Sample Airship

The *Bismarck* is a large, semi-rigid airship produced by a metal-rich nation. It has an envelope capacity of 10,000K cu. ft., giving it a length of 200 feet and a lifting capacity of 350 tons. The envelope will require 1,000 man-hours of general labor to make, plus another 1,000 for the gas cells. Total weight of the envelope is 100 tons. The frame requires an additional 1,000 hours (1 hour per 10K for semi-rigid ships) and weighs 50 tons. Since the capacity of the vessel is 350 tons it will require 17.5 MW of power to propel (the total mass of the ship divided by 20).

The *Bismarck* uses an internal combustion engine weighing 20 tons (power output: 20 MW) and requiring 40 tons of fuel to power four 1-ton motor-propellers (5 MW each). The engine will require 120 man-hours of labor and 72 hours of Engineer skill (as per the *Riverboats* section). The engine and fuel will be housed in a gondola also containing crew, cargo, and passenger space. Two forward-mounted MGs are also placed on the gondola. The additional 2.5 MW provided from the engine are used to power a lighting system, a radar/barometer system, and a gas cooling system.

Total weight of the control gondola, with engine and fuel, is 160 tons (net weight without engine and fuel is 100 tons, giving it an HT of 49). This leaves



21 tons for crew, passengers, ballast and cargo. The weight and man-hour considerations of the *Bismarck* are broken down as follows:

Envelope	50 tons	1,000 man-hours
Gas cells	50 tons	1,000 man-hours
Hydrogen gas	25 tons	—
Frame	50 tons	1,000 man-hours
Motors	4 tons	800 man-hours
Engine	20 tons	192 man hours
Main gondola	100 tons	5,000 man-hours
Fuel	40 tons*	—
Cargo/crew	21 tons*	—
Total:	*350 tons*	*8,992 man-hours*

*variable weight.

Mass Combat

While ***GURPS Riverworld*** is primarily a game of individual quest and glory, situations in the campaign may involve battles on a mass scale. This is a system to resolve combat between large forces, possibly including numbers of different types of craft. For example, suppose an airship and a fleet of biplanes are attacking a riverboat. The complexities of such a battle are beyond the scope of these rules. Instead, this system is designed to answer two questions: *who won,* and *what happened to the PCs?*

The participants of a battle are divided up into two "sides" (it should be obvious how those sides are drawn). Each side should have a force commander, and it is his skills that will determine much of the battle's outcome. The GM should determine the skills of any NPC commanders.

Determining Firepower

The firepower of the craft involved in the battle is abstracted for these rules. Basically, for each full die of damage a weapon does, 1 point of firepower is assigned to the craft. Therefore, a weapon that does 6d×10 damage is worth 60 points of firepower. Optionally, a GM may "add up" the bonus numbers and consider every 4 *full* bonus points to be 1 additional point of firepower. For example, a 2d+2 weapon and a 2d+3 weapon together would be worth 5 points of firepower.

This assumes that each side is somewhat vulnerable to the other's weapons. Should either side be *wholly* invulnerable to the maximum damage that some of the foe's weapons can do, those weapons are omitted from consideration. For instance, if a riverboat has DR10 armor, no possible 1-die attack can penetrate it, and enemy weapons doing only 1 die of damage, and men without firearms, can be omitted from the firepower calculation.

The GM then computes the total firepower for each side in the battle. As the battle progresses and weapons become inoperative (either from damage or lack of a gunner), the firepower totals will change, and the GM should keep a running tally.

Armies and Mobs

In a battle between airplanes and/or boats, foot soldiers become less important. Still, a large enough group of infantry, especially if they are disciplined, can stand against a war machine.

To determine the firepower value of a group of 10 men, take their *average*

Engineering Nations

Given the vast amount of resources and man-hours required to construct a large craft of any kind, the only realistic way to start is to get a *lot* of people in on it. Organizing these people into a cohesive working group means establishing a nation. Many nations on the Riverworld were founded solely for the purpose of constructing a riverboat or airship.

The purpose of any state is to provide for its citizens in return for their services. A shipbuilding nation can arise by promising people a place on the riverboat once it is built. Of course, it takes more people to *build* a riverboat than to *man* it. This can be a positive situation, however, since it can create a competitive working environment (i.e. only the *best* people will get a place on the boat).

Once a nation is established, the next step is to delegate tasks based on skills. The GM defines the skills available, based largely on the original makeup of the area's population. Engineers, shipbuilders, mechanics, carpenters, metalworkers, and, of course, boat pilots and crewmen, will all be needed to get the boat designed and properly built. Those with little applicable skill can still provide general labor.

Continued on next page . . .

weapon damage, as given above (e.g., if the average weapon does 1d+2 damage, a squad of 10 has a Firepower of 1). Double the Firepower value for ranged weapons; allow +1 for any group that is wearing heavy leather armor or better. But any group of men that cannot reach its foe has *zero* firepower. A squad of axemen, or even bowmen, will be useless against an airplane. They can attack a boat only if the boat comes to shore or they have a boat of their own.

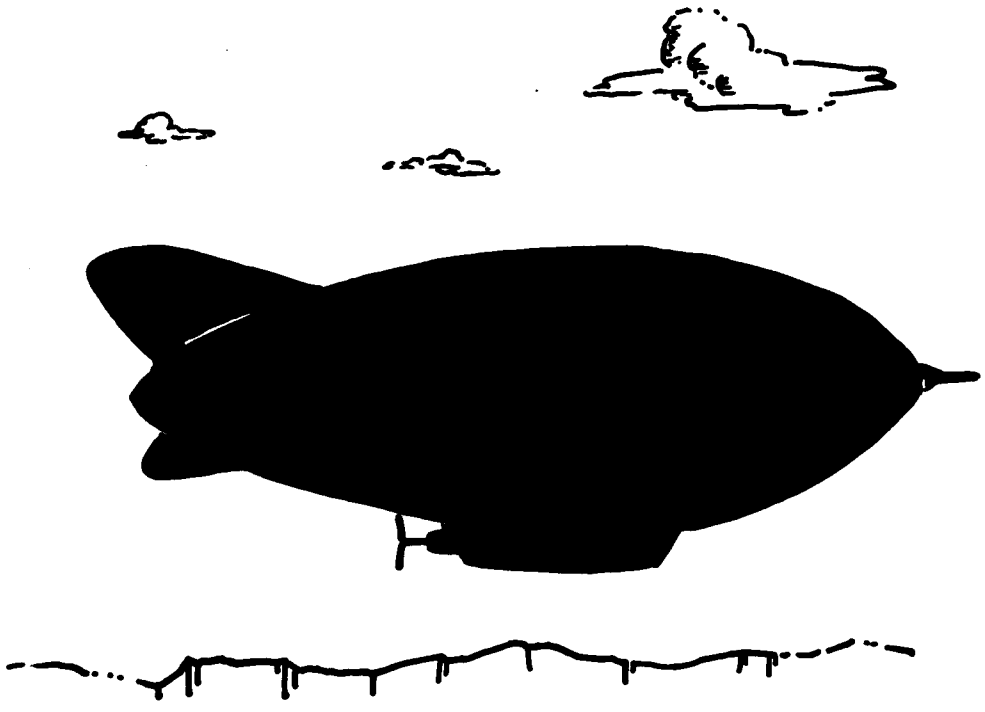
Finally, the GM must determine whether these infantrymen constitute an *army* (that is, disciplined) or a *mob* (possibly well armed, but not disciplined). Prior training helps make an army, but if the group is small, a single talented leader can make the difference. If the group is a mob, halve its firepower.

For a situation that is mainly or entirely infantry-vs.-infantry, see p. 82.

Detection and Engagement

Combat is divided up into "rounds," each round representing one minute to one hour of time, depending on the number of craft involved. At the beginning of each round, before the battle is drawn, each side attempts to detect the other. This is done by a basic Vision roll, or an Electronics roll if radar or other type of detection equipment is being used. The GM should modify this roll for any countermeasures being used to avoid detection.

Once detection occurs, each force commander should roll a Quick Contest of Tactics to determine if engagement takes place. The force with the greater speed has a +1 on this roll for every 5 mph of superior speed. The winner of the contest has the choice to engage or flee. (If a force contains units of vastly different speed, its commander may choose to split the force, at least for the first combat round.) Air fleets have a great advantage over river craft in terms of speed, and can almost always engage at will.



The Round

Each round is resolved according to the following rules. At the end of each round, so long as there are still combatants, the round order resumes; re-compute firepower and roll a new Contest of Tactics.

Engineering Nations (Continued)

In addition to those working directly on the vessel's construction, a "service" populace will be required to maintain the nation itself. Buildings must be built and maintained, tools must be constructed, some sort of military organization is required to protect the facilities from greedy neighbors. Even entertainment should be provided for rest and recreation. The people involved in the service of the nation should have as much chance of a place on the boat as those directly involved on its construction, or of some equivalent reward.

Just how the state controls its citizens depends on those in power. Presumably, the boat's designers will be in charge, though how they administer their authority is entirely up them. The society might be stratified according to skill, with the shipbuilders and mechanics enjoying more privilege than the general laborers. Or privilege could be based on merit, with rapid promotion and demotion based on performance. However the society is operated, once the boat is completed, the fate of the nation and its citizens becomes open to question. Those denied a place on the vessel may be quick to anger and could spark a hijack attempt.

Of course, the most logical thing for those left behind is . . . start another project. Since the social and technical tools are already in place, the second one will be easier. As long as raw materials are available, an industrial base could continue to produce boats (or aircraft) indefinitely. In time, such a nation would be led and populated by people who genuinely wanted to *build* such craft rather than *crew* them.

Contest of Tactics

The force commanders roll a Quick Contest of Tactics. If there are more than ten vessels in the battle, or ground forces of over 100 men, use Strategy instead. The Tactics or Strategy skill is modified by the following conditions:

Attack totally by surprise: +5 first round, +2 second round.

Partial surprise — less than 3 minutes warning: +2 (first round only).

Familiar area: +1 to +3, GM's choice.

Maneuver ratings: Airplanes have a maneuver rating of +4, and airships -4. The maneuver rating of riverboats is determined when they are constructed. *Average* the maneuver ratings of the vessels on each size to determine the modifier to the Tactics roll.

Relative Firepower

To determine the relative firepower of the two forces, find the firepower rating of each craft and total the firepower ratings for all craft on each side. Then find the ratio of the larger firepower to the smaller (see *Determining Firepower*, above).

Once a ratio is determined, find the ratio of the larger to smaller in the first column of the table below. Then read across to the second number to find the Relative Firepower Modifier for the Contest of Tactics roll, which is added to the Tactics (or Strategy) skill of the larger force's commander.

Less than or equal to 1.2	No modifier
More than 1.2, but not more than 1.4	+1
More than 1.4, but not more than 1.7	+2
More than 1.7, but not more than 2	+3
More than 2, but not more than 3	+4
More than 3, but not more than 5	+5
More than 5, but not more than 7	+6
More than 7, but not more than 10	+7
More than 10	+8

If one side has no firepower, the opposing force gets a +8 for better than 10 to 1 superiority.

Player Character Glory

In the course of the battle each PC makes two die rolls: one for daring in battle — the Glory roll — and one for survival. The Glory roll is made *before* resolving the Contest of Tactics; the Survival roll is made *after* the entire battle is completed. A PC may choose to take extra risk during the battle, or to play it safe, choosing any number from -6 to +6 as a modifier to his Glory roll. However, the *opposite* modifier applies to the Survival roll. Naturally, these modifiers must be chosen before the Glory roll is made.

Thus, someone who goes for more glory is also more likely to be wounded. It's risky to be a hero! Likewise, playing it safe (applying a positive modifier to the Survival Roll, and its opposite to the Glory Roll) isn't likely to win your commander's respect.

The Glory roll is made against "Battle" skill. This is not a skill which can be studied in itself. It is the average of the PC's Tactics skill (defaulting to IQ-6) and the primary skill the PC uses in the action (Shiphandling, Gunner, Airshipman, etc.). If the skill involved is a noncombat skill, roll against that skill alone, without averaging Tactics (e.g., Seamanship. Note that Shiphandling most definitely is a combat skill!). If no particular skill applies, roll against the

average of DX and IQ. The result can modify the Contest of Tactics which determines the outcome of the battle.

Glory Roll	*Modifier*
made by 10+ or a Critical Success	+5/+3/+1
made by 7-9	+4/+2/—
made by 4-6	+2/+1/—
made by 0-3	—/—/—
missed by 1-3	-2/-1/—
missed by 4-6	-4/-2/—
missed by 7+ or a Critical Failure	-5/-3/-1

Effect of Glory on the Battle

The numbers in the *Modifier* column indicate the effect that this Glory Roll will have on the whole battle. Use the first modifier if the PC is the Force Commander, the second if he is a combatant, pilot or active seaman, and the third if a noncombatant. If more than two PCs are involved on one side, apply only the *best* and *worst* resulting modifiers to the contest of tactics. Note that the best result may be a negative number, or the worst result may be a positive modifier.

The Survival roll is detailed on p. 82, under *Player Character Survival.*

Effect of Glory on the PC's Reputation

An individual's Glory roll also determines how he impresses his leaders. This may be important if he is "trying out" for a place on a River expedition or some similiar venture.

Critical Success: Covered with glory! Check reaction of leader at +2; if roll is 16+, you will get a special place in the leader's future enterprises (if the leader is killed, you are the new leader!). Your reputation will be enhanced on a reaction of "good" or better, at no character point cost.

Make roll by 7 to 9: Fought with great courage and heroism. Check reaction of leader as above, but with no modifier.

Make roll by 4 to 6: Fought heroically. Check reaction of superior officer as above, but at -2.

Make roll by 3 or less: Fought competently.

Make roll by 1 to 3: Fought adequately.

Miss roll by 4 to 6: Fought poorly. Leader notices your ineptness or caution; make reaction roll at -2 to see how he will treat you after the battle, with no reaction better than Good.

Miss roll by 7+ (or roll 17 or 18): Fought abysmally. Results as above. In addition, if you survive the battle, you will be publicly named a coward; depending on local customs, you may be demoted, beaten up, banished, challenged to a duel, exiled or simply shot.

Resolving the Contest of Tactics

Having noted all these modifiers, the quick Contest of Tactics — or Strategy, if 10 or more craft are involved in the battle — is rolled. The winner of this Quick Contest is the winner for that round. The *difference* in the amounts by which the leaders make or miss their rolls determines the *outcome.*

Intensity of the Battle

A second roll (on one die) determines the intensity of the battle, and the

Special Attacks

The combat rules in this chapter are an abstract representation of action between large forces of different types of craft. The special capabilities of each craft within the force are ignored in this system. PCs aboard a vessel may wish to make special attacks to make good use of its abilities.

The GM may allow a special attack once per round. Any weapons used in the attack are *not included* in the force's firepower for that round. These weapons can be brought to bear on specific targets. The attack is resolved *after* the "winner" is determined for that round. The GM should then determine the range and any other special factors based on the mass combat result. If the PCs' side took losses, especially losses against their own vessel, then the attack will be with negative modifiers (and may not take place at all).

Damage effects from a special attack on enemy forces will modify the Tactics roll of the next round up to -3, depending on the nature and extent of the damage. This is the GM's decision — if the affected vessel was vital to the enemy effort (perhaps the force commander was aboard) a full modifier should be applied. Additionally, firepower may be reduced if a major weapon was incapacitated by the attack.

Special PC maneuvers may also be allowed as a special attack. This includes actions such as planting an explosive, taking an aimed shot at a specific person, parachuting onto a riverboat, etc. Treat each action as a separate roleplaying situation with required success rolls (possibly even reaction rolls). PCs performing special actions do *not* make Glory rolls but *do* make Survival rolls, modified according to their actions as the GM sees fit. How the PCs' actions affect the next round's Tactics rolls is also up to the GM.

The use of special attacks allows the PCs to directly affect the outcome of the battle. It also provides opportunity for roleplaying amidst a situation that is largely out of the PCs' control. Creative players should be rewarded for ingenious PC action during the heat of battle.

degree of damage suffered by each force. Degree of damage ranges from A (none) to F (near total). The GM may assign the intensity of the battle based on the details of the encounter, rather than rolling randomly. This is affected by number of craft involved, total firepower (of both sides), and the stakes of the battle.

On the following table, cross-reference the battle outcome, based on the difference in the Tactics rolls — and the battle intensity — 1 to 6. For each pair of letters, the first indicates damage taken by the winner, the second indicates damage taken by the loser. Thus, a result of "B/F" indicates minimal damage to the winner and crippling damage to the loser.

Difference	*Outcome*	*Battle Intensity*					
0-3	inconclusive	A/A	B/B	C/C	D/D	E/E	F/F
4-10	marginal	A/B	B/C	B/C	C/D	D/E	E/F
11-20	definite	A/C	B/D	B/D	C/E	C/E	D/F
21+	decisive	A/E	A/F	B/E	B/F	C/F	C/F

Assessing Damage

Three types of damage are important in a ***GURPS Riverworld*** battle: personal injury to important characters, specific damage to the PCs' craft, and the casualty percentage suffered by each force.

Craft Damage

To determine damage to the craft on each side, cross-index the degree of damage with the total firepower of the opposing force. The result is the number of hits that side takes to their craft.

Degree	*Firepower of Opposing Force*					
of Damage	1-10	11-20	21-50	51-75	75-100	101+
A	6	10	20	50	75	100
B	10	25	60	120	170	200
C	15	45	105	190	260	300
D	20	60	140	250	350	400
E	40	90	220	350	475	500
F	60	120	300	450	600	700

Commanders may distribute the damage to their forces as they see fit. Craft with armor will absorb hits up to their DR rating. Heavy damage assessed to craft containing PCs or important NPCs will negatively affect their Survival rolls. See the rules on individual types of craft for the effects of damage.

Force Casualty Percentage

If the PCs' craft is part of a very large force, it may not be desirable to compute damage to every single ship. In that case, damage to each fleet as a whole is determined as a "casualty percentage" — the percentage by which the fleet's firepower is reduced. This percentage is given by a die roll, using the table below.

Degree of Damage	A	B	C	D	E	F
Fleet Casualty	None	1d+5%	2d+10%	4d+20%	8d+40%	12d+60%

If it is important to the adventure, the GM decides how this reduction is allocated in the force, based on the circumstances of the battle. (If damage is over 100%, all firepower is lost.) The PCs' craft (and any other important craft in the battle) will lose a percentage of its HT equal to the force casualty percentage.

Hit Locations

Given the large variety of craft that this system covers, specific damage tables have been dispensed with in favor of general hit points. However, the GM may wish to apply damage to specific areas, especially in the case of the PCs' vessel.

Most hits will be against the hull (in the case of riverboats and airships), or the fuselage (in airplanes, gliders, and the like). The larger the number of hits on a vessel, the greater the chance of hitting something vital, like a power plant, weapon or pilot. The roll to hit a vital area is equal to the number of hits the vessel takes divided by 3. Remember to use the *effective* damage, those hits in excess of the vessel's DR rating (if any). *Example:* 21 hits are applied to a riverboat with a DR of 6, producing an effective damage of 15 hits. 15 divided by 3 is 5, so on a roll of 5 or less, a vital area is hit.

If a vital area is hit, it takes HT damage equal to the roll required to hit (so in the example above, the area would take 5 hits). Determining what exactly is hit should be done both logically and randomly. Power plants, fuel tanks, and large weapons like cannon are more vulnerable than crewmembers and small armaments. Roll 3 dice on the table below to determine the area hit:

3	Captain/airplane pilot
4, 5	Gunner/airship helmsman
6, 7	Small weapon
8, 9	Fuel tank
10, 11	Power plant
12, 13	Large weapon
14, 15	Fuel tank
16, 17	Small weapon
18	Captain/airplane pilot

The GM should adjust these results to fit the given situation. For example, an airship helmsman probably won't be affected by an attack from above the ship.

If further detail is desired, plans can be drawn up of the vessel(s) in question, and hits can be marked off of specific areas. Armor can be "stripped away" by successive hits (e.g., 1 point of DR is lost every time the armor is hit), and crew losses (and their effect on the vessel's operation) can also be tallied.

Damage Control

At the end of each combat round, PCs not involved in controlling the vessel or firing the guns may attempt damage control, using skills appropriate to the damage. Engineer, Shipbuilding, Mechanic and Armoury (the craft's weapons) are always appropriate; the GM may rule that others are appropriate for specific sorts of damage.

Each PC may make one damage control roll per round, provided he is involved in no other activity. The GM may allow PC commanders to use the services of NPC crews as well. In general, not more than 10% of the crew should be considered capable of attempting these rolls at skills of 1d+10.

A successful roll against a given piece of damage repairs it temporarily. Failure has no effect. A critical failure breaks the equipment, and may have worse effects. Damage control *never* repairs lost HT; it only renders damaged equipment temporarily operable. Equipment at half or less of its original HT modifies the damage control roll by -4. Equipment that has lost all HT cannot be repaired at all.

A damage-control attempt against hull damage (that is, an attempt to repair damage to the craft's basic HT) gives a *temporary* fix of 1 HT on a success. This HT is lost again when the craft next lands or docks; it must be replaced with a permanent repair. Only on a critical success is 1 HT permanently restored; it is rare that a genuine repair is accomplished in the heat of action.

Damage control on computers, radar and the like requires an Electronics roll with the appropriate specialty. This is a matter of quick troubleshooting and replacing modules. If the first roll fails, the damage cannot be repaired until after the battle.

If equipment is repaired in this manner, and then damaged again in the same battle, subsequent damage control rolls are at -2 for each time the component has been damaged. This does not apply to welding the hull, or patching the fuselage or envelope, to deal with hull damage.

Player Character Survival

Each PC and important NPC must make a Survival roll at the conclusion of each round, based on his HT. This number is modified by the original HT (before damage) of the PCs' craft, the intensity of the damage suffered, and the damage to the PCs' own craft.

Degree of Damage	*Survival Roll Modifier*	*Original HT of Craft*	*Survival Roll Modifier*
A	No roll	1,000+	+3
B	+5	800-999	+2
C	+2	500-799	—
D	—	200-499	-1
E	-2	100-199	-2
F	-5	Up to 100	-3

% of Craft's HT Lost This Round	*Survival Roll Modifier*
0-20%	—
21-40%	-1
41-60%	-2
61-80%	-4
81-100%	-5

The advantage of Combat Reflexes also helps a PC avoid injuries in battle, giving a +2 on the Survival roll. Once the appropriate Survival roll for each character is established, roll to determine the injuries incurred during action.

When the Survival roll results call for a wound, take the injury directly off HT — subtract Toughness, but not armor. Determine hit locations randomly.

Made Survival roll by 5 or more: Unhurt.
Made roll by 1 to 4: Take 1 point of damage.
Made roll exactly: Take 2 points of damage.
Miss roll by 1 or 2: Take 1d+1 damage.
Miss roll by 3 or 4: Take 2 wounds, each 1d damage.
Miss roll by 5 or 6: Take 2 wounds, each 2d damage.
Miss roll by 7+ (or roll 17 or 18): Take 3 wounds, each 2d of damage.

Land Battles

In the first few years on the Riverworld, most battles will be simple infantry engagements; there will be no high-tech war machines. Below is a greatly simplified version of a mass combat system which has been presented in ***GURPS Horseclans*** and ***GURPS Japan***. Those interested in more detailed mass combat rules may refer to one of those books.

Play out combat rounds as described above, but substitute the following sections for firepower and combat results.

Troop Strengths

Determine the results of a large-scale battle by resolving a Quick Contest of Tactics (Strategy if commanding 100 or more troops) between the leaders of the forces involved. The Strategy roll of each leader is modified by several factors. One is the *troop strength* of the forces they are commanding. The troop strength is a value from 1 to 10, and is assigned by the GM based on the number of troops and the quality of their training.

The troop strength of each side is compared as a ratio, which determines a modifier to the Tactics roll of the superior side, as given on p. 79.

The roll can also be modified by the *quality of weapons* involved. In the case of melee weapons, the GM may modify the Tactics roll by the weapon's modifier to the basic swing or thrust damage. For example, an iron axe does swing+2, so a group using iron axes gets +2 to their leader's Tactics roll. This assumes that *everyone* is thusly equipped; otherwise, the GM should reduce the modifier accordingly (i.e. if only half the group is using iron axes then the modifier should only be +1).

Ranged weapons should count for a +1 modifier *in addition* to any damage modifier. Again, this should be reduced in terms of the number of troops equipped with such weapons. To continue the above example, if half the group is armed with iron axes and the other half with spears (a ranged weapon), the total modifier is +3: a +1 modifier for the axes, added to half of a +4 modifier for the spears (+3 for the damage, +1 for the ranged weapon).

If one side has aerial surveillance and the other does not, that is worth a +2 modifier if the roll will be against Tactics, and +3 if it is against Strategy. There is a further +1 modifier if the foe does not realize that it has been subjected to aerial observation!

Other factors may also modify the Contest of Tactics, such as surprise, morale, good defensive position, etc. Action on the part of the PCs may also affect the roll (negatively or positively — see *Glory Roll,* above). The GM should weigh these factors individually and decide on the total cumulative modifiers for each side involved. Again, for campaigns in which less GM improvisation is desired, more detailed rules are found in ***GURPS Horseclans*** and ***GURPS Japan.***

Glory and Survival

Glory and Survival for PCs are handled as described on pp. 79-80 and 82.

Resolving the Contest

The winner of the Quick Contest of Tactics is the winner of the battle. The *difference* in the amounts by which the leaders make (or miss) their rolls will determine how decisive the outcome is:

0-3: Inconclusive. Each side holds position. At the leaders' choice, either side may withdraw, or may attack again.

4-7: Marginal victory. The losing side withdraws with minimal losses; they may elect to counterattack.

8-12: Definite victory. The losing side withdraws after losing half its troops.

13-16: Great victory. The losing side withdraws after losing three-quarters of its troops.

17 or more: Overwhelming victory: The losing side loses most (if not all) of its troops and the leader is killed.

Boarding Actions

Eventually the battle will become one between men instead of between vessels. This usually occurs when one or more vessels are boarded by enemy troops. When the PCs are directly involved in boarding actions, the following rules apply.

Before beginning boarding, determine damage from combat as normal, including any wounds to the PCs. If deck plans are being used, the PCs should be placed in a logical spot (whether they are being boarded or are part of the boarding troops). If deck plans are not available, some may need to be sketched. Riverboats will generally be boarded from the area with the least amount of ship's weapons (see below for boarding airships).

How the PCs fare will determine how their entire crew fares. The GM must determine how many NPCs (and of what type) to pit against the player characters. Most boarded boats that are severely outnumbered will simply surrender — unless the captain is a fanatic like Sam Clemens or King John. The NPCs will usually consist of a large number of "generic" cannon-fodder types with one or two distinguishable individuals among the ranks.

If boarding actions that do not involve the PCs occur, the GM should resolve these abstractly. Decide how damaged the boarded boat is, and how powerful and organized the boarders are. The mass combat rules can be used to quickly resolve boarding actions involving a large number of troops. Of course, the GM can always decide the outcome if it helps to move the adventure in an interesting direction.

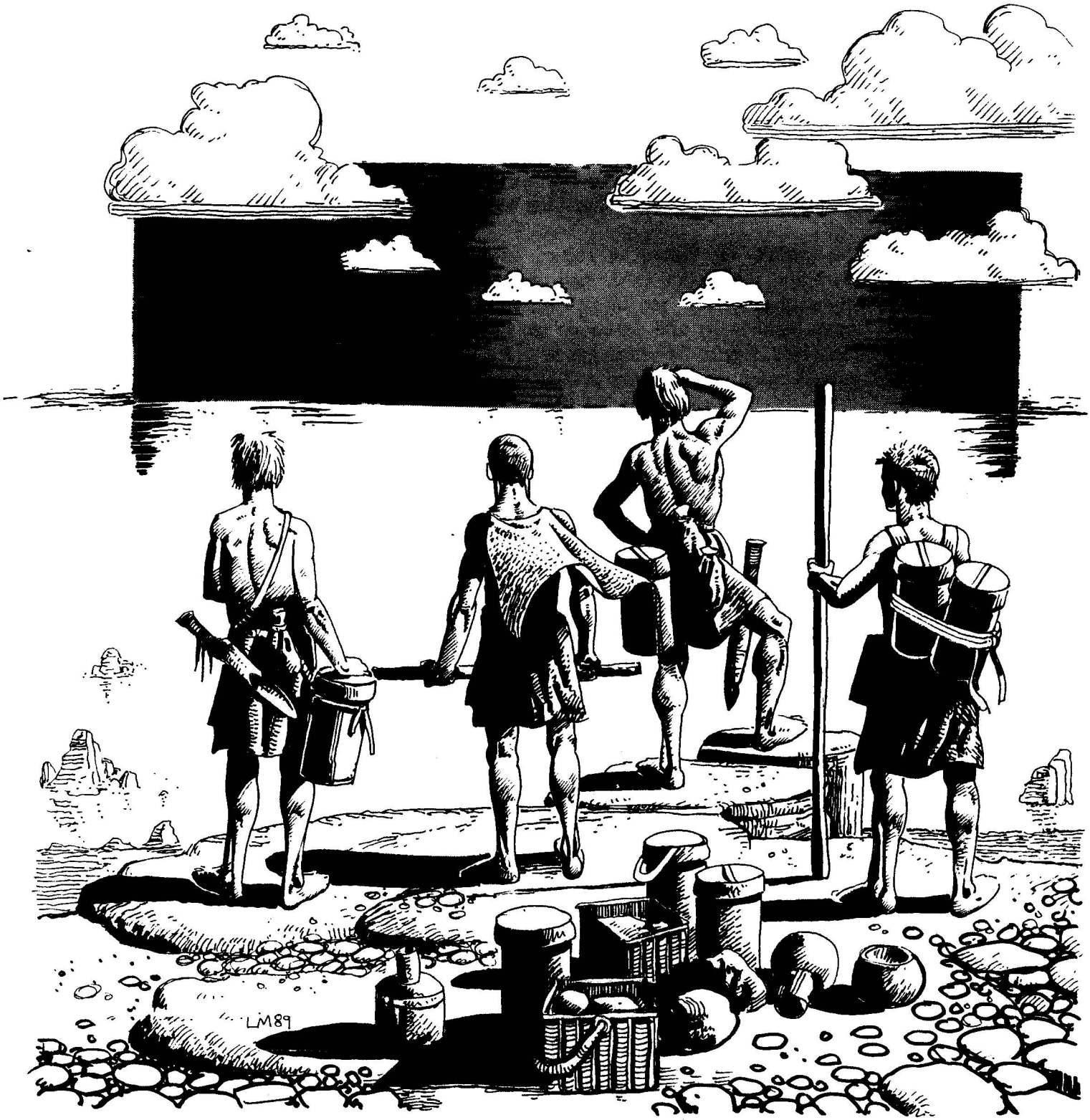
Boarding Action Aloft

Airships in flight *can* be boarded, but it is usually better to bring them down instead. To board an airship in flight, the attackers must match speed and course; if the target is trying to evade, it may be necessary to disable its propulsion first. Then, unless someone is to attempt a jump, lines with grappling hooks can be cast to the target's gondola. This requires a successful missile attack or a good roll against Throwing. Crossing the lines requires DX rolls every 10 yards, with a failure resulting in no forward progress and a cumulative -1 on the next roll, and a critical failure resulting in a fall. Once foemen are aboard the ship, boarding actions can be resolved.

Rigid airships may have living and working space inside the hull, in which case boarding actions aren't as easy. It will take inside information or IQ rolls to determine just where the control room is; the grappling-hook roll is at -3 to hit exactly the right place. It should be clear that attackers will have to want the ship intact pretty badly to attempt boarding it in the air.

4 THE ETHICALS

This chapter is intended for the GM, providing an overview of the Ethicals, the Riverworld project, the Dark Tower and the advanced technology used by the builders of the Riverworld. It should *not* be read by anyone who has not read the books, as it reveals the underlying secrets therein.

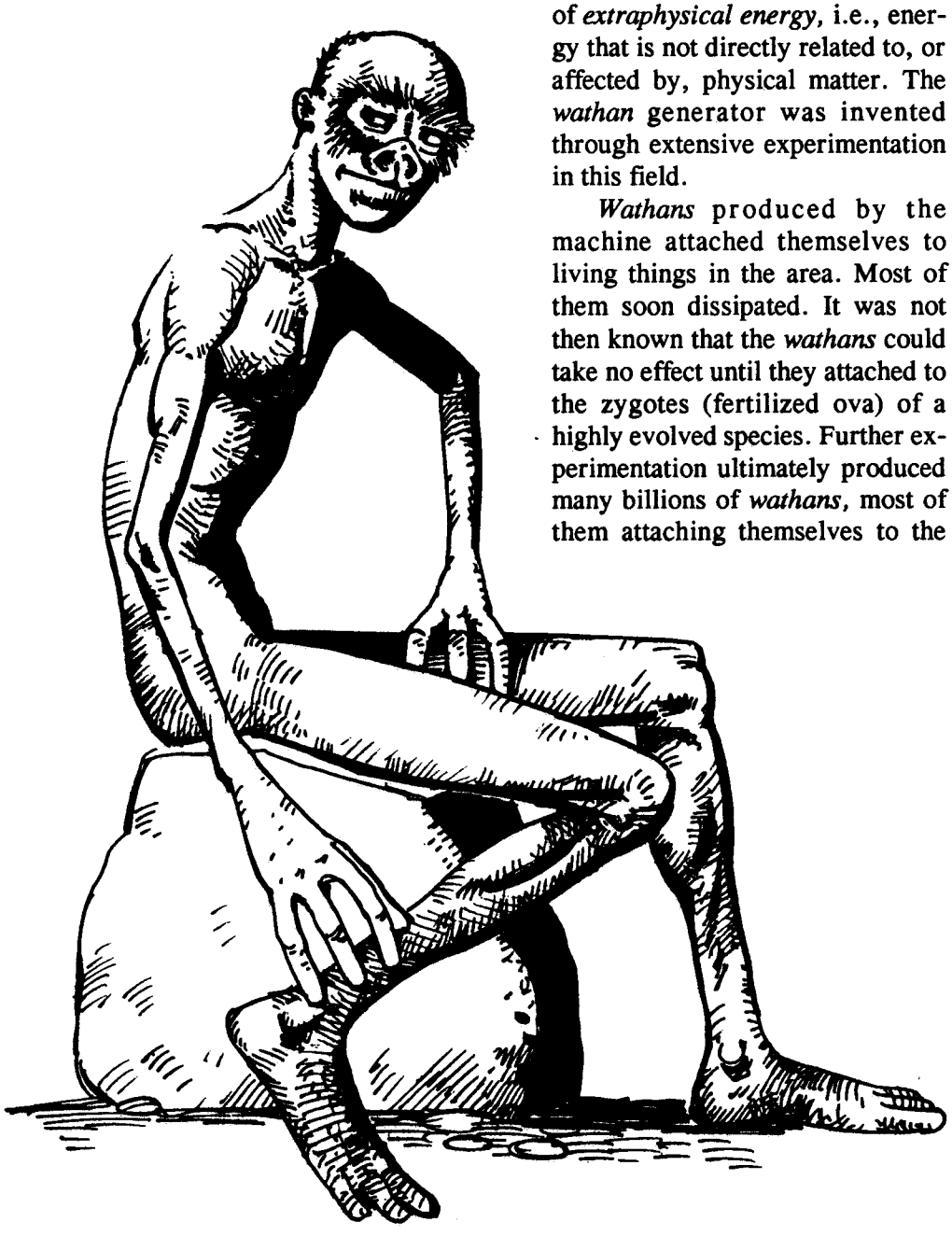


Origin and History

Ethicals is the name given to a series of extraterrestrial races that have shared the responsibility of the galaxy's most awesome technology. This technology is that of the *wathan* generator, invented (or possibly discovered) when the galaxy was very young. The *wathan* generator produces *wathans,* drawing their form from surrounding extraphysical energies. Inexplicably, *wathans* are drawn like a magnet to highly-developed living things, imbuing them with self-awareness and "soul."

The Firsts

The Firsts is the name that the Ethicals give to the race that invented the *wathan* generator. They were a bipedal race that existed on an unknown world hundreds of millions of years before humans appeared on Earth). They possessed highly evolved nervous systems, but like other intelligent species of the time, they lacked self-awareness. The Firsts built a complex civilization and developed an advanced science. Much of their scientific inquiry was in the area of *extraphysical energy,* i.e., energy that is not directly related to, or affected by, physical matter. The *wathan* generator was invented through extensive experimentation in this field.



Wathans produced by the machine attached themselves to living things in the area. Most of them soon dissipated. It was not then known that the *wathans* could take no effect until they attached to the zygotes (fertilized ova) of a highly evolved species. Further experimentation ultimately produced many billions of *wathans,* most of them attaching themselves to the

Monat Grrautut

Fictional: born 23rd century A.D. (TL15)

Race: nonhuman (no name for his race is ever given)

ST 16, DX 16, IQ 17, HT 12.

Basic Speed 7; Move 7.

Dodge 7; Parry 0.

Appearance: see below.

Advantages: Absolute Timing; Charisma +2; Eidetic Memory; Lightning Calculator; Mathematical Ability; Strong Will +3; Unusual Background (TL15).

Disadvantages: Duty (to Ethicals); Enemy (Loga); Ugly (to Valleydwellers); Pacifist (Self-Defense Only).

Quirks: Comfortable with humans even though they may be afraid of him (acts so natural he puts others at ease); Enjoys intrigue; Genuinely loves humans and is fascinated by them; Twitches eyebrows to show surprise.

Skills: Acting-15; Astrogation (Ethical spacecraft)-20; Computer Operation/TL15-25; Computer Programming/TL15-25; Detect Lies-16; Engineer/TL15 (Computers)-25; Hypnotism-18; Judo-18; Karate-15; Mechanic/TL15 (Ethical technology)-20; Quarterstaff-16, Read Wathan-25.

Languages: English-14; Hindustani-14; Mandarin Chinese-13; Esperanto-14; Ghuurrkh-17; Russian-14.

Monat is a non-human extraterrestrial. His race is native to a planet whose location and very name are well-guarded secrets. His 6'8", spindly body is pink-skinned; his hands have three long fingers and a thumb, with thick pads of cartilage instead of nails. His head is bald; his face has thick black eyebrows that sweep down to cover his high, protruding cheekbones. His eyes are large but human-seeming, and dark brown. The nose is deeply cleft and the nostrils are fringed with a thin membrane. His lips are thin, black and leathery; and his ears are deeply convoluted and lobeless. Sensitive or phobic people would have to make a Fright Check on first seeing Monat, which he occasionally uses to intimidate hostile strangers. Usually he seems to radiate benevolence; no one remains frightened of him long enough to attack.

Monat's race placed the *wathan*-generators on Earth, and constructed both the Gardenworld and the Riverworld. Although Monat did not sit on the Council, he built, programmed and operated the Computer (the other Ethicals refer to him as the Operator). Most of the Council looks up to him as to a parent.

Continued on next page . . .

Monat Grrautut (Continued)

He long suspected Loga's dissidence, and single-handedly worked against him to preserve the Project. His vast knowledge of the Computer defeated Loga at his own game, and it took Alice's ingenuity to overcome Monat's failsafes. Monat's fate after the Computer's rescue remains unclear.

At first, Monat claimed to come from Tau Ceti. He later changed his place of origin to Arcturus. It is clear that he is from neither of these worlds, and that he wishes to protect the secrets of his race. Monat also claimed that his race destroyed the planet Earth in the 21st century when humans demanded the secret to immortality, but this too is a fabrication. His primary goal is to outwit Loga (and any other renegades) and to preserve the Project.

His tremendous intelligence and resources will probably be more than a match for any PC. In a physical contest, a human antagonist would be amazed at Monat's strength and speed (perhaps his body has been enhanced, as the Valleydwellers' were). Unlike the Church of the Second Chance members, who believe they are patterning their behavior on that of the Ethicals, Monat will fight very effectively if he is attacked. Nevertheless, he detests violence.

zygotes of the Firsts. The next generation of the Firsts quickly developed self-consciousness, the effect of the *wathans*. This was the first manifestation of self-awareness in the history of the universe. The self-aware Firsts soon came to dominate their race.

The Firsts continued their production of *wathans* for several centuries. Rocket propulsion was developed, and with it limited space travel. After the Firsts extensively explored and colonized their own star system, an FTL drive was invented, using extraphysical energy to "sidestep" the physical universe. It suddenly became feasible for the Firsts to bring their *wathan*-generating technology to other worlds and aid the development of self-aware species. They decided that it was their *ethical* duty to do so, and so began a massive project to construct *wathan* generators on planets that harbored the beginnings of intelligent life.

Many expeditions were sent to find such planets. Once a suitable world was found, a *wathan* generator would be constructed deep beneath the planet's surface, and self-consciousness would develop in the sentient species of the planet. The Firsts decided to keep the technology hidden from the new sentients for fear of misuse. They also chose not to "guide" the development of the race by interfering with its evolution. That simply would not be "ethical."

What happened to the Firsts is open to speculation. It is most widely believed that they have "Gone On" — transcended their physical forms and joined a cosmic "Godhead" or *meta-wathan*. Whatever happened to them, they did not leave their project unattended. The job of "seeding" the galaxy with self-awareness fell to one of the races that the Firsts had helped toward self-consciousness, who in turn passed it to three other races, until the job finally fell to Monat's race.

Wathans

A *wathan* is a formation of extraphysical energy that thrives in symbiosis with a sentient life form. Extraphysical energy is a special field of energy that does not relate to physical matter in an Einsteinian sense. It coexists with the physical universe but rarely affects it unless it is formed and shaped. The first known *wathans* were generated through technology and further ones always have been. It is still an open question whether or not *wathans* can occur naturally. One school of thought suggests that the *wathans* have always existed and were merely "discovered" by the Firsts.

The *wathan* subsists on the complex neuroactivity of highly evolved living organisms. It derives "richness" from the positive emotions experienced by the organism (love, joy, compassion, etc.), and from its level of ethical development and spiritual enlightenment.

The ultimate fate and purpose of the *wathan* is an area of speculation among Ethical theologians. Perhaps it becomes one with the universe, or with God, or with a community of *wathans*. The story of "going on" that Loga spread through the Church of the Second Chance (see p. 21) is, in fact, one highly-respected theory among the Ethical philosophers, but it is only a theory.

What the *wathan* provides for the organism is self-consciousness. This can be defined as an awareness of one's self in relation to others, and a perception of the ability to create conscious change in the environment. Some Ethicals speculate that because of the *wathan*'s extraphysical nature, a sense of time (and mortality) is imbued in its host, giving rise to self-awareness. Whatever the cause, it is only through self-consciousness that a *wathan* host can develop ethically and spiritually, thus allowing the *wathan* itself to grow.

The *wathan* requires a sentient life form with a highly-developed nervous system. When a *wathan* generator is active on a planet harboring such a species, a *wathan* is created each time a new member of that species appears (in humans, this occurs with the fusion of spermatozoon and ovum). It has been observed that

wathans cannot attach themselves to organisms that have grown beyond the initial zygote stage. It is believed that a metaphysical *hardening* of the entity occurs as it ages, causing it to resist *wathan* attachment. After the *wathan* has attached itself to the zygote, it grows and develops with the organism.

When the organism dies, the *wathan* leaves the body at the moment of death. A certain level of self-awareness "trails off" with the *wathan* for a short time (the explanation for so-called "near-death" experiences) before the *wathan* begins to aimlessly wander the universe. Monat's race built *wathan* catchers to retrieve and store *wathans* after they left the body. They could then be placed in duplicates of the original bodies, thus resurrecting the species.

The *wathan* of an individual cannot be viewed except with special technology developed by the Ethicals. When made visible, the *wathan* can be seen floating just above the top of the head. It appears as a translucent globe of many colors that dance and swirl on the surface. The *wathan* expands and contracts, and occasionally extends hexagonal tentacles several feet in length. Despite the random appearance of its movements, there is an underlying pattern that can be "read" to glean the nature of the individual. Broad bands of black or red indicate "negative" aspects such as character weaknesses, while brighter colors such as silver and yellow indicate stability and positive emotion. The flow of these colors reflects mental and emotional tensions and shifts in both the conscious and unconscious mind. The ability to correctly read a *wathan* is a very difficult skill mastered only by a few (see p. 43).

The *wathans* of all humans on the Riverworld (actually, the *wathans* of anyone who dies within about 120 AU of the Riverworld) are captured by the Computer. They are stored in a "well" until duplicate bodies are ready for them. Body records are obtained from the *wathans* themselves, since each *wathan* is a permanent record of the entire individual's life.

Individual *wathans* in the well can be studied through the Computer to extract body records or biographical information, although this practice is considered unethical except in emergencies.

It should be emphasized that the Ethicals did not install a separate *wathan* generator on the Riverworld. This means that babies created on the planet will *not* possess wathans (treat them like androids for all purposes). All food available in the Valley contains a contraceptive, but if the Valleydwellers gain control of the Tower they may wish to restore their fertility. However, if they want the newborns to possess *wathans*, they will need to build a generator. This *can* be done; all that is necessary is to instruct the Computer to do it.

A *wathan* is immortal and will exist until the end of the universe, unless it "goes on" first (if such a thing ever occurs). It is possible that the Ethicals have built a "*wathan* bank" on a planet somewhere that will ultimately collect the *wathans* of all self-aware species in the galaxy. The potential use of *wathan* technology is mind-boggling, and the players and GM are encouraged to use their imagination in exploring its possibilities.

Monat's Race

Monat Grrautut, the Operator (see sidebar, p. 85) comes from a planet somewhere near Sol. He told some Valleydwellers that he was from Tau Ceti, others that he was from Arcturus. He also fabricated a story that his race destroyed the Earth in the early part of the 21st century. The reason for all of this deception is that Monat's race is the most recent of the Ethicals, having created and engineered the Riverworld project.

They began installing *wathan* generators in our part of the galaxy around 100,000 B.C. In 97,000 B.C. they came to Earth and found a race of hominids with sophisticated tool-using abilities. Deciding that this race fit the requirements for self-awareness, Monat's race buried *wathan* generators deep beneath

The Death Spheres

Every Ethical on the Riverworld carried a *death sphere*. This is a small (several millimeters in diameter), black sphere of an unknown material. It is surgically connected to nerve endings in the forebrain. Its use is analogous to the "hollow tooth of cyanide" used by spies of Earth. Whenever a captured Ethical agent feels that he is in danger of revealing secrets, he "wills" his death sphere to activate. The sphere kills him instantly (of course, the Ethical is then resurrected back at the Tower). Loga installed a program in the Computer that, on command, activated the death spheres of all the Ethicals in the Tower at the time. It is possible that death spheres can be found somewhere in the Tower, although their purpose would be obscure to uneducated Valleydwellers.

A death sphere can be found by autopsy; it is easy to locate if the searcher knows what to expect. It can be also detected by X-ray (few places on the Riverworld had that technology, but Parolando was one of them). A sphere could be removed by a Surgery/TL7 roll at a -4 penalty, or Surgery/TL6 at -8.

Ethical Devices

The Ethicals have a wide array of highly advanced technology. Much of this can be found in the Dark Tower, and some of it may make its way into the Valley. Valleydwellers who get possession of any of these devices will be at a great advantage. The sidebars on the next pages will describe some of the more important pieces of Ethical equipment.

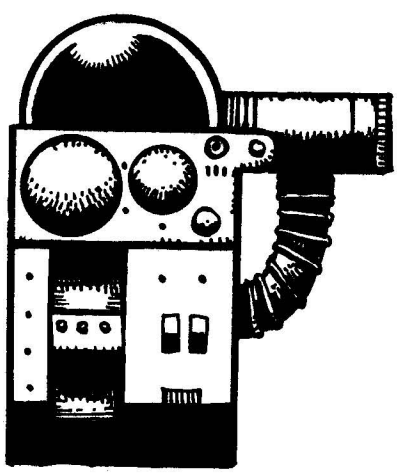
Charruzz

Many Ethical artifacts are made out of a very hard metal called *charruzz*. It is normally gray in appearance, though it can be colored, and is electrically conductive. The grails and grailstones are of *charruzz*.

Charruzz is light, but extremely tough. Although the walls of the grails are no thicker than a sheet of newspaper, they could not even be scratched or bent, let alone destroyed, by anything that the Parolando researchers could do . . . and Parolando was at TL7. However, Ethical beamers at their top setting will penetrate *charruzz* by disrupting the artificially-enhanced molecular bonds that make the metal so strong.

Therefore, the HT and DR given for any *charruzz* artifact apply only to attacks from beamers and from other ultra-tech weapons that affect molecular bonds. Against other attacks, *charruzz* is indestructible. Therefore, the Ethicals make their vehicles out of it. Anyone in the Tower can order any item made out of *charruzz* (or any other material), and it will be delivered in a few minutes.

But it does not make its users invulnerable! A laser could heat up a *charruzz* artifact, such as a vehicle or weapon, until non-*charruzz* parts were destroyed or occupants were cooked. (For game purposes, assume that 10% of laser damage gets through.) A man in *charruzz* armor could die by falling, drowning, or poison gas. *Charruzz* protection is a challenge to a foe, but not perfect protection.



the Earth's crust, and *Homo sapiens* developed self-consciousness. Humans were to become part of a new phase in the project, for not only did Monat's race install *wathan* generators on Earth, but also *wathan catchers* that retrieved the *wathans* after they left the deceased body.

The *wathan* catchers were a technology developed by Monat's race. Normally, when a person died, his *wathan* left the deceased body. It would drift out into the universe and be lost unless a duplicate of the body was immediately available (the Firsts did this to a limited degree). The *wathan* would then reattach itself to the duplicate body, and the person would effectively be resurrected. As long as duplicate bodies could continue to be made, immortality could be achieved.

The *wathan* catcher stored the *wathans* of the deceased in one place, so that an entire race could later be resurrected. Monat and his people commenced on a project that would raise all of humanity, and would be a model and experiment for any future attempts to resurrect other self-aware races. The purpose of the mass resurrection was to "test" humanity's worthiness and ability to accept immortality.

The Great Project

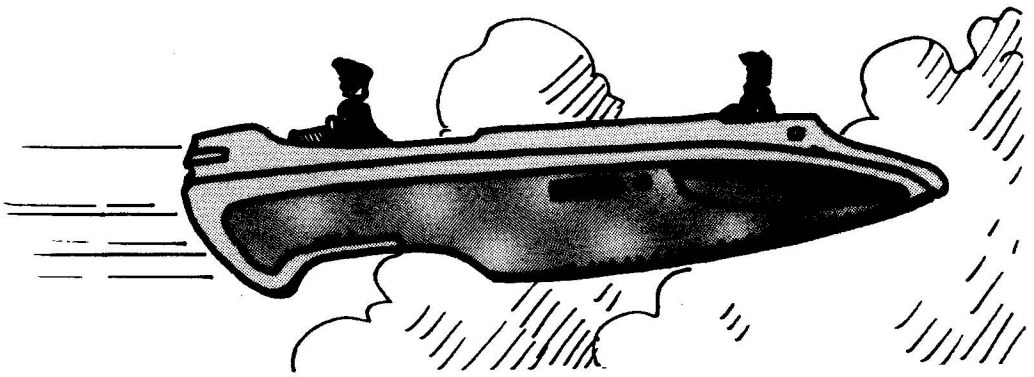
The first phase in the Project was called the *Gardenworld.* A planet in an isolated star system was resurfaced by Monat's race into a lush, perfect garden planet. This was sometime in the 10th century B.C. Certain of Earth's captured *wathans* were taken to the Gardenworld, where energy-matter converters built a body for each one. These *wathans* included children who died before the age of five (including stillbirths, miscarriages and abortions), the mentally retarded, and the extremely psychopathic. It was decided that this special population, who never had a fair chance to "prove" themselves on Earth, would be raised and cared for by Monat's race on the Gardenworld. Those that excelled in their new lives and met certain Ethical standards would be chosen as Ethicals to assist in the next phase of the Project — the Riverworld.

Monat was directly involved in the Gardenworld project, and had the final say in which humans were to become Ethicals. He spent a great deal of his time, however, designing the massive protein computer that would direct the operation on the Riverworld. This computer would act as a *wathan* retriever, transmitter, and storage facility. It would also contain programs for energy-matter conversion so that *anything* could be created. It would require tremendous energy that could only be drawn from the molten core of the planet on which it was built. While the technology for the Computer was available when Gardenworld was constructed, the software took centuries to write and perfect.

The Computer software was finished and ready for operation by the late 22nd century A.D. Scouts were sent to find a planet suitable to become the Riverworld where the rest of humanity would be resurrected. Eventually, an appropriate world was found. Remote and barren, it had the potential to become a duplicate of Earth.

In 2009 A.D. a council of twelve human Ethicals (in addition to Monat) left the Gardenworld for a planet that was to become the Riverworld. The journey took 160 years. The wholesale resurfacing of the planet took another 50 years. During this time, the Dark Tower and the underground preresurrection chambers were also constructed. The Computer was built and the *wathans* for the first phase of the project (97,000 B.C. to 1983 A.D.) were installed. More human Ethicals arrived on the Riverworld over the next 30 years. These Ethicals would serve as assistants in the Tower and observers in the Valley.

On Resurrection Day, duplicates of the 36.6 billion humans to be raised were manufactured by the Computer and placed in the preresurrection chamber. The duplicate bodies were based on "records" derived from the *wathans* (copies



of these body records were kept in the Computer's memory). The bodies made by the Ethicals were identical to their terrestrial counterparts at the moment of death. The Ethicals then systematically cured, repaired and perfected the bodies. The *wathans* were attached to the duplicates, but the bodies were kept unconscious. Nevertheless, the *wathans* were already active and recording physical changes. The bodies were then destroyed, but the *wathans* had recorded the physically-perfect versions.

Then, on Resurrection Day, the perfected bodies were re-created on the banks of the River. The *wathans* rejoined the bodies, and the people awoke. All the billions of Valleydwellers found themselves alive, naked, lying on their backs in the grassy plain by the River. Despite the tremendous amount of time that had passed, it seemed to the Valleydwellers to be only the day after their own deaths.

The Valleydwellers have 100 to 120 years to prove that they are ethically advanced enough for immortality. Representatives of Monat's race will arrive from the Gardenworld about 120 A.R. to pass judgement on humanity. Those who qualify for immortality will be transported to Earth, which has been remade by the Ethicals after a devastating war. The rest will be "phased out" — their *wathans* will be released to wander the universe forever. Once the Riverworld is emptied, the Ethicals will resurrect the next group of humans, those who died between 1984 A.D. and sometime in the 22nd century when Earth was destroyed.

The Ethical Council of Twelve

Twelve of the humans raised on the Gardenworld were chosen by Monat to lead the Riverworld project. They would be responsible for maintaining the Computer and the grailstone system, for monitoring the ethical progress of the Valleydwellers, and for dealing with any behavior (by Ethical agents or the Valleydwellers themselves) that would endanger the Project in any way.

The Ethical Council of Twelve also laid down the "laws" of the Riverworld, which revolved around a prime directive of non-interference with the progress of the Valleydwellers. No new technological or philosophical concepts were to be introduced to the resurrected humans. The Council felt that this would give an unfair advantage to the small number of Valleydwellers who would gain this information. Additionally, no human Ethicals could seek out friends or relatives in the Valley, since it would involve them in the Project on too personal a level.

The Council is made up of six men and six women, from widely diverse periods of human history. All, of course, had died before the age of five and have

Vehicles

Ethical agents need to move around the planet quietly and quickly. All Ethical vehicles are extremely simple to operate — skill rolls when piloting are at +5.

All Ethical vehicles operate on beamed power; there is never a need to refuel. The Computer can cut off power to all vehicles, or to any particular one, if its number is know. It can also send a power overload, burning up the vehicle's motor.

Flyers

The flyer is the preferred mode of transportation when traveling from one part of the planet to another. Flyers come in many sizes. The commonest are enclosed, narrow craft, ten feet in length, with tapered ends like a canoe. They can hold up to two people and up to 500 pounds of cargo. Larger ones exist; the biggest are spheres over 100 feet in diameter. Each flyer has a remote control, disguised as a grail cup, that can be used to call the craft within a mile radius of its owner. This allows the Ethicals to hide their flyers on mountaintops when not in use.

Flyers are piloted by a computer. The pilot gives commands verbally, and the computer does the rest. The flyer's computer can also communicate with the Computer in the Tower.

Flyers are seldom seen. They cruise at an altitude of 15,000 feet and at speeds of 150 mph. It is rare that they will be encountered by Valleydweller aircraft, since Ethicals will avoid flying in areas where such craft are known to exist. They can also make themselves invisible for brief periods of time when it is neccsary to approach Valleydweller areas!

A typical small flyer has HT 20 and DR 150. Larger ones would be much tougher.

Boats

Loga had special boats manufactured by the Computer to assist Valleydwellers in reaching the Tower. Since the Ethicals usually traveled by air, it can be assumed that these vessels were unique (GM's option). The Ethical boats are of various sizes and made of *charruzz*. The largest will hold 30 people, but weigh less than 300 lbs. when empty. They cannot be damaged by anything except a beamer; against a beamer they have DR of 6 and HT 100.

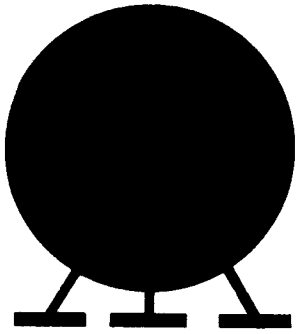
Each boat is piloted by a computer that homes in on a specific destination (usually the Tower). Speed is controlled by squeezing a glowing bulb — the tighter the grip, the faster the boat moves (up to 50 mph). They have bright lamps at the bow.

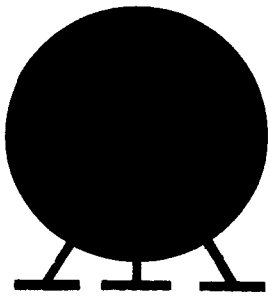
Ethical boats are propelled by direct energy conversion — there is no wake or other evidence of underwater propulsion. An IQ roll is required to figure out the simple controls. A roll against Powerboat skill (at +5) would be required to perform any tricky maneuver.

Ethical Spacecraft

The Dark Tower contains a number of spacecraft, ranging from two-person scouts to vessels that will carry over 100. These ships, like the flying craft, are computer-controlled. Study is required to learn to give the proper commands, but it is not difficult: Astrogation (Ethical Ship) is a Mental/Easy skill. All these ships have charruzz armor that would withstand any hand beamer, but all are totally unarmed.

The speed and capabilities of these ships are left to the GM, should he choose to permit PCs to leave the Riverworld. It took 160 years for the Council to come from the Gardenworld to the Riverworld, but it is not stated whether this was done in some sort of hibernation, or whether time dilation made the voyage seem shorter, so these questions may also be answered in whatever way best suits the campaign.





very limited memories of Earth. The Council meets regularly inside a spherical chamber at the heart of the Dark Tower. The chamber walls can be programmed to simulate any environment the Council members wish. There is also a special field within the chamber that makes the *wathans* of its inhabitants always visible.

The Council acts as representatives for the interests of all Ethicals involved in the project. There is no single "leader" of the Council — all decisions are made by majority vote. The members all have Read Wathan skill at 13 or better, and can usually detect lying and manipulation by anyone within the chamber (including their fellow members). They rarely call Valleydwellers into the chamber, but when they do, they "intercept" a translation to bring the subject to the Tower. This means they must wait until the subject "dies," but this process can be accelerated by having Ethical agents do away with him. Once in the chamber, the Ethicals can read the subject's *wathan* during interrogation. The Council has the power to delete a subject's memory of the experience before returning him to the Valley via the grailstones.

Loga's Plan

One of the Council members is a 12th-century Trojan named Loga, chosen from the Gardenworlders for his vast curiosity and keen mind. Loga was different from many of the Gardenworlders because his memory of Earth was very vivid, even though he died at the age of four. When he learned about the Riverworld project, he was overjoyed at the prospect that his family, whom he loved deeply despite his short existence, would live again and have a chance for immortality. However, Loga decided to sabotage the Project and take it into his

own hands once it was decided that terrestrials would have only 120 years to "prove themselves" worthy of life everlasting.

In order to understand his motives, it is important to appreciate the task Loga set for himself. His goal was to allow the Valleydwellers to take control of the Computer so they could choose their own destiny. This involved eliminating the Council and securing the Tower from further Ethical defenses. It also meant accelerating the technological progress of the Valleydwellers so they could reach the north pole, which of course violated the Council's prime directive. If caught, Loga's body would be disposed of by the Council and his *wathan* suspended indefinitely. That Loga would risk all of this for the love of his family implies that he was either transcendently devoted or clinically psychotic.

Burton's Awakening

Loga knew that he would have to be on the Council to carry out his plan. This fact contributed to his ambition on the Gardenworld and led to his selection as a Council member. He worked closely with Monat on the project, especially in the area of the Computer's operation. His first overt act was the awakening of Sir Richard Burton in the preresurrection table. The awakening of a resurrectee would show the Valleydwellers that the resurrection was not supernatural, an important first step in their education about the Riverworld. Burton was chosen because of his curiosity, determination, charisma and love of travel. Loga knew that Burton would spread the news of his experience.

Loga felt that awakening only one of the humans would appear to be an accident and would not be investigated. However, Monat took no chances, and chose to be resurrected in the vicinity of Burton to observe him and learn more of his awakening.

Eventually, the Ethicals decided to bring Burton in and question him. Warned by Loga, Burton tried to evade the Ethicals on his "suicide express," but was eventually caught. When he went before the Council, Loga had tampered with the Computer to produce two effects. First, he distorted Burton's memory readings to disguise his identity. Second, he sabotaged the Council's attempt to remove the memory of his questioning. When Burton was restored in the valley, he retained a complete memory of the Council. He had learned more from them than they did from him!

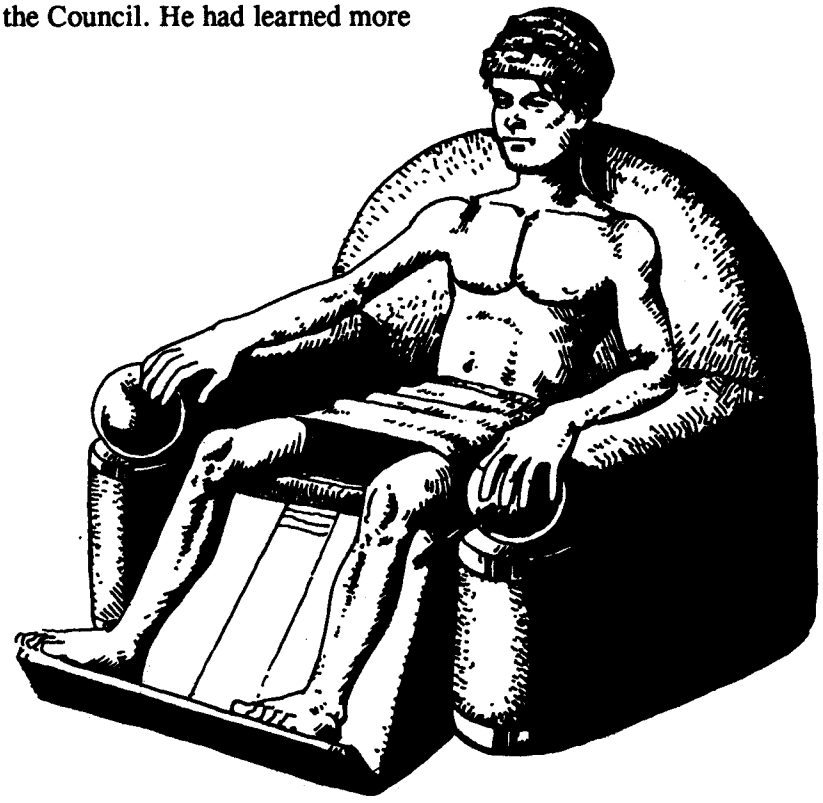
Strangers in The Night

Loga contacted the Valleydwellers on many occasions. He made nocturnal visits to selected resurrectees and tell them various stories of the Ethicals and of the Dark Tower at the north pole. His stories were designed to anger and upset the hearer; one common one was "The Riverworld is just an experiment, and when the experiment is over, everyone here will die permanently." But he also spread the doctrines described under *Church of the Second Chance* (see p. 21). His tales were deliberately contradictory to keep agents from following up on them! He also changed his physical appearance nearly every time he went to the Valley.

Flying Chairs

Movement through the long, winding corridors and shafts of the Tower is made much easier by the flying chairs. The chairs are large and overstuffed, with massive arms. On the end of each arm is a wide metal circle. Pressing the left circle causes a rod to emerge from it. When the rod is oriented a particular direction, the chair will move in that direction. Pressing the right circle increases the speed. The chairs can be moved in any direction along a horizontal plane (without banking) and can be moved up or down, but they cannot be moved both vertically *and* horizontally at the same time. Their maximum speed is 20 mph. The chair is equipped with built-in safety sensors that prevent it from stopping too quickly or from colliding with walls and other objects. The chairs are made of *charruzz* and have an HT of 40 and a DR of 20. Flying chairs can be found in most areas of the Tower.

When Burton and his companions were being stalked by a mysterious foe in the Tower, he had the Computer build an armed and armored chair for him. The *charruzz* part of such a chair has HT 100 and DR 30. The "pilot" is protected by a 3" plastic bubble; this is not *charruzz*, but it has a DR of 20 and HT of 50 against normal attacks, and is irradiated so that it will reflect laser fire like a mirror. Four beamers are mounted around the chair, so that at least two can fire in any direction.



Personal Equipment

The following items will be on the persons of most Ethical agents operating in the Valley. They can also be found in various areas of the Tower.

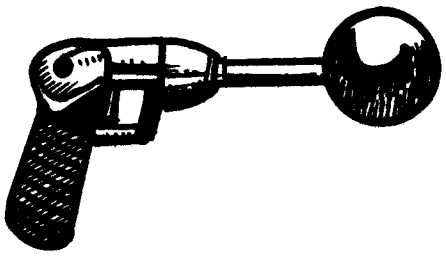
Beamer

The beamer is a hand weapon weighting 1 pound. At the end of the barrel is a four-inch sphere. It fires a thin beam of scarlet light.

A beamer has three settings, controlled by a dial on the side. At the lowest setting, it is treated like a stunner (p. B119, B208). It uses an Ethical power cell (their version of a "C" cell), and can fire 500 stun charges from one cell.

At the second setting, treat it like a blaster (see p. B208) for purposes of damage, range and rate of fire. However, it is totally recoilless. Each beamer shot uses 10 charges, so a fully-charged beamer is good for 50 blasts.

At its highest setting, the beamer will cut *charruzz* (see sidebar, p. 88). Each full-strength blast uses 25 charges, so a fully-charged beamer will only deliver 20 such beams. When one of these beams hits any material besides *charruzz*, treat it as a blaster bolt doing double damage.



Stun Wand

The stun wand is an easily-concealable, nonlethal hand weapon. It is a six-inch rod with a simple trigger button and no other controls. Treat it as a Stunner (p. B208, B119), except that it gets 500 shots from a single Ethical C-cell.

Regular stun wands are made of *charruzz*, but self-destruct versions of plastic are often carried, especially by renegades who might want to give them away.

Communicator

When Ethical agents work in teams, they wear small earplug communicators. These have a range of at least 50 miles. They look like flesh-colored hearing aids, and are easily noticeable, so agents wear them under long hair.

By subvocalizing, agents can talk to each other freely. This means that someone who mutters to himself a lot *might* be an agent.

Continued on next page . . .

Loga had an accomplice on the Council, Tringu, who also made visits as the "Mysterious Stranger." They scheduled their Valley trips during the regular thunderstorms, because the electrical activity would obscure their locations from the Ethical spy satellites in orbit around the planet. They traversed the planet in flyers, avoiding the grailstone e-m system because those movements could easily be traced by the Computer.

Loga recruited a total of 124 people, telling most of them that only 12 people were involved. He told each of the 124 that the secret to the Riverworld was in the Dark Tower in the middle of the Polar Sea. The odds against anyone reaching it were far too high for comfort, hence the large number of people enlisted. In choosing his recruits, he looked for determination, strong will, and a driving need to know what was really going on. He also chose many for the technical skills needed to construct boats and aircraft.

Sam's Meteor

One of Loga's recruits was Samuel Clemens, the American humorist. Clemens was to play a major role in Loga's plan, because Loga knew that given the chance, Clemens would build and captain a great riverboat to reach the River's source. However, on the mineral-poor Riverworld, the metal required to construct such a vessel could never be found. Loga arranged for Sam to get the metal he needed.

The Ethicals had placed several satellites in orbit around the Riverworld. Most of these were communication satellites used to monitor the movement of agents, but several were armed with lasers to destroy large meteors threatening to impact the planet's surface. Loga found a meteor whose orbit would bring it near the planet; with an Ethical spaceship, he diverted its path. He then used the Computer to short-circuit instruments in one of the defense satellites. It struck, according to plan, in an area of the Valley that was rich in platinum, aluminum and other soft metals that could be used as catalysts. Loga visited Sam one night and told him where the metal could be found.

Sam claimed the meteor and its rich nickel-iron resources and set up the nation of Parolando to build his dream riverboat. Loga visited him several times as the Mysterious Stranger, and once in the guise of Odysseus, the Homeric hero. He could not, however, monitor Sam's progress for long, for Monat was becoming increasingly suspicious. The time Loga dreaded soon came — the time the Ethicals in the Tower would have to die.

The Dark Tower Falls

Loga had hidden two personal resurrectors in the Tower, operating on circuits separate from the Computer. He used these to hide Burton's numerous resurrections from the Council's knowledge. The Council discovered the resurrectors shortly after Sam Clemens completed his boat. They also found evidence of Loga's tampering with the Computer. Monat, who was in the Valley, was notified. He decided to return to the Tower with Burton and run a complete memory trace on him.

Loga was in the Valley on a legitimate Ethical mission and was notified by the Council that he was to return to the Tower, where he would be placed under arrest. After much personal deliberation Loga activated a program he had placed in the Computer. It activated the spheres in the agents' heads, killing everyone inside the Tower. It also deactivated the flyers of those Ethicals in the Valley, effectively stranding them all, sometimes millions of miles from the Tower. Only Monat's flyer survived; Loga could not control it.

With the Council dead (except for two members who were in the Valley at the time — Thanabur and Siggen), Loga could return to the Tower and begin directing the project himself. However, he had underestimated Monat, who was

convinced that one of the Council members was a traitor, although he did not know who. Monat had installed a device in all of the Council flyers that would activate whenever a Computer catastrophe occurred. The device set the flyer on autopilot, taking its passenger to a mountaintop where Monat would be waiting. Loga escaped by a plan so rash that Monat had not anticipated it. By alternately switching the power on and off, Loga coasted into a highland area of the Valley and escaped Monat's trap.

Loga was now as stranded as the rest of the Ethicals in the Valley. His computer tamperings had stopped all resurrections, so he couldn't just kill himself and reappear in the Tower.

He meandered up-River in various disguises until he rendezvoused with fellow Councilmember Siggen. Loga and Siggen made their way to Parolando disguised as late 20th-century airshipmen, planning to secure a place on the *Parseval* and get into the Tower. When the airship arrived at the Tower, Siggen (along with fellow Ethical Milton Firebrass) stole a helicopter and tried to get inside. Loga stayed on the ship and murdered the two other Ethicals, destroying their helicopter by a remote-controlled bomb. He then tried to get a helicopter himself, but was prevented from doing so by the crew of the *Parseval*. On the return voyage, Loga escaped from the ship and sabotaged it.

The Final Journey

To Loga's dismay, the right-bank grailstones failed due to lack of maintenance. Within a day, half of all humanity was killed in the largest food riot in history. And, due to Loga's tampering, none could be resurrected; their *wathans* were again trapped.

Loga waited in an area down-River from Virolando, hoping to board one of the two great riverboats when they passed by. About this time, the spy satellite failed, and Loga could no longer keep track of the movements of other Ethicals in the Valley. He boarded the *Mark Twain* disguised as Ah Qaaq, an ancient Mayan. Surviving the Battle of Virolando, he joined Burton's polar expedition.

The group successfully crossed the polar area and reached the Tower. Very shortly after the party entered the Tower, Loga's identity was revealed. He evaded Burton and his comrades, making for his private chamber to check on the Tower's situation after his long absence. There he discovered that the Computer was in danger of destruction because of a stuck water valve. This would release the trapped *wathans*, ending the chance of resurrection for more than half of humanity! He revealed the news, and his plan, to Burton's group, telling them that the purpose of the Riverworld was to give humanity a chance to "go on." Alice managed to save the Computer, and the group was finally in control of the Tower.

By this time the full weight of Loga's actions was beginning to wear on him. Knowing that humans (especially his family) could freely possess immortality, he decided to further "test" Burton and his friends by faking his own death. By leaving the godlike technology of the Ethicals to be freely used by the Valleydwellers, Loga could observe just how responsible they were with it.

He returned a year later and revealed that *wathans* don't really "go on," as far as anyone can tell — humans are essentially immortal as long as they can always replace their bodies. Loga was projecting his own insecurities about his family being "ready" for immortality onto Burton's group. Burton decided that Loga was dangerously crazy; he shot him with a beamer and suspended his *wathan* indefinitely. This left the full power of immortality in the hands of the Valleydwellers. Despite his desperate measures and unsound motives, Loga gave humanity the ability to determine its own destiny.

Personal Equipment (Continued)

Lightrod

Ethicals in the Valley carry a general-purpose instrument called a *lightrod*. The lightrod is a *charruzz* cylinder two feet long and one inch wide. It is activated simply by "willing" it to do so, which causes the ends to glow with a white light. When pointed at a subject, the lightrod causes the subject's *wathan* to become visible. The device also "psychically" informs the user of the subject's general physical and emotional condition. Lightrods can only be used by Ethicals, since they are powered by the *wathan* of the user. It is possible for a Valleydweller to use one with Ethical assistance, but it would take years of practice to become proficient with it.

Satellite Map

Observation satellites in orbit above the Riverworld were equipped with *wathan* detectors that could pinpoint the *wathans* of Ethical agents in the Valley. This data could then be transmitted to receivers carried by the Ethicals, allowing them to know the location and movements of their fellow agents. Satellite receivers are built into the bottom of the agents' grails and can only be viewed by issuing a special code word. Each receiver shows a map of the hemisphere the user is in. Ethical agents are represented by triangles, and Council members (and Monat) by hexagons. Loga rigged his satellite map so that it would also display the location of his recruits (he used his lightrod to "record" the *wathans* of the recruits, then secretly transmitted them to the satellite from the Tower). Satellite maps are completely unusable by Valleydwellers without Ethical assistance.

The Dark Tower

At the north pole of the Riverworld , long past the last grailstone, is a great icy sea, the source and mouth of the River. In the midst of this sea is the headquarters of the Ethical Council, a huge structure known as the Dark Tower (also the Misty Tower, Grail Tower, et al.). The Tower is a little over a mile tall and ten miles in diameter. It is made of smooth, grey *charruzz*. Within the Tower are the Council chambers and residences (known as "world rooms"), the Computer, control rooms, and aircraft hangar decks. The vast labyrinthine interior of the Tower is a world unto itself, worthy of an entire campaign setting.

The Trek to the Tower

It is extremely difficult to reach the north pole and the Tower. It was intended to be impossible, but humans are very persistent, and Loga did several things to make the trip easier. Nevertheless, even after human habitations are left behind, the trip to the Tower is a full adventure in itself. GMs should vary the details of the last stretch of the trip, to make sure the players don't know what to expect. (Burton's party had a guide — Joe Miller had made most of the trip once before — and they still met with surprises, including an eight-yard canyon that had to be crossed, with a thousand-foot fall as the price of failure.)

One can get to the pole by following the River either upstream or downstream. The downstream route is actually riskier at the end, because the river goes rushing into a low tunnel; a craft trapped by the current will be dragged to destruction. Whether one goes upstream or down, the last grailstone is passed long before journey's end. From there on, preserved food must be carried.

On the upstream journey, great cataracts are encountered soon after the last grailstone., forcing any party to leave its boat. It is possible to climb the cliffs alongside the river, but it is difficult (Climbing rolls are required every 5 minutes). Eventually a sheer cliff is reached, a thousand feet high. Loga left a rope of towelkilts on each side of the river to help pass this obstacle, but later parties had to use their own ropes and pitons.

A later cliff is penetrated by a long, narrow tunnel at a 40-degree angle; claustrophobes will probably never manage the hours-long crawl. Later parties found this tunnel melted shut, and had to chip through the lava plug.

After that, narrow ledges must be traversed in a high wind! This requires more Climbing rolls, at a -4 or worse penalty. From here, when the clouds part, the huge Tower can be seen 20 miles across the sea.

Finally, the "boat room," a cavern prepared by Loga to help his chosen travelers, is reached. Ethical boats in several different sizes (see sidebar, p. 89) are here. There is also light and good food. Instructions for the boats and food are in pictorial form (IQ-1 roll to figure out). However, there are no grailstones or e-m converters here.

From this cavern, a party can take a boat, or boats, across the Polar Sea.

The Polar Sea

The River begins and ends at the Polar Sea, a body of water some 60 miles in diameter. The sea is surrounded by a wall of mountains 32,000 feet high. There is no beach or shoreline, merely the continuous cliff face of the mountains.

Two gaps can be found in the mountains where the River leaves and enters the sea. At the source of the River, water flows out of the sea through a vast misty chasm some 10,000 feet in depth. From there it passes through a series of underground chambers before tumbling down numerous cataracts to reach the valley.

The River empties into the sea through a great archway in the mountains,

Other Equipment

The following items can be found only in the Tower . . . at least, as far as anyone knows!. They are among the myriad instruments and tools of the Ethicals. The GM is encouraged to create his own Ethical devices to amaze and baffle the players Remember that a device which may be harmless and useful to an Ethical might be a deathtrap to a Valleydweller!

E-M Converters

The devices used to manufacture material goods are shaped like tall cabinets. They can be transported from place to place and fitted to orange circles on the floor, marking the external energy port. When an object is desired, the Computer is instructed to manufacture it within the converter. Larger, immobile converters can be found in various places around the Tower. These can create items as large as a house.

Personal Resurrectors

Loga made several personal resurrectors that could operate independently of the Computer. The personal resurrector creates a duplicate body to which the *wathan* attaches itself. Loga's were set to operate automatically whenever he died. If a duplicate is made when the original person is still alive, the *wathan* will remain with the original.

Body records must be available from the Computer in order to use a personal resurrector (e.g. security codes might be in place to prevent access to the records). Personal resurrectors are of two kinds — those usable only by one person, and those that can be used to raise any deceased body. The resurrectors are indistinguishable from regular e-m converters.

directly opposite from its source. The gap is three miles wide and nearly two miles high. The River pours through the arch, flows for two miles, and then plunges 3,000 feet into the sea (about the same height as Angel Falls, the tallest waterfall on Earth). Winds gust out of the hole at over 60 mph.

The Polar Sea is always covered in a dense mist. Its surface can never be seen from the mountains, but occasional gaps in the fog allow the Tower to be viewed, albeit briefly. The water is extremely cold and choppy. Visibility on the surface is limited to about 10 feet.

Entering The Tower

There are two entrances to the Tower: at the top (the aircraft hangar deck), and at a secret entrance at sea level. The top entrance can, of course, only be reached by aircraft. It is a circular hangar deck set 800 feet below the top of the wall. Small drainage holes are placed at intervals along the bottom of the wall. Aircraft are brought into the Tower from the deck on lift platforms. These can only be operated by voice command through comm-links in the Ethical flyers and spacecraft. They can also be opened from the inside of the Tower using different commands.

There is a hemispherical dome on the deck surface that can be used as an entrance. The dome is 150 feet wide and 60 feet high, and appears to be a continuous part of the deck's face, as if it were a "bubble blown from the surface." There is an arched entrance in the side, above which is an alto-relief image of a looped cross topped with a rainbow. The entrance opens up into a large room, which funnels to a corridor ten feet wide and eight feet high. The passage proceeds straight for about 100 feet before curving sharply to the right. Several feet from the turn is a vertical shaft leading to the aircraft hangar below.

This entrance is guarded by the Computer, which uses its *wathan*-reader on anyone who enters. No one will pass but those at a certain level of "ethical advancement," as judged by Ethical standards. Anyone else proceeding down the corridor will be stopped by a force field — the more advanced they are ethically, the farther they get. The field feels like an impenetrable layer of thick jelly — no one of any strength level can get through it. The field is controlled by the Computer and can only be deactivated by a special command. (Should PCs try to enter here, the GM must simply make his own determination of their ethical advancement, based on their behavior in the campaign. It is very unlikely that any PC will be able to enter; of all the Valleydwellers who got this far, only two, both Sufi philosophers, made it through the door.)

There is a second entrance to the Tower at sea level. This was a special entrance installed by Loga to allow Valleydwellers to enter the Tower. It can only be opened by a special signal transmitted from the Ethical boats. Once the signal is sent, a circular door opens in the seamless side of the Tower. Passengers can easily step from the boat into the opening. A passageway leads into the tower, but it is guarded by a poison gas trap that can only be deactivated by Loga. Therefore, no one can use this entrance safely until Loga has carried out his plan and is safe within the Tower.

The Tower's Interior

The Dark Tower is ten miles in diameter and measures a dozen miles from the hangar deck to the bottom level deep beneath the Polar Sea. It contains 35,793 rooms and chambers. These rooms are interconnected by curving corridors and vertical shafts, which can be traversed via the flying chairs of the Ethicals (see sidebar, p. 91). A central vertical shaft connects all of the levels, while other shafts vary in height. The walls within the Tower are several feet

Artificial Creatures

Androids

The e-m converters can be used to make protein-androids, which are essentially human bodies without *wathans*. Many of these can be found wandering the corridors of the Tower and can be mistaken for real people. Androids can be "programmed" by their users to perform certain tasks. They can be given any degree of complexity, up to human or better intelligence, but they have no self-awareness.

If an android duplicate of a living person is made, the *wathan* will remain with the original. However, once the original person dies, the *wathan* will immediately attach itself to the android. This could be quite a surprise for both the deceased and the android's owner.

No way has been found to create an android that will attract a "new" *wathan*. If this could be done, the android body would gain self-awareness, and would be "alive."

Animals

The computer can create actual living creatures of any degree of complexity. This is where the plants and animals of the Riverworld came from in the first place. Such creatures are exact, perfect copies of the originals — or random changes can be programmed in for true individuals. Any creature that has lived on Earth in the past 99,000 years can be re-created accurately, and many alien creatures are in the memory banks as well.

Creatures

When the computer has no record of a living being, it can create one in any desired shape or form. These can be normal (Peter Frigate created dinosaurs), imaginative (like the Jabberwock created for the Mad Tea Party in the final book) or seemingly impossible (like the vanishing Cheshire Cat at that same party).

An adventure idea: suppose that *someone* in the Tower decides that the Riverworld needs some new creatures. Such as fresh-water sharks . . . or dragons . . . or vampires . . .

Robots

Mechanical metal robots are used to do mundane labor in the Tower (cleaning, lifting, etc.). Many of these are operated by the Computer, but others can be used as personal servants. They can be made in any shape suitable to their purpose. Humanoid robots are distinguishable from androids because of their gleaming metallic skin.

thick and contain Computer sensors and connections. They can also be used by the Computer to display images.

Rooms are of three general types: living quarters, research laboratories, and control areas. Almost every room in the Tower contains an e-m converter and a Computer access panel. Living areas are often grouped into connecting apartments, each living quarters containing its own e-m converter. The research areas are used to maintain and develop Ethical technology. The control rooms monitor the Computer and the grailstone system, and are used as communication bases. The grailstones can be used to view the Valleydwellers from the control rooms.

There are many other possible types of rooms within the labyrinthine Tower. Holographic recreational rooms are common, and storage areas, service corridors and engineering rooms might also be found. The GM should use his imagination to fill in the vast, uncharted areas of the Tower.

Several unique areas are described below.

The Aircraft Hangar

Directly below the hangar deck is a large, cavernous room that extends out to the Tower walls. It contains 200 Ethical flyers in addition to several spacecraft. Commands to the Computer open and close the doors to the deck above.

The World Rooms

Each member of the Ethical Council had an entire "world" to himself. The 12 world rooms are on the level directly beneath the hangar. This level can only be reached by the central shaft. The shaft emerges into a circular area 150 feet in diameter and 500 feet high. 12 square metal doors are set into the walls, each bearing a symbol representing one of the Council members. Each door gives entrance to a pie-slice chamber 5.4 miles long and 400 feet high.

The interior of these chambers can be customized however their inhabitants choose. An entire "world" can be created in the chamber, using Computer-as-

The Godhead Lens

This is a jewel-like blue contact lens that, when fitted over the eye, causes a hallucination of billions of souls coalescing into a universal *wathan*. The origin, purpose and nature of this device are unknown. The hallucination is accompanied by a sense of religious rapture and ecstasy, and even when the lens is removed a feeling of encompassing love remains. Perhaps the lens is used as a sort of "spiritual drug." Anyone wearing the Lens will be so stricken by the effect that time seems to pass very quickly; make a Will-3 roll every 20 minutes to remove it unless someone else distracts you to bring you out of the trance.

Burton found a godhead lens in the Council chamber, and it is possible that it was unique. Whether others exist, and what their functions would be, is left to the GM. See 4/341 for a complete description of the lens and its effects.

New Ethical Technology

Almost any gadget the GM can come up with may be introduced into the Ethical inventory. This culture is Tech Level 15; they routinely do things that would look like magic to a 20th-century Earthman.

The exception has to do with weaponry. Although the Ethicals have a potent weapon in the beamer, and no doubt know how to build other devices, they are a determinedly peaceful race. They will specialize in weapons that incapacitate without hurting.

Of course, since the Ethicals can resurrect anyone they kill, philosophical debates over "violence" will get even muddier. If you kill someone painlessly, and resurrect him where he cannot harm you or be harmed himself, was that violent?

Be that as it may: the Ethicals could build a variety of terribly destructive devices, but they will not do so.

sisted e-m conversion, and holographic representations of a continuous landscape, horizon and sky can be added for effect. Each room can only be entered by its respective inhabitant, using a code word. However, it is possible that this command can be overridden or reprogrammed (see *The Computer*, below), and anyone could potentially use these areas.

The Council Chamber

On the level beneath the world rooms is the spherical chamber where the Ethical Council meets. Twelve corridors radiate outward from the chamber walls. Each door to the chamber is marked by 12 helices circling a sun disc. There are no knobs on the doors; rather, a facsimile of a human hand is clutched and turned to open the door.

The inside of the chamber gives the impression of being within one of many intersecting bubbles. This is a holographic projection, intended to disorient Valleydwellers brought into the chamber for questioning. Twelve chairs are arranged in a semi-circle, facing a 13th chair. All the chairs are e-m converters that can transport people to and from the Valley and other areas within the Tower. Computer commands can be issued from the chamber, and a special field in the room makes *wathans* visible.

The Wathan Well

Extending down from the level below that of the Council chamber is a wide shaft 600 feet deep. Sloping transparent walls line the chamber so that its interior can be viewed from the levels the shaft passes through. Here the Computer stores the collected *wathans* of those Valleydwellers (and Ethicals) who are currently awaiting resurrection. The pool of *wathans* appears as a raging sea of whirling multicolored globes. The well will usually contain only a few dozen *wathans* as long as the translations are still occurring, but once the resurrections stop, hundreds of thousands will accumulate. After 35 A.R., when the right-bank grailstones quit, the well contains *billions* of *wathans*.

The sight of the *wathans* within the well is an awe-inspiring experience. Not only is it visually spectacular, but the mere awareness of its nature is transfixing. Characters viewing the *wathan* well must make Will rolls (one attempt per minute) to take their attention away from it.

The pool of *wathans* is too bright for the naked eye to discern individual forms. A person wearing dark glasses can see each *wathan* as a separate entity.

The Computer

The Riverworld project is maintained and monitored by an immense protein biocomputer, known simply as the Computer. The Computer is not located in any one place in the Tower — rather, its components are scattered throughout the structure. In fact, one could say that the Tower *is* the Computer, and vice versa.

The jobs of the Computer are numerous. Its primary function is to coordinate the *wathans* on the Riverworld, storing those that are currently awaiting a body, and preparing bodies as needed. The Computer also runs the grailstone e-m conversion system, as well as the converters within the Tower. It draws on its vast memory to create new materials, and virtually any object desired can be fashioned. It also operates every major system within the Tower (security, communications, maintenence, etc.).

The Computer and the grailstone network draw on the Riverworld's molten core for energy and power. All energy used to create matter is generated by a power converter beneath the Tower. This converter has numerous back-ups in case of failure. If something catastrophic occurred to the converter and its back-ups, the grailstones would fail and the Computer would die (releasing all the

wathans it was storing at the time). The Computer estimates that at the expected average rate of consumption, the core's energy will be used up within 200 years.

The Computer is a *living* protein brain. It subsists on distilled water mixed with sugar and minerals. The water flows from the Polar Sea into a mixing chamber. The flow is controlled by a force field valve. If the valve fails to operate, the Computer will eventually die. For every 24 hours that the Computer goes without "food," the GM should secretly roll 3 dice. On an 16, 17 or 18, it loses one "hit," which reduces the roll by 1 for the next 24-hour period. Once the roll to lose a "hit" reaches 3 or better, the Computer dies, releasing all of its *wathans* to wander the universe forever. The valve (like most critical Computer systems) is guarded by a complex defense system of beamers that is difficult to infiltrate.

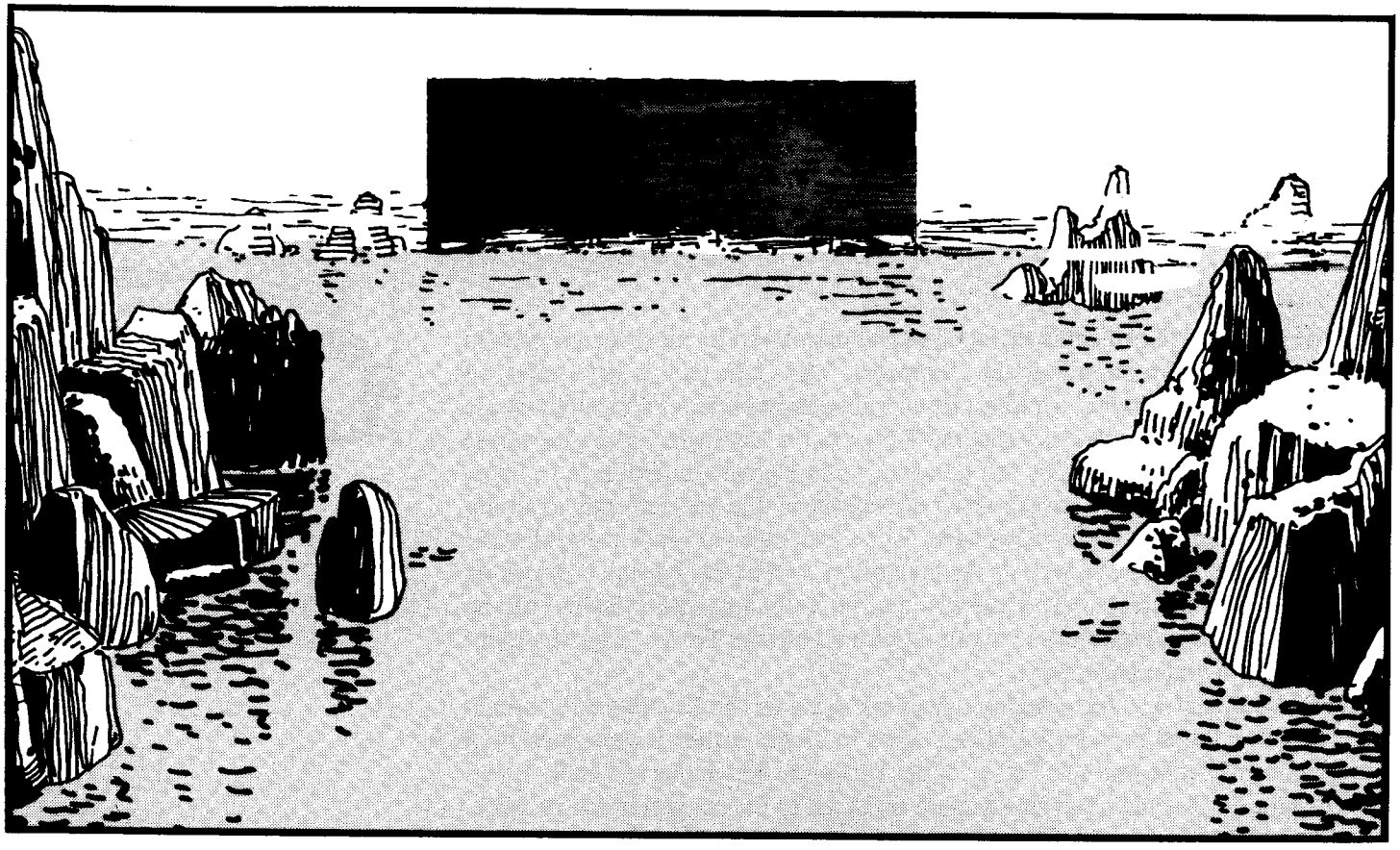
Theoretically, the Computer can be accessed and commanded by anyone. However, the Council has installed numerous security codes to keep the Computer from performing unauthorized tasks. Monat's passwords are needed to stop or change the resurrection process. These passwords can be overridden by the Council in an emergency situation (Loga did this of his own volition). The Council's passwords control the grailstones, access to flying vehicles (including starships), and control of most e-m converters. Ethicals who are not members of the Council are restricted to using the Computer only to fulfill their functions. In light of all this, Valleydwellers gaining entrance to the Tower will need to be allied with an Ethical in order to utilize much of the Computer's power.

The GM and the players should make creative use of security codes. Loga's operation almost failed because of Monat's "security lock" on the resurrections. Remember, Monat built and programmed the Computer, and his passwords will always override anyone else's. Council passwords are next highest in power, but any passwords can be circumvented with enough ingenuity and Computer Operation skill. Remember, though the Computer is TL15, it is not self-aware!

Self-Destruct Devices

Certain Ethical devices, designed for use by agents in the Valley, are designed to destroy themselves after a few uses. These are often found in the hands of renegades, for obvious reasons. A renegade might be quite willing to give high technology to a Valleydweller, but he would not want it to last past the immediate need. Not only might it be used in ways he would not approve of, but it would be evidence against him!

Most such devices are weapons (stun rods are common), but pairs of communicators, and other harmless devices, are sometimes found. All have a limited amount of power. They will last for a set time, or a set number of uses. When a device reaches this limit, it will begin to heat up, quickly becoming too hot to handle! Shortly thereafter, it will melt into a glob of plastic. Should anyone think to salvage it, there are a few metal bits in the plastic; these will be worth $50 in a typical metal-poor area, but nothing in an industrialized state.



THE RIVERWORLD CAMPAIGN 5

A ***GURPS Riverworld*** campaign will differ widely from "standard" roleplaying fare, and will require special approaches by the GM. The setting is physically repetitive and predictable, but the cast of characters is 37 billion strong! This chapter is intended as a guide to running a successful Riverworld campaign.

One of the first decisions, of course, is the "period" of the campaign . . . where in the Riverworld story it falls. The sidebars on pp. 7-10 describe the various periods, and the sort of campaigns they are suitable for.

Dealing With Death

Death in ***GURPS Riverworld*** is an annoyance, rather than a tragedy, because the Valleydwellers are essentially immortal. As long as there is a body available for a character, the *wathan* will inhabit it and the character can continue his life. However, the coordination of bodies and *wathans* is often disrupted by the quarrels of the Ethicals. And, of course, "translated" characters will probably find themselves far from the action in the campaign.

When a character dies, check to see if translations are still going on. They could be distrupted by grailstone failure, Loga's sabotage in 30 A.R., or Computer malfunction (loss of body records, etc.). If the translations have stopped, the character's *wathan* will be retrieved by the Computer and stored in the *wathan* well (unless that too is not functioning, in which case the *wathan* will wander the universe). Characters whose *wathans* are in the well are effectively out of the campaign until either the translations are resumed or someone within the Tower elects to resurrect the character.

If translations are still occurring, the character is resurrected 24 hours after his death. The GM can decide, randomly or by design, where the character is resurrected. Usually, it will be some random spot along the Rivervalley, but it could be near the headwaters (in the land of the titanthrops), in some special area like Parolando, or even in the vicinity of the player characters. The chances of the latter occurring are astronomical, but the GM may wish to roll for it (perhaps rolling for three 3s in a row or some other near-impossible result). Chances are that the character will be out of the main campaign, unless there is interference through the Computer (see sidebar, next page) However, the character *is still alive*, and could conceivably return to the campaign, or could become part of a new campaign that might eventually link to the old one.

Linked Resurrections

The mechanism by which the Computer chooses resurrection sites is unknown, and appears to be random. However, there was one known instance in which two people (Richard Burton and Hermann Göring) were repeatedly slain together and then resurrected together. Clearly, the Computer programs controlling their resurrection had somehow become synchronized.

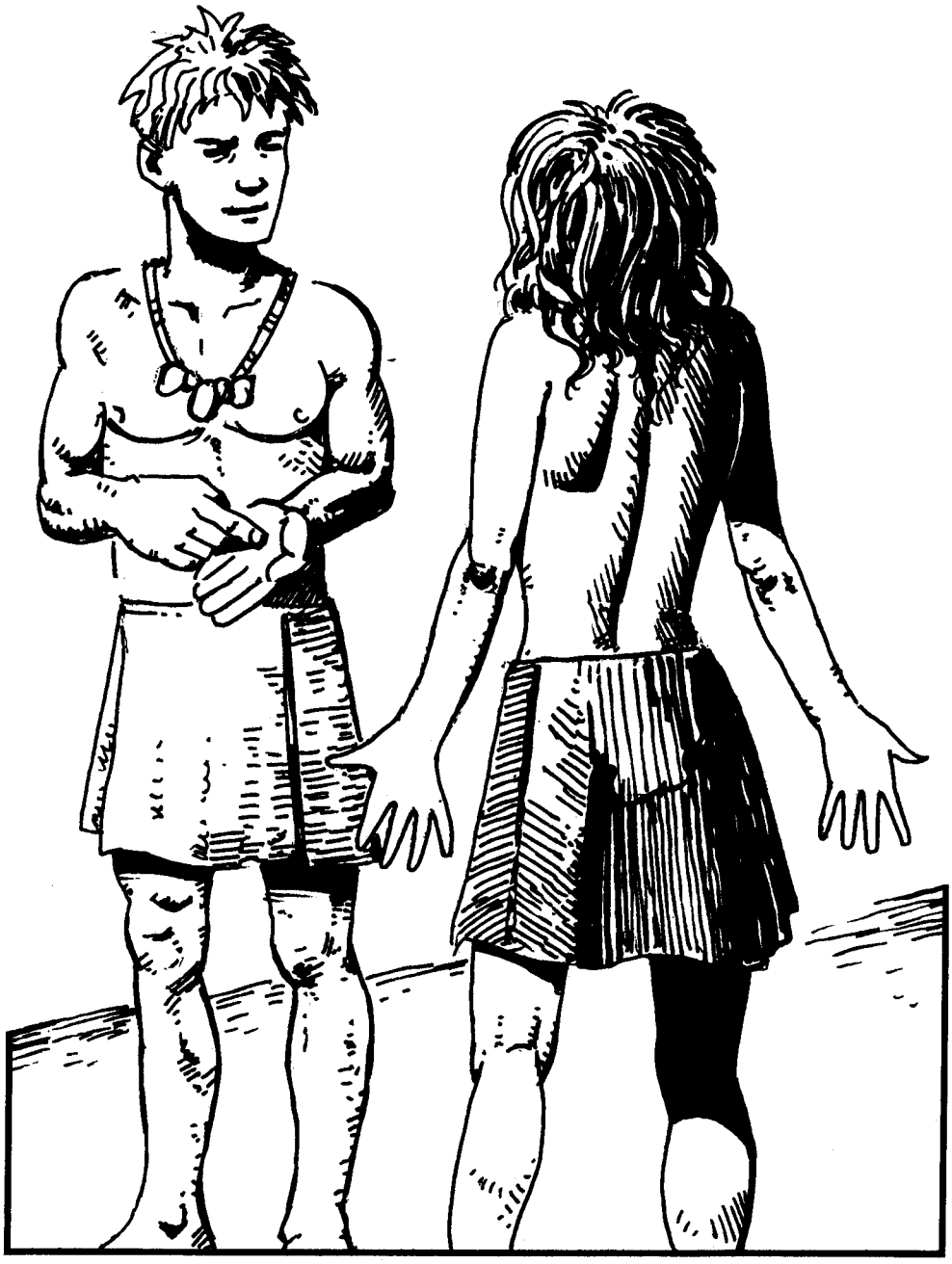
The GM may rule that this sort of occurrence is common. Thus, if the PCs die in a common mishap (or even all on the same day), they could be resurrected together. They would have lost whatever goods and political connections they had accumulated, but on the Riverworld, that's no more than a temporary setback.

The Role of the Player Characters

GURPS Riverworld provides a unique opportunity for the players to define the nature of the campaign. How the PCs deal with the Riverworld environment and what their goals are in that environment will determine the tone of the campaign. Several of the more obvious PC goals are listed here.

Getting to The Tower

Once news of the Dark Tower spreads to the PCs, they may want to go there themselves. The adventures on which they embark to reach this goal are manifold and interrelated. To get to the north pole, they will need either a riverboat or some sort of aircraft. Special resources, like metal, are required to build one of these. Other nations in the Valley may possess these resources, and the PCs may want to journey there and try to get them. But wait . . . in order to make such a journey a boat, and perhaps weapons, are necessary. The PCs could fashion these themselves, but won't the other nations have *better* equipment to



defend their resources? A chain of events emerges, and the GM can turn each of these situations into an adventure.

Conquering the Valley

Perhaps the PCs have no interest in the Riverworld's makers, and would rather establish themselves politically and militarily in the Valley. There are many possible motives for this: the desire for personal freedom, the protection of others, resisting a local tyrant, developing technology, even testing some particular social theory. The PCs could also have less than noble motives: a lust for power, a desire for luxury, a sadistic desire to enslave or destroy others, and so on.

Any campaign of this sort first requires establishing some sort of nation and maintaining its existence. Building an army means raising tech levels to provide better weapons than those of neighboring nations. Those other nations may have ideas of their own, and may keep the PCs busy with raids and invasions. The characters then become involved in a small-scale "arms race," requiring more resources than they have. Alliances and trade routes could be established to supply needed resources and technology. Spies and saboteurs will suddenly become abundant, and NPCs heading for the Tower may be very interested in any high-tech aircraft that may be developed. If the new nation becomes powerful enough, it may attract Ethical interest, especially that of renegades looking to overthrow the Council.

River Journey

Like Huckleberry Finn, the PCs may wish to journey up and down the River for the sake of the travel itself. This is a perfect vehicle for the GM, as each bend in the River brings a new adventure. The dominant historical population of an area can be determined, along with its tech level, and a few of its citizens. These elements by themselves will often suggest an interesting adventure. The locals may desire something the PCs have, something that they are willing to bargain or fight for. Or the natives themselves may have metal or some other resource of interest. Ethicals may be operating in the area, and may involve the PCs in some of their schemes. Remember, the travelers will have to stop to fill their grails at least twice a day, so it is difficult to avoid encounters. If the locals gain possession of their boat, the PCs will suddenly be faced with new challenges.

Follow the Ethicals

The GM may let the PCs encounter Ethicals early in the campaign, stirring their interest not so much in the Dark Tower but in Ethical operations within the Valley. If contacted by a renegade, the PCs may want to try to stay on his trail and attempt to reach other Valleydwellers who have encountered him. Of course, staying on a renegade's trail means keeping agents *off* their own trail. This type of campaign can become very "cloak and dagger," complete with double-crosses, assassinations, and secret identities. If one or more of the PCs actually *is* an Ethical, things can get very interesting indeed (see p. 109).

Reliving History

PCs of a scholarly bent may wish to use the Riverworld as a vast library of historical information. They may decide to journey along the River, studying people and cultures as they go (see above), or they may wish to seek out specific individuals or people from certain historical periods. Either way, the GM must endeavor to be historically accurate and interesting. Seeking out a specific famous person could make for a terrific campaign as the travelers pick up clues, follow false trails to imposters, and so on. The quest could lead to a Conrad-

New Player Characters

Introducing new PCs to the campaign is especially easy on the Riverworld. The world is *full* of strangers, many of whom are wanderers. If the party is traveling along the river, they will meet any number of people who might like to join them. If the campaign is localized in one area, there will be lots of people passing through. No further rationale is needed for a new PC.

Planned Resurrections

Ethicals, or Valleydwellers with an Ethical looking out for them, will not be resurrected randomly. Ethicals will be resurrected in the Dark Tower, so they can report in person and get some R&R (Loga, of course, will sabotage this function when he annihilates those in the Tower). Valleydwellers with an Ethical patron or master will be resurrected wherever the Ethical wants them to appear.

If the PCs occupy the Tower and have access to the Computer, they can resurrect any comrades who perished earlier in the campaign. They can also bring translated characters to the Tower by utilizing the Computer to seek them out in the Valley. It is for this reason that all characters who die or are translated should be saved for later play. Translated characters should be given experience points to reflect any adventures they may have had in the Valley before rejoining the other PCs.

esque "Heart of Darkness" scenario, where the historical figure in question has established himself as a "god" among primitives. Or he (or she) might turn out to be not at all what the searchers expected, either because the Riverworld changes people or because history did not report accurately.

Inside the Magic Labyrinth

Entire campaigns could be set within the Dark Tower. The GM may even wish to *start* his campaign there, especially if the all the players have read the books and the Valley holds no surprises for them. The goals for explorers within the Tower become much larger in scope, given the awesome technology available to them. The ambitions of the player characters can be complicated by the presence of NPCs (Ethicals and/or Valleydwellers), the machinations of Monat, or the ambivalence of the Computer. The use of the world rooms and the sheer vastness of the Tower add up to tremendous potential for campaign play.

Creating Adventures

Once the PCs have established long-term goals for themselves, the GM needs to flesh out adventures to help them reach these goals. Adventures in ***GURPS Riverworld*** differ in style and form from most roleplaying adventures. The terrain and inhabitants of the planet offer little in the way of variation (the GM cannot throw strange creatures and underground mazes at the players to spice things up . . . at least, not until they reach the Dark Tower!). Consequently, the GM must focus his adventures on the interaction of characters and developing technology.

The Setting

Despite the uniformity of the Riverworld's geography, many types of settings can be utilized when designing an adventure. Inhabited areas of the Valley will contain different types of structures: single huts, multi-room bungalows, even treehouses. Metal-producing areas will have much larger structures: factories, warehouses, airplane hangars, etc. River and air vessels provide good adventuring environments, from small schooners to large riverboats and airships.

It is a good idea to map any area that the PCs will be in for a long time. Show where the area's leaders live, and the structures in which they dwell. Indicate the positions of citizens' homes and other important buildings. Some militant areas build walls around their lands, or construct complex fortifications to defend the Riverbank and the grailstones. Grail slave nations will have stockades, military barracks, etc. High-tech nations could be as complex as a modern town, depending on their TL and the availability of resources.

The Plot

The story behind a ***GURPS Riverworld*** adventure will be derived from the immediate goals of the PCs. This differs from other roleplaying adventures where it is the GM's job to get the players interested (usually by offering them some sort of reward). The PCs are in a position to do whatever they want — if that means being lazy and snoozing all day on the Riverbank, fine. If, on the other hand, they want to build a small boat and go exploring, the complications of such a project provide for a story. Resources might be scarce or guarded, other people may want the finished boat for themselves, and so on. Creating several important NPCs and deciding how their interests conflict with those of the player characters is another way to devise a plot.

The plot of a ***GURPS Riverworld*** adventure does not have to be a linear

Random Historical NPCs

Often the GM will need to create NPCs quickly, especially in a River Journey campaign where different personalities will be encountered each play session. The GM can use the rules on pp. B84-85 to create the basic character, but he must also determine a basic background to help flesh the person out.

These tables are used to provide a time and place of origin for randomly met Valleydwellers. Each table reflects the demographics of the Riverworld population. They can be used by the GM for individual NPCs, or to determine the dominant group in a given area. The GM should interpret the results creatively. For instance, if the time period is the Iron Age, but the location is in North America, the inhabitants would be Indians, whose technology would not be Iron Age, but Stone Age.

Players may also wish to use the tables to provide a starting point for their PCs' origins.

Roll three dice on each table.

Die Roll	*Period of Origin*
3	The Stone Age
4-6	The Iron Age
7, 8	Renaissance/Colonial
9, 10	The World Wars
11, 12	Modern
13, 14	Industrial Revolution
15, 16	Medieval
17, 18	The Bronze Age

Die Roll	*Place of Origin*
3	Indonesia/Australia
4-6	South America
7, 8	Europe
9-11	Asia
12-14	The Middle East
15, 16	North America
17, 18	Africa

For a discussion of the way a local population may be divided into dominant and secondary groups, see the sidebar on p. 16.

sequence of events, as is the case in most roleplaying campaigns. The GM cannot always expect to "lead" the characters along a series of encounters, teasing them with material rewards. He must be prepared to respond to changes in the objectives of the PCs, and must be able to adapt his story to them. This can be done by designing the campaign as a set of interrelated characters and events, allowing for the effects the PCs' actions may have. Concentrate on defining the adversaries — the more detailed their personalities and motives become, the easier it becomes to determine their actions.

The NPCs

Designing NPCs for a ***GURPS Riverworld*** adventure can be as demanding as the creation of player characters. Study the section on character generation and apply the same principles to your NPCs. Try to create a mix of character types: original, famous and familiar. Original characters are perhaps the easiest to create (see p. 31) and provide the most flexibility for the GM. Famous characters are important to a campaign — the players will expect to see some. The GM can have great fun with familiar characters — imagine the look on your players' faces when one of them shows up in the campaign!

The role of the NPCs will vary with their importance. The likes of Alexander and Genghis Khan will tend to have starring roles in your campaign, while that 12th-century French peasant may not get more than a walk-on part. Ethical NPCs are extremely important, as are any figures from the books (see pp. 50-58). Adventures can be shaped around the goals and behavior of NPCs, especially in the way they either accommodate or aggravate those of the player characters.

Dreams

Nocturnal dreams on the Riverworld seem to be more vivid and informative than those on Earth. The reason for this is not known — it may be that the Ethicals have enhanced the connection between the Valleydwellers and their *wathans* to allow for a clearer communication between the conscious and the unconscious mind. Important dreams also recur more often on the Riverworld, as if the *wathan* "knows" of their significance.

The GM can use dreams as adventure vehicles in the campaign. Dreams can fill the sleeping time of the PCs with "mini-adventures" that have no real world consequences. Study the quirks and psychological disadvantages of the player characters to help create anxiety-filled dream experiences. Important events from a PC's terrestrial or Riverworld life may also play a role in a dream. For example, after he betrayed and murdered Erik Bloodaxe, Sam Clemens was forever haunted by dreams of the Viking's oath of vengeance. Unethical or amoral actions on the part of the PCs may later inspire haunting dreams. Particularly horrifying nightmares will cost the dreamer Fatigue and may even call for a Fright Check!

Dreams can also be used to convey information about the campaign to the PCs. Instead of a renegade Ethical making nocturnal visits to the PCs, he may instead develop some way to speak with them via their *wathans* (if the campaign includes psionics, Telepathy may be used here). The message would come to the PCs in their dreams, perhaps as the cloaked form of the renegade. The GM can create interesting combinations of "normal" dream experiences and those caused by an Ethical — the characters will have to sort out which is which.

Particularly inventive GMs may wish to try creating *symbolic* dreams, which use symbols and allegory to convey either deep psychological messages or hidden universal truths. Burton's recurring dream of God demanding rent for his fleshly body falls into this category. Such dreams can be used in a lengthy campaign to fully develop a character on every level. As disadvantages are bought off and anxieties are overcome, these recurring dreams could either change or cease altogether.

GURPS Crossovers

For groups that are already involved in a ***GURPS*** campaign and wish to use the Riverworld background, there are several interesting options. First, the characters can all be hit by a truck and begin afresh on the Riverworld. The players may not appreciate this, however, especially if their characters are doing well in the current campaign. Alternatives include:

GURPS Space

Spacefaring PCs may discover the Riverworld on their own. This could make for a fascinating campaign once they discover that the planet's inhabitants are resurrected humans from early Earth history. The planet's defense satellites would need to be neutralized before attempting a landing, of course. Once on the planet, visitors may wish to "mingle" among the Valleydwellers and assume historical disguises in hope of learning more of the planet's secrets. They may introduce ultratech items and skills to the Valleydwellers, which would certainly attract Ethical interest. Or they may make for the Tower in their spacecraft to confront the Ethicals directly.

GURPS Fantasy

Inhabitants of a fantasy world could appear on the Riverworld — through a misapplied Teleport spell, for instance — and be unable to return. They won't have grails, of course! If they die on the Riverworld, they will be resurrected, and this time they *will* have grails, but they will still have normal human bodies, without the special Riverworld advantages of Unaging, Very Rapid Healing, and so on.

This sounds terribly unfair, and it probably would be . . . unless the fantasy PCs were wizards. In that case, they would be the only ones on the whole planet who would be able to use magic. This Unusual Background should go a long way to cancel out the physical superiority of the Riverworlders!

Historical Worlds

If the campaign is set in historical Earth, as in ***Swashbucklers, Ice Age,*** or even ***Horror,*** the best way to get the player characters to the Riverworld is to kill them! See the sidebar on the next page.

Creating the Campaign World

The GM is not only responsible for designing the adventures for the campaign, but also for presenting the Riverworld to the players. Chapter 1 provides descriptions of the Rivervalley and its inhabitants. The chronology should be used as a guideline to events happening outside the sphere of the PCs' actions. Chapter 6, *Resurrection Day,* introduces the Riverworld one day at a time.

Creating Populations

If the PCs are going to be in a specific area of the Rivervalley for an extended period of time, it is important to know as much as possible about the inhabitants of that area. The sidebar on p. 16 describes the basic demographic distribution of the Valleydwellers. This may change as time goes on and populations mix. However, each area should be dominated by a specific type of people from the same general period of history. The tables used for generating historical NPCs can be used for this purpose, or the GM can choose his own populations. Numbers of people and the area they inhabit will vary, but the average is about 850 people for every mile of Riverbank (one side).

In a Resurrection Day campaign, the GM should choose the time and place of one of the PCs as the dominant population for the area. The remaining PCs are part of the minority from anytime and anyplace (unless, of course, they also happen to come from the same time and place). The PC on whom the dominant population is based will be at an advantage; he will be able to communicate with and relate to most of the people in the area. He can act as interpreter and diplomat for the rest of the party. For this reason, the GM may want to make the "native" the PC with the best language and communication skills.

The GM is free to develop the populations of other areas as the PCs travel and explore the Valley. There is room for interesting experimentation here, as people from different historical backgrounds try to coexist. If the PCs are journeying along the River and sampling many different areas, the GM may need to quickly create populations using the historical NPC table. This requires a good knowledge of all of history to make encounters realistic. If this gets to be too demanding, a leaky or stolen boat will ground the PCs for awhile. Or perhaps they will get drafted into somebody else's war.

But, when all is said and done, the Riverworld is one place where you really can (usually) run away from your problems!

Determining Tech Levels

As pointed out in Chapter 1, tech levels will never rise above 1 until metal is discovered. This shouldn't occur until at least 10 A.R., as excavations become more common. Remember the makeup of the local population when setting tech levels. Ancient Babylonians will not have airplanes unless they receive a *lot* of help. As metal and other raw materials become available, technology will begin to develop rapidly, guided by those who developed the technology in their Earth lives.

The presence of metal and high technology will change the makeup of a Valley area dramatically. As news of the technology spreads, immigrants will swell the population. This means a wider mix of historical types. Trade routes will develop between neighboring nations, increasing River traffic (and potential danger). Politics will become technocratic, the leaders dominated by 20th-century resurrectees (although they may find allies in historical tyrants, as Sam Clemens did with King John). High-tech areas will also draw Ethical interest.

Describing Societies

The types of societies to be found in the Valley are as numerous as those found throughout Earth history. An easy way to determine the society of a particular area is to base it on the dominant population. An area inhabited by 10th-century Europeans will probably have some sort of feudal structure, while 18th-century Zulus will base their society on extended families. Populations from the late 20th century, when society became very complex, will have to adapt to the different societies of other Valleydwellers, at least until technology becomes available.

When determining an area's society, the GM should also determine its leaders; they should be fleshed out as NPCs. When the PCs come into a new area, the leaders will usually wish to see them, and may even play a large role in the PCs' plans. If a society has an organized army or navy, the GM should decide on their numbers and weapon types for use with the mass combat rules.

If several adjacent areas along the Valley are defined in this fashion, a lengthy campaign is in the offing, as trade flourishes and war erupts between the fledgling nations.

It is important for the GM to remember that, in the final analysis, *he* is the one who decides where the PCs' boat lands. One nation looks a lot like another from the middle of the river. If the PCs sail right past a carefully contrived situation, move it a hundred miles along the River . . . to the next grailstone they visit.

Keeping Track of Time

In a campaign that follows the plot of the original novels (see next section), the GM should keep track of events that may affect the Valleydwellers and the PCs. Things like Sam's meteor, grailstone failures and the like will affect the campaign, no matter where in the Valley they are taking place. Keep a calendar of passing days beginning with Resurrection Day, and use the chronology to integrate key events into the campaign. Many events on the chronology will reach the ears of the PCs via the Rivervalley "grapevine," usually six months to a year after the fact.

Considering the potential scope of a ***GURPS Riverworld*** campaign, GMs may want to "skip" large amounts of time to speed play or allow for technical progress among the Valleydwellers. This can save a lot of work, especially if the

The Riverworld as a Safety Net

The Riverworld can become a place to bring back favorite characters who meet their ends (heroically, we hope) in historical campaigns. Deceased PCs can be raised on the Riverworld in a Resurrection Day campaign, or brought in as part of a later campaign. Transferring characters from the historical setting to the Riverworld will require rebalancing character points. Remember that all physical disadvantages will be cured on the Riverworld; this may unfairly penalize those who took mental disadvantages instead. The best solution is to trade new mental disadvantages for the lost physical ones. For instance, a resurrectee could acquire a phobia relating to the circumstances of his death.

Even if no Riverworld campaign is planned immediately, it is a good idea to save character sheets for both player characters and interesting NPCs. Create a "bank" of characters that can be brought into the Riverworld someday. The players may then finally have what they have always wanted — total PC immortality!

The Riverworld background can also be used as a "safety net" for a whole campaign set in any period up to and including the present. Should the PCs make a drastic miscalculation that ends in the death of the whole party, they can wake up together on the Riverworld. (This does not even require any stretching of the Riverworld background; it was common for people who had died in the same area, at about the same time, to be resurrected in the same part of the Valley.) And the campaign continues, with the same characters in a whole new situation.

This can be especially amusing (for the GM, at least) in a ***Cliffhangers*** campaign. The PCs are in a terrible situation at the end of an evening. The players go home, wondering how the GM will get them out of *this* one. When next they get together, the GM looks at them, shakes his head, and says . . .

"You all die."

After the shouting dies down, he can proceed to the ***Resurrection Day*** adventure on p. 112.

The World Rooms

An alternative ***GURPS Riverworld*** campaign involves use of the world rooms in the Dark Tower. If the PCs have gained access to the Tower and its technology, they will be able to enhance the campaign greatly by making use of the world rooms. Consider the following scenario:

Each PC takes one world room for himself. The players can customize the room's interior however they wish, providing living space for themselves and for any friends they resurrect. They can also use the space to design *adventures* for the other PCs. These can be full-fledged roleplaying adventures, set in any type of genre the players desire. Other ***GURPS*** worldbooks can be employed to provide resource material for adventures. The PC can then "run" the other PCs through their own "live" adventure, literally acting as a Game Master. The "real" GM can elect to play an NPC adventurer (allowing a rotation of the GM job), or play the role of the Computer in its interaction with the PCs.

The goal of the adventure can be whatever the PC creating it desires. Androids could be built to provide "NPCs" for the adventure (since androids are built using body records, actual historical NPCs could be brought into play). PCs may actually die in the course of the adventure; of course, they will be resurrected again immediately. The PCs may wish to set up a "point system" to keep track of deaths and victories, making for competitive play. After all, the PCs are now essentially gods — they have to amuse themselves somehow.

This concept can also be used if there are Ethicals still in the Tower who are trying to evade pursuing Valleydwellers. If Ethicals are in control of the world rooms, they can "trap" unsuspecting PCs in deadly adventures of their own. This is a good way for the GM to "cross genres" and run another ***GURPS*** world for a while. Of course, the PCs won't be sure whether this is still ***GURPS Riverworld*** or another campaign altogether!

PCs are making a long River journey and the GM doesn't want to play out each and every encounter along the way. Just say, "A year or so passes during which you have many adventures, none of which are worth playing out." Allow the players to use this time to study skills, and award them general experience points. Calculate the distance traveled based on the speed of their boat. A journey to the Polar Sea covers millions of miles and will take many years; playing out every encounter will stretch the campaign past the participants' lifetimes! Just cover the highlights and leave the rest to the players' imaginations.

When compressing time in this fashion, the PCs should also be informed of news and rumors circulating throughout the Valley. News is usually carried by River travelers, but it is even more rapidly spread by Valleydwellers translated to remote parts of the planet. People learn more about conditions up-River than they do about down-River, because most travelers will be going with the current. Nations may employ messengers who carry news to and fro, either on foot or by River or air vessel. Even the most insular nation would encourage travelers to stop long enough to tell the news, especially if they look like they have come a long distance.

Deviating from the Novels

The GM should feel free to create his own Riverworld epic which deviates from the original story. This may be necessary if all of the players are familiar with the books. They would know right off that Loga is the traitor, that he will divert a meteor to the planet, and that he will murder everyone in the Tower. But maybe Loga isn't the traitor, or maybe there's a *second* traitor with his own plans in conflict with Loga's. Or perhaps Loga has different plans, such as doing away with Monat early on in the Project, or building his own computer.

There are a wide variety of options the GM can pursue if he decides to deviate from the story. In every case, however, care must be exercised in maintaining consistency. One approach is to keep the original plot intact, but change certain details to allow PC integration. For example, instead of arousing Burton in the pre-resurrection chamber, Loga could bring one of the PCs to consciousness. This means that Monat (and other agents) would immediately attach himself to the players' group. A more dramatic course is to have the PCs find the meteor before Sam Clemens does. Perhaps it was even intended for the PCs to begin with.

A much larger task is to completely alter the overall story. The first step is to plan the entire plot — decide who the traitors are, what their objectives are, how they will carry out their operation, and who will oppose them. Or perhaps there are no traiters; perhaps everything is going exactly according to the alternate plan of these alternate Ethicals.

Whatever the rationale, decide when important events will occur, and generate a chronology like that in Chapter 1, so that the PCs' actions can be integrated into those events.

The last section of this chapter, "The Secrets of Riverworld," provides further ideas for an original Riverworld epic.

Ethical Intervention

One of the best ways to enliven a campaign is to bring in Ethicals, whether as NPCs or player characters. The presence of Ethicals brings a sense of mystery and suspicion to a campaign, especially among players who have not read the books and don't really know what the Ethicals are all about.

Ethical agents are in the Rivervalley to observe the Valleydwellers and to watch for any activity that violates the Council's directives or threatens the Project. They always assume the disguise of terrestrials (they are in fact human), usually claiming to have died sometime after 1983 (or whatever date the GM sets as the "deadline"). Ethical agents can be discovered if their flyer or personal devices are found. Autopsies of dead agents may reveal the death sphere on the forebrain.

Ethical NPCs can come into play either because the PCs are especially interesting or because they have done something suspicious (such as being contacted by a renegade). They will use the PCs solely as sources of information, and will never confront them directly (unless, of course, some of the PCs are Ethicals).

Adventure Seeds

Here are several situations that can be used to kick off adventures on the Riverworld.

The Stolen Grail

- Someone has taken the grail of a party member — or perhaps *all* the grails have been stolen. They are invited to ransom them back with goods . . . or, for a more interesting situation, with a dangerous service.

Free Grails!

Of all the rare resources on the Riverworld, a freebie grail is perhaps the most valuable. It is lightweight, impossible to counterfeit, and marketable anywhere along the river. The party learns of one or more free grails, in the hands of someone sufficiently evil or irritating that they will have no moral objections about taking them . . . if they can find a way.

Riverboat Coming

Word reaches the party that a huge rivercraft is only a few days away. Depending on what they perceive as the boat's mission, they may want to get on board, or to make trouble for the owners.

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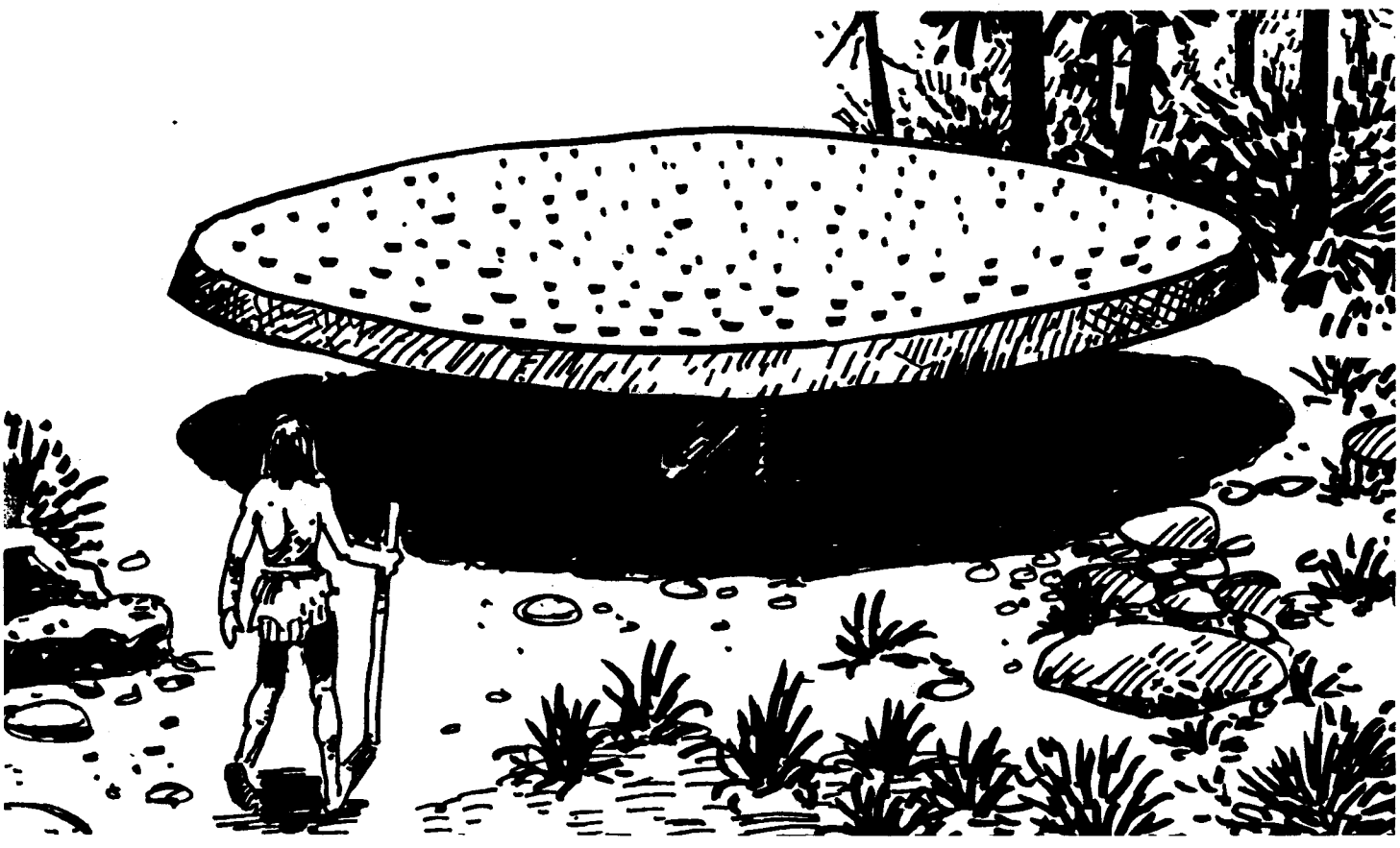


Adventure Seeds (Continued)

Treasure Trove

The party fells a tree, and it falls across another one, tearing it up by the roots and ripping the near-impenetrable sod open. This reveals a boulder of pure metal — perhaps a "small" iron meteor only the size of an automobile, perhaps some other material. This represents wealth and power . . . but how can they exploit it without having it confiscated by the local government, or being crushed by jealous neighbor nations?

The Cursed Grail

One of the PCs has a problem. Not only does his grail not work . . . when it is placed on a grailstone, that grailstone doesn't work either! There may be ways to turn this to advantage, if the lucky PC can avoid starving or being lynched first.

The Billboard

A party member with the See Ethical Markings advantage points out a huge arrow (which, of course, only he can see) painted on the mountains. Searching the area that it points too, smaller pointers are located . . . leading to a cache of goods meant for emergency use by Ethical agents!

Malfunctions

Strange and disturbing things, all connected with the grailstones, are taking place in the Valley. A man has been resurrected dead . . . over and over again. His body was duplicated at every grailstone the party can learn about, all at the same time. The noon grailstone discharge was five minutes early one day, killing dozens of people. Grails have been filled with extraneous objects, with no food. Clearly, something is wrong! If the campaign is heavily involved with Ethical and renegade activity, these problems are a clue that someone is tampering with the Computer, apparently in a very clumsy way. If the PCs aren't really involved with the Ethicals, this series of events will simply be a mystery that may trigger unrest along the Valley.

New Toys

A raft drifts to shore, its one passenger dead or dying. In a well-made bamboo chest on board are a half-dozen well-made gunpowder weapons (see p. 50) and a supply of ammunition. Of course, this is interesting loot for the PCs or the nation they serve. But what does it mean? Were the guns created by the Ethicals for some reason, or is a previously-unknown industrial nation trying to extend its influence downstream?

"Renegades" are those Ethicals opposed to the Project and who are working against the Council. They could be Council members themselves, or "second-order" agents working in the Valley. PCs will usually only contact them individually and secretly. If only one PC is contacted, it is his choice whether or not to reveal his experience to his fellow adventurers. A renegade will only contact the PCs if they can be of some unusual service to him, usually due to special skills and character traits. The GM decides the nature of the encounter, how much the renegade reveals, and what special instructions he gives to the PCs. This is a good tactic for steering the campaign toward a specific adventure.

All Ethicals on the Riverworld, except for Monat himself, are humans who were raised on the Gardenworld. They should all possess above-average attributes and skills, because they were carefully selected from millions of children, and raised by highly advanced extraterrestrials. Every Ethical should have a "real" biography of his or her short life on Earth, plus an artificial biography for use as a disguise. Some Ethicals, especially renegades, will change their identity as they change location. All Ethicals operating in the Valley have a flyer and the personal equipment listed in the sidebars on p. 92-93. Ethical agents never use these devices in the presence of the Valleydwellers, but renegades might do so in order to impress a contact.

Creating Ethical Player Characters

Allowing one or more of the players to play an Ethical creates a very different type of campaign. The Ethical PC has a real advantage over regular PCs in terms of his abilities and the fact that he knows the true nature of the Riverworld. In this regard, it is best to allow players who have read the books to play Ethicals.

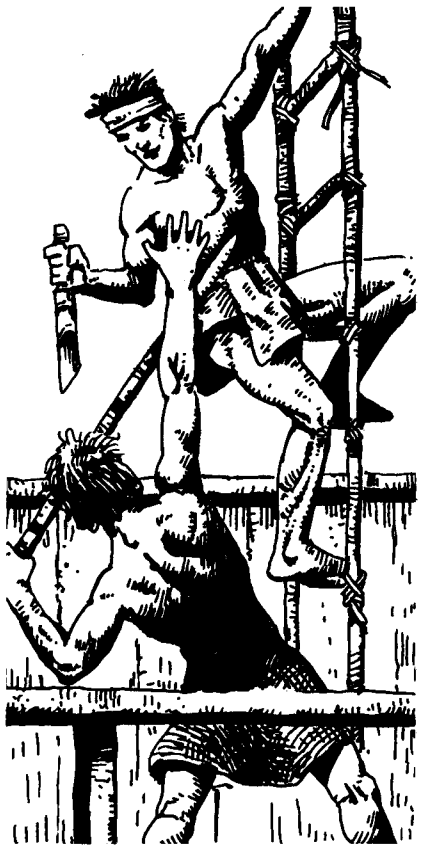
Ethical player characters are built on 100 points. No attribute may be taken at less than 12. They have the same restrictions on advantages and disadvantages that regular PCs do. They must take the Ethicals as a Patron (see p. 35), though "frequency of appearance" can and should be low. Their native language is *Ghuurkh* (p. 42), and they must learn the language of their fictional identity. The Ethical PC must then create a false identity and learn skills that help him to create that identity.

The presence of the death spheres allows an Ethical PC to "think himself to death" at any time. He will be resurrected in the Tower, unless resurrections have stopped, and from there he may be translated to any location he or his superiors choose.

The player of an Ethical character must work with the GM to establish his role in the campaign. If the PC is an *agent,* his job will be to watch for renegades (and their contacts) and to investigate any suspicious activity. Of course, he must do this without revealing his true nature to the other PCs. An agent PC can be used in this regard to help initiate adventures.

If the PC is a *renegade,* or an agent who is helping a renegade, he can be used to steer the PCs toward their ultimate goal, and to provide them with illegal assistance. Since the GM knows of his identity, he must be careful not to use that knowledge against him by causing NPC agents to give him undue attention. At the same time, the player must exercise caution not to abuse his power and knowledge. The GM can use agents to keep the PC "in check" to prevent him from upsetting campaign balance. Remember, if a renegade is caught, his *wathan* will be suspended, which means he is effectively out of the campaign.

For an especially exciting campaign, a group of PCs can contain *both agents and renegades.* Of course, each Ethical player can be told that he is the *only* Ethical in the group. Other Ethicals can be revealed by using a lightrod, discovering their flyer or personal devices, or by using the satellite map (which shows the positions of all Ethicals in the Valley; see sidebar, p. 93). The GM can circumvent many of these techniques by citing equipment failure. It is not recommended that *everyone* in the group be an Ethical (this would be highly unlikely), but the presence of at least two Ethicals with conflicting motives will make for very interesting roleplaying.



The Secrets of the Riverworld

The vast potential of the Riverworld setting can be realized by creative GMs who would like to invent alternatives to Farmer's original vision. Although the GM must be careful to maintain consistency when taking liberties with the original story, he has room for a much greater degree of personal creativity when establishing his campaign. And, just as important in a roleplaying game, it creates new "secrets" for the Riverworld, keeping the background fresh and interesting even for those players who are very familiar with the series.

The many alternatives to the main Riverworld storyline can be explored in a multitude of campaigns. Input from players, especially those who are familiar with the novels, will help the GM create further diversions. And tying in the Riverworld milieu with other ***GURPS*** universes (see sidebars) will provide an even greater variety of roleplaying experiences. With 20 million miles of Rivervalley, almost anything can happen.

Ethical Adventures

Many types of adventures can be created involving Ethical player characters. Possibilities include:

Sabotage

A renegade has greatly accelerated the technological progress of a nation somewhere up the River, and helped to build a massive metallic riverboat/airship. The craft is now in the hands of a group led by Attila the Hun's *meaner* brother. The Ethicals are concerned that this could disrupt development along literally thousands of miles of Rivervalley. An agent PC is instructed to infiltrate the area and deal with the vessel. The other PCs can be led to believe that they are working to capture the warcraft, when in fact the intent of the mission is to destroy it entirely.

Stop the Renegade!

If an Ethical agent is in the party, he can learn from the Council (i.e., the GM) that a renegade has been reported to be operating in this part of the Valley. The adventure can involve investigating activity in the area and following clues to the renegades's whereabouts. Of course, the agent must do all of this without revealing that he is an agent.

The Mission

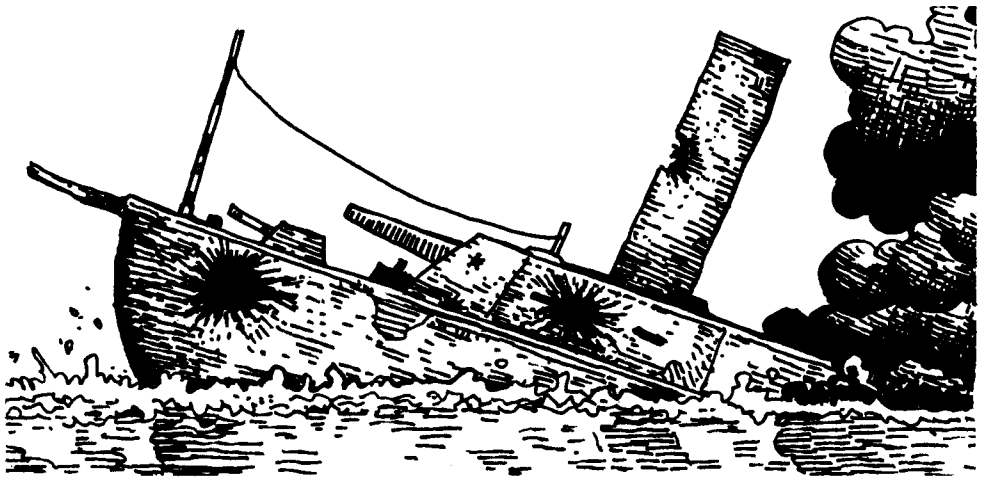
The PCs are Church of the Second Chance converts, one of whom is an Ethical renegade agent. His job is to spread the "truth" of the Church to the Valleydwellers and instill a desire in them to reach the Polar Sea. The PCs can be used in their role of missionaries to help spread the word.

Rude Awakening

One of the PCs is awakened by a renegade PC in the pre-resurrection chamber. After the resurrections, both the renegade *and an agent PC* attach themselves to the character. The renegade will be attempting to coax him to get to the Tower, while the agent will try to learn more of his awakening. Both Ethical PCs will also be busy avoiding and outsmarting each other.

Checkmate

In the Tower, Ethical PCs will have easier access to the Computer. If both an agent and a renegade are in the party, they may try to secretly work against each other through the Computer. At the same time, the remaining PCs may be trying to wrest control of the Computer from both Ethicals.



Other Spacefarers

One of the biggest areas to explore is the fact that the Riverworld seems so isolated from the rest of the galaxy. We are told that it is over 100 years travel from Earth and the Gardenworld, but what about other interstellar civilizations? Alien races, some of the many who were given self-awareness by the Ethicals, may discover the Riverworld during a scouting expedition. Its unique surface features would certainly be noticed, and they might have the capability to deal with the defense satellites and actually make a landing.

The presence of another alien race could either help or hurt the interests of the Council, depending on the nature of the race. Renegades might rush to meet the aliens before the Council gets to them, hoping to find an opportunity to aid the Valleydwellers. Alien spacecraft falling into the hands of the Valleydwellers would certainly make things interesting for the Ethicals. And, since self-aware aliens would by definition have *wathans*, any of them who died on the Riverworld would be resurrected the next day . . . somewhere! The Computer would realize that it had an extra *wathan*, of course, but it might not volunteer the information unless asked.

An alternative possibility is that the Riverworld might be discovered by a race the Ethicals overlooked . . . intelligent but *not-self-aware* creatures. Perhaps they would be a high-tech hive mind. At any rate, they would be very alien indeed. Having no *wathans*, they would not become caught up in the resurrection process. In the long run, the Ethicals would certainly want to follow such a race back to its home world and place a *wathan* generator there. In the short run, the interaction between Valleydwellers and soulless aliens will be interesting.

Alternate Schemes for Loga

Other variants worth exploring involve the ways Loga might have more rapidly executed his plans. Suppose he murdered the Tower's inhabitants on Resurrection Day, leaving only those Ethicals in the Valley and himself in the Tower. He could then direct the entire operation until someone (Ethical or otherwise) reached the Tower and stopped him. Another possibility would be Loga murdering Monat, leaving a distracting mystery to be solved by the Council while Loga contacted the Valleydwellers.

Other options include a mass arousal in the pre-resurrection chamber (instead of just Burton), a *total and permanent* failure of the grailstones (prompting direct Ethical interference), an early discovery and "execution" of Loga (paving the way for other renegades), and even an unscheduled arrival by the Gardenworlders.

The Eternal Riverworld

In this alternate background, the Ethicals' plan for mankind is much less elaborate. Having built the Riverworld and recreated all mankind there, they feel they have completed their ethical duty. There will be no end to the Project, and no "test." The people they have given eternal life can now work out their own fates. If they want to treat it as a never-ending playground, that is their business!

In this case, there is no particular reason to get to the Dark Tower (unless, of course, there are Ethicals who disagree with *this* plan, and a whole new set of renegades). The Tower is staffed with technicians and observers. Persistent PCs may reach it, but they won't be allowed in; if they become nuisances, they will be swatted like flies, and resurrected somewhere else the next day.

There will still be Ethical agents among the Valleydwellers, but they will simply be observing the development of society. An occasional Valleydweller might be recruited for some special job, but in general the Ethicals won't interfere. Perhaps the Riverworld really is just a research tool.

Or perhaps the whole Riverworld was set up by an entertainment company, as an endless source of 3-V spectaculars. The "agents" are writers, producers, and perhaps even trained actors. Or maybe the whole thing was set up as a battleground for live wargames, and the Ethicals (now very inappropriately named) visit to enjoy themselves, setting up little states and fighting among themselves. In that case, any "famous person" may be a cynical impostor!

In the original series, the grailstones were powered by the energy of the planetary core, which would be substantially exhausted after 200 years. For this variant, it is better to assume that the grailstones work on solar energy, beamed in from elsewhere in the system, or cosmic power, or some other inexhaustible source. This will let the Riverworld continue *forever.* What kind of society might exist after hundreds or thousands of years?

Chariots of the Ethicals?

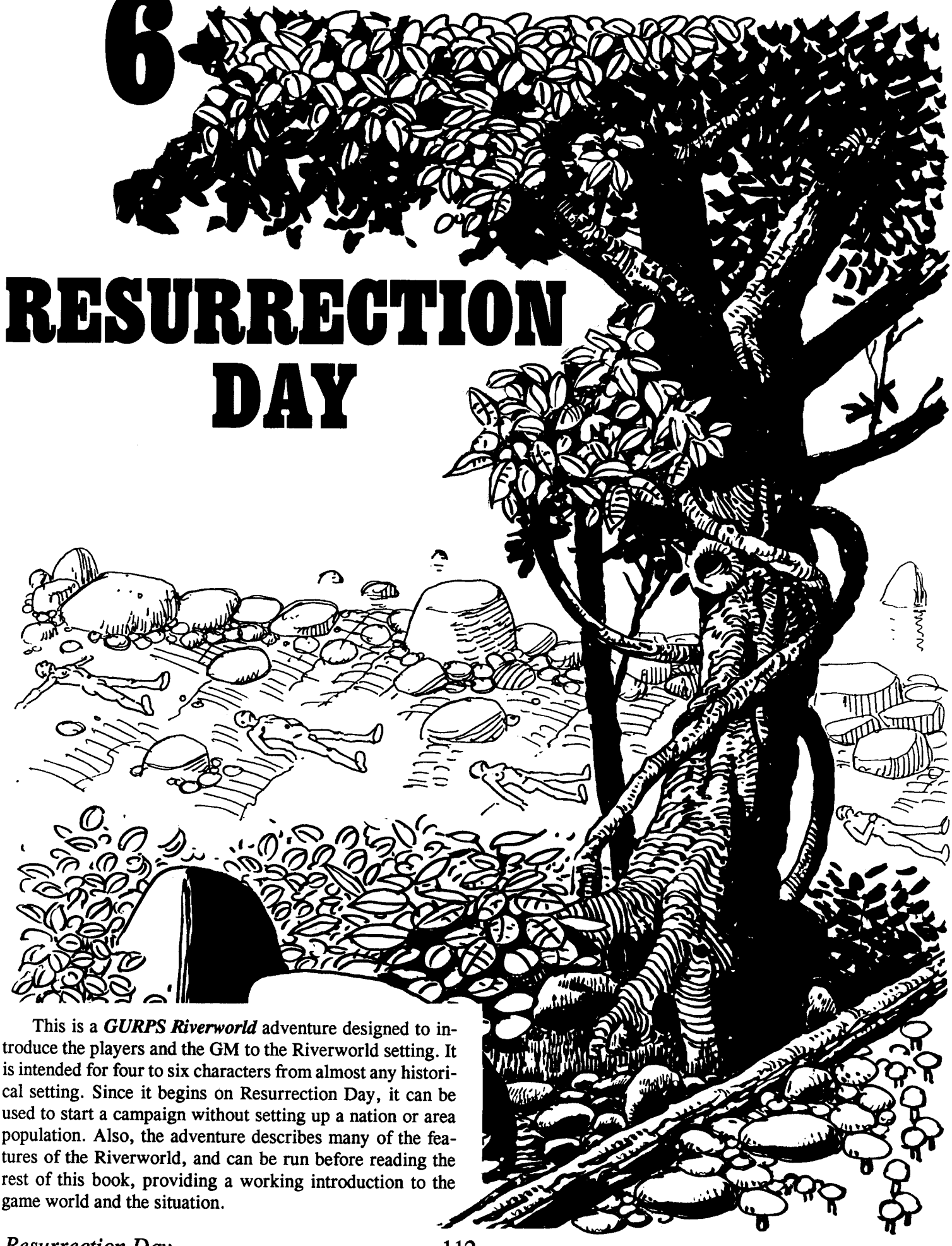
Beyond a doubt, human Ethicals (those raised on the Gardenworld) visited Earth to assist in the Project. They would have been able to mingle with the terrestrials and measure *wathan* development at various times in Earth history. Another possibility to consider is that *some Ethical agents were recruited on Earth.* This implies that terrestrials were approached by the Gardenworlders and perhaps even transported back to the Ethical planet. Those that declined the invitation probably had their memories of the encounter erased, but a renegade may have reversed that situation. This would mean that the person remembers the alien contact after his resurrection, which could help fellow Valleydwellers in solving the grand mystery. This type of experience would make an interesting twist for a player character.

The presence of Monat's race or other non-human Ethicals on Earth is a little more dubious because of their obvious physiological differences. Still, 20th-century close encounter experiences could provide ideas for visitations by Monat's race. An interesting scenario would be that of a renegade Gardenworlder who escaped to Earth to tell humans about the Project. Members of Monat's race arrive on Earth to seek out the renegade and bring him back to the Gardenworld. Despite their caution, some of them are seen by terrestrial humans, who would carry that memory with them to the Riverworld. If Monat was ever encountered by such a person, he could be identified as one of the aliens who once visited Earth.

It would be against Ethical law to interfere with the development of human history, but this is another area where renegades could take action. Perhaps some great strides in scientific achievement were brought about by illegal Ethical influence. Individuals may have been visited by a "mysterious stranger" while on Earth, and again on the Riverworld. If time travel is introduced into the campaign, whole new areas of roleplaying can be explored. Agents, renegades and Valleydwellers may pursue each other back to historical Earth, attempting to alter or correct history, and to enlighten or deceive humans in the knowledge of their own potential immortality.

6

RESURRECTION DAY



This is a ***GURPS Riverworld*** adventure designed to introduce the players and the GM to the Riverworld setting. It is intended for four to six characters from almost any historical setting. Since it begins on Resurrection Day, it can be used to start a campaign without setting up a nation or area population. Also, the adventure describes many of the features of the Riverworld, and can be run before reading the rest of this book, providing a working introduction to the game world and the situation.

Resurrection Day will seem very familiar to those who have read the series; it is a retelling, in game form, of the first few chapters of *To Your Scattered Bodies Go.* These events were repeated literally billions of times across the Riverworld, as humanity woke up and looked around . . . replaying them is *the* way to start a Riverworld campaign.

This adventure also presents a series of encounters with a group of interesting and diverse NPCs. Two of these NPCs are Ethicals; one is a loyal agent and one is a renegade. Before running the adventure, the GM needs to decide which NPCs these are. See *The Renegade and The Agent,* p. 121.

Gamemasters should read through the adventure before starting.

Those intending to play this adventure should stop reading here.

The Awakening

The adventure commences with the death of the player characters. Since each player should know the circumstances of his character's death, have each of them describe it to the rest of the group and to the GM. This is done to set the stage for the *players* — the characters will not know about each others' deaths until they are told about it.

Alternatively, the GM could use deceased characters from a previous adventure, or bring a current group of PCs into this adventure by causing their unexpected deaths!

The PCs are plunged after death into "black nothingness," lasting for an indeterminable amount of time. Suddenly, they will find themselves conscious and feeling very strong, lying on their backs on a field of grass. As they look around they realize that they are among thousands of naked, hairless humans on the green banks of a river valley.

The valley seems to be perhaps ten miles wide. The ground on either side rises slowly at first, with plains giving way to hills, then larger hills, and then *huge* sheer cliffs, dead-black in the morning dimness. These cliffs will be estimated at 20,000 feet high, though later it will be learned that this is an illusion; they are "only" half that height. Above the cliffs, many huge brilliant stars will still be visible, though dawn is coloring the sky. No IQ roll is required to realize that this is not Earth.

Closer to hand, green plains of short grass slope up from the edge of the River. Mushroom-shaped stone structures, 50 feet wide, line the River on both sides as far as the eye can see. Anyone making a successful IQ roll at this point can estimate the distance between the structures to be about a mile.

Everyone finds, tied to his wrist, a large grayish metallic cylinder, 18" in diameter and 30" long. There is a hinged lid with a handle; the handle is tied to the owner's wrist by a six-inch strap of transparent material. When opened, the cylinder reveals six small metal containers, all of which are empty.

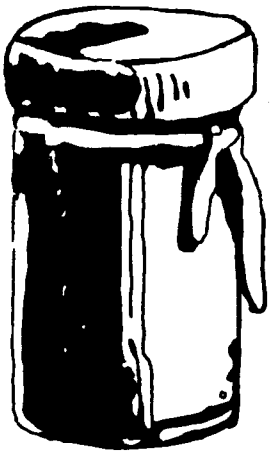
All the PCs will awaken in the same general area of about 500 square feet.

If the Players Have Read the Books

This adventure is designed to introduce the Riverworld to those who are not familiar with the novels. If some of the players *have* read the books, they will be at an advantage when it come to some of the Riverworld's initial mysteries such as the grailstones and dreamgum. However, the GM can take steps to curtail this and make the adventure more enjoyable for everyone.

Point out to readers of the books that while they may know how the grailstones work, their *characters* do not. A character from TL4 or less won't even understand the electrical nature of the discharge, much less figure out what its purpose is. Remember that character points are awarded for realistic roleplaying of the character — remind the players of this.

If there is only one player who is familiar with the novels, he can be invited to play the renegade. This way he can impart his knowledge of the Riverworld to the others while trying to avoid the attention of the agent. This will make the adventure more interesting to him as well as the other players.



The Local Resurrectees

The people who were resurrected in this area are about 60% French, from the late 19th century, and about 30% Englishmen who died between 1910 and 1920. It is from this group that Kitchener will draw much of his support.

The remainder, as always, are drawn randomly from every time and place. About a quarter of them are from the 20th century.

The GM may use the upper map on p. 25 to represent the local area.

Of course, if the GM has created another map or population mixture, the scenario will work just as well.

Language Barriers

It is possible that the PCs will be unable to verbally communicate with each other, much less with the NPCs. To get around this, the GM could insist that the players create characters that speak a common tongue, but this artificial restriction on character creation should be avoided. What is more desirable and interesting is forcing the PCs to communicate non-verbally. Gesture skills will come into play here, and PCs with the Linguistics skill should be given success rolls to try to discern meaning in other languages.

The Ethicals have resurrected most humans in groups of similiar origin, in terms of both time and place. The GM should make sure that at least one PC can communicate with the dominant population of the area. That PC can at least be a "cultural anchor" for the other PCs. Once all the player characters begin interacting with NPCs, the GM can introduce Professor Bixby (see sidebar, p. 117) to act as an interpreter for the rest of the adventure. Bixby's language skills can be modified to make him a useful translator for most of the party, though (for instance) he couldn't possibly know Neanderthal!

As they arise, it is important that the players imbue their characters with appropriate levels of shock and fear. After all, this is neither the "eternal void" or the Heaven or Hell that many were expecting after death. Many people along the Riverbank will be praying or panicking. The PCs should react to this situation according to their beliefs and experiences. Have each character make a Fright Check at -5 and roleplay the results. *However, none of these results will be permanent!* Any losses of IQ, new Phobias, etc., will be gone the next morning. But right now, there are more than 30 billion very upset people on the Riverworld . . .

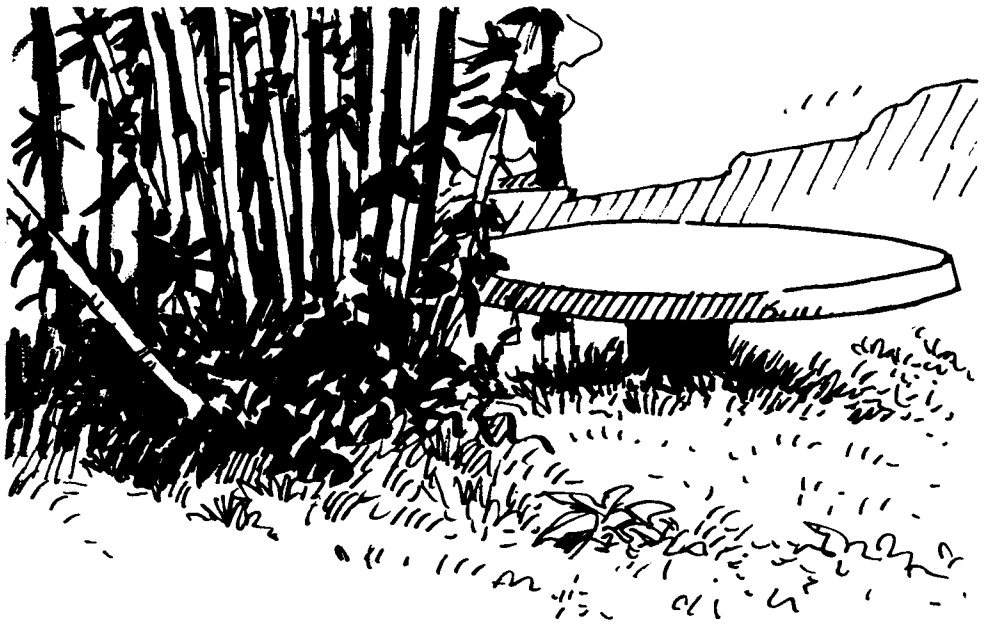
Once the PCs settle down and accept the reality of the situation, they should become acquainted with each other. Assume that the strangeness and mystery of this new life will create a fellowship between those in the immediate area. They will discover that each of them possesses the body of a 25-year-old. Any scars, blemishes or internal maladies that may have been present with the terrestrial character no longer exist. The bodies are also devoid of all head and body hair.

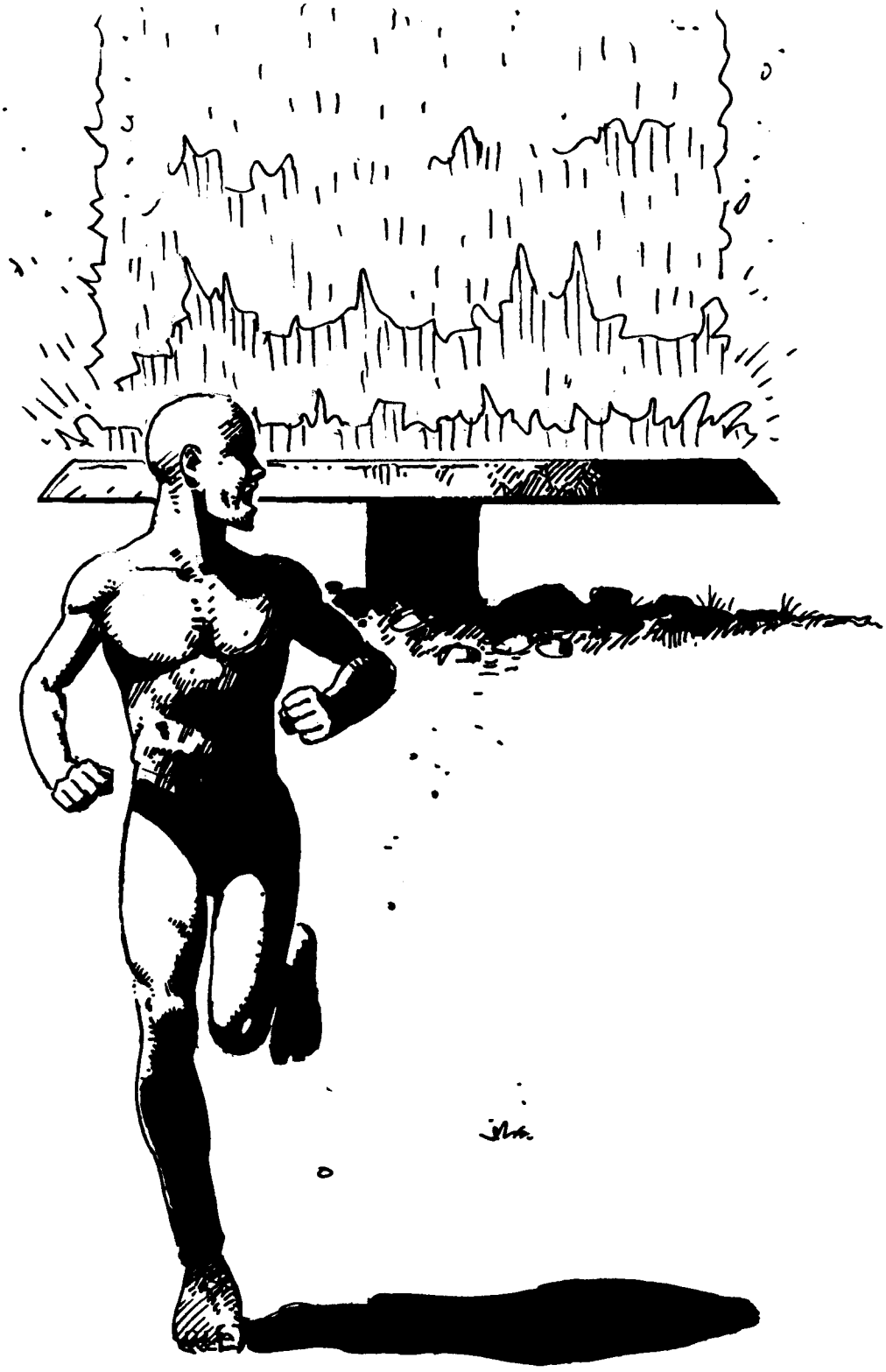
The GM may wish to introduce one of the NPCs to the characters at this point; it may even be one of the Ethicals. Whichever NPC is chosen should work to unite the PCs and inspire them to ask some questions.

The Grailstones

One of the initial objects of interest should be the grailstones, the mushroom-like objects lining the Riverbanks.

When examined closely, the mushrooms' surface is not stone, but gray metal with reddish specks. The stone is about five feet high, topped with a flat surface 50 feet in diameter. The stone surface is riddled with shallow circular depressions 18" wide. The central depression contains a cylinder similiar to the ones found strapped to the wrists of the resurrectees. Walking on the stone, hitting it, shouting at it, etc., produces no effect. Nothing on the stone is movable except the central cylinder, which can be removed; it is just like the others, but can't be opened. All the cylinders fit the depressions; it is possible that some people will leave their cylinders there.





Soon the sun rises over the mountains. An earsplitting roar suddenly echoes throughout the Valley. A bright blue flame erupts from the top of all the grailstones, shooting 20 feet into the air. The eruption is over in an instant, after which only a distant echoing rumble can be heard, followed by terrified screams. The grailstone discharge delivers 3d damage to any appendage that happens to be on or over the stone surface at the time. Anyone leaning, sitting or lying on the surface of the stone is instantly cooked. Anyone *underneath* the stone will be deafened temporarily and very hot, but unharmed.

Lord Horatio Kitchener

Historical; born 1850, died 1916 (TL5)
Nationality: English
ST 13, DX 12, IQ 14, HT 13
Basic Speed 5; Move 5
Dodge 6; Parry 8
Appearance: 5'9", commanding.
Advantages: Charisma +2; Combat Reflexes (+1 to active defenses); Literacy; Strong Will +1.
Disadvantages: Duty (to both Queen Victoria and King Edward, once he realizes that they are both alive somewhere in the Valley).
Skills: Administration-15; Diplomacy-15; Economics-13; Fencing-14; Guns-16; Leadership-19; Riding-12; Strategy-18; Tactics-17.
Languages: English-14; French-9.

Since he entered the Royal Military Academy at Woolwich at the age of 18, Kitchener has known nothing but a military way of life. Commander of the Egyptian army, commander-in-chief in South Africa and India, and finally Secretary of State for War during WWI, Kitchener has always been a supreme military commander and a ruthless strategist.

Kitchener's last earthly memory is being aboard the H.M.S. *Hampshire* on his way to Russia. The ship must have hit a German mine, for he remembers the explosion and the sinking, with no foe in sight. Instead of the pearly gates promised by the Church of England, he found this mysterious valley. He views the Riverworld primarily as a purgatory, a testing ground to weed out the weaklings.

Kitchener is an imperialist in every sense, the quintessential product of the Victorian era. He sees the British Empire as the crown of civilization, and all non-Anglos, especially those of darker complexions, are best served by serving the Queen. He will recruit primarily Englishmen, though almost anyone adhering to his ideals will be welcome. Once he realizes that all humanity is present here, he will perceive the Riverworld as an opportunity for imperial conquest, and will want to bring the entire history of civilization into the folds of the Empire. Only thus can humanity expiate its sins and ascend to Heaven.

Kitchener will not be explicit about his ambitions; he will rationalize the need for military force by painting neighboring Valleydwellers as a threat. Once he gains control of a sizeable area, he will stop at nothing to retain that control, much as he did in the Boer War, when he divided the countryside into blockhouses and prison camps to prevent guerrilla uprisings. PCs allying themselves with Kitchener will find political and military opportunity, so long as they accept his position as commander and his imperialist ambitions.

Francisco de Orellana

Historical; born ca. 1490, died 1546 (TL4)

Nationality: Spanish.

ST 13, DX 12, IQ 11, HT 12

Basic Speed 6; Move 6

Dodge 6; Parry 8

Appearance: 5'9", with wide-eyed, hawkish features.

Advantage: Combat Reflexes.

Disadvantages: Impulsiveness; Obsession (to sail up "God's River").

Language: Spanish-12.

Skills: Boating-11; Fencing-14; Leadership-13; Shipbuilding/TL4-9; Strategy-13; Survival (Jungle)-13; Tactics-13.

Like Kitchener, Francisco de Orellana (pronounced o-ra-LYAN-a) has been a military man all his life. Born in Spain, he reached the New World as a young soldier and fought the Inca during Pizarro's conquest of Peru. He joined Pizarro's expedition to the fabled Cimmamon Forests east of the Andes as second-in-command. After reaching an Amazon tributary, food ran low, and Francisco took a handful of men downriver to find sustenance. Apparently intending to desert Pizarro (though historians still argue about it), Francisco decided to follow the Amazon to its mouth, and he reached the Atlantic in September of 1542.

After returning to Spain, de Orellana was granted the right to explore and govern the land south of the Amazon. On the voyage back to the New World, sickness and fatigue overcame him, and his dream of learning the secrets of the Amazon were never realized.

De Orellana's view of the Resurrection is very egocentric. Since he died before he could explore the great Amazon, the Riverworld must be a river to God that he himself is to journey upon. This belief is reinforced by the fact that the eye he lost during a battle with the Inca has been restored to him.

After talking to people of the 19th and 20th centuries, de Orellana is convinced that he can construct a massive riverboat and set sail up-River "to the gates of Heaven." He will do everything in his power to obtain materials and men for such a voyage. He wants several grailstones at his disposal but would rather share than conquer them. He sees Kitchener as a possible asset to his expedition, but knows that he will not come of his own accord. The inevitable battle with Kitchener is important to de Orellana as a chance to prove his worth as a leader.

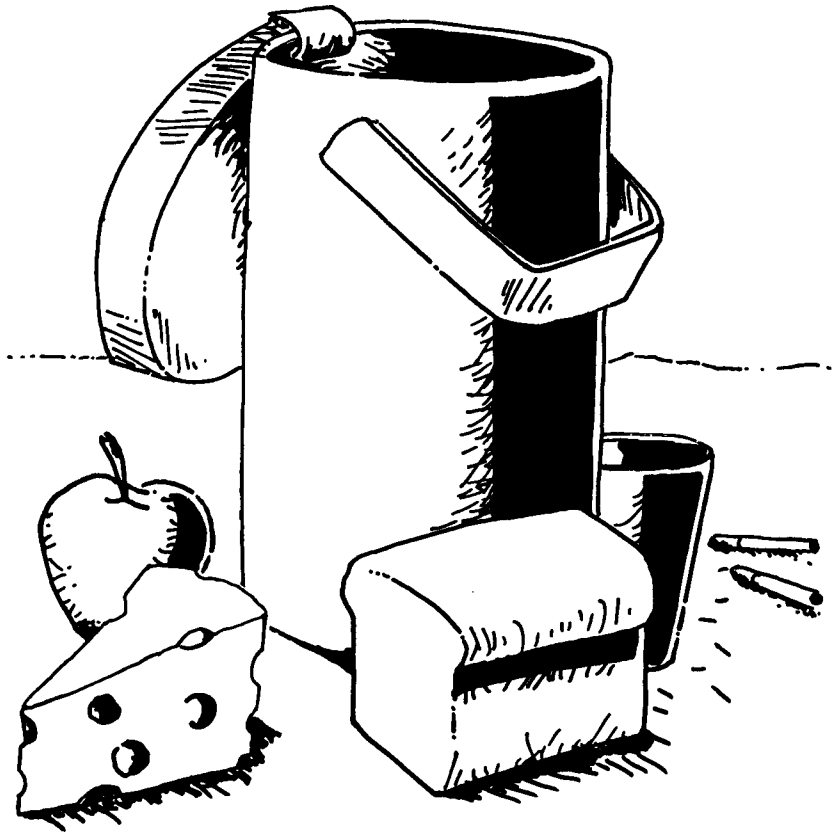
PCs who wish to journey up the River will do well to ally with de Orellana. His self-oriented view of the Riverworld will at least be a driving force that can guide the PCs in a productive direction.

A Grisly Death

The GM should time the discharge when no PCs are on the stone; if it is necessary to improvise an encounter to lure them away, do so. One person on the stone was not so lucky. The charred remains of a human body lie across the top of the grailstone. He happened to be standing on it when the blue flames leaped up; he was killed instantly.

The corpse is quite grisly and PCs will must make a Fright Check (see pp. B93-94). This is required not only by the gory scene but also by the realization that life after death is not life everlasting.

There is also the problem of disposing of the body. Suggestions of a "proper burial" are met with questions of digging tools; should anyone try to dig with their hands or their metal cylinders, they will find the turf to be incredibly tough and densely matted with roots. It should become clear that the River is the best recourse (if the PCs don't think of this, someone else will). Once the corpse is disposed of, anyone watching it make its way downriver will suddenly see it devoured by a huge, finned silvery shape. The creature disappears back into the River too quickly to make out any details. (If no PC sees this, others on the riverbank will, setting off a small hubbub.)



The Grail's Bounty

It will be found that the cylinder (hereafter called *grail*) that was on the stone is undamaged. So are any others placed there. Opening any of these reveals that the six containers are filled with food, tobacco, liquor, and grooming aids (see the sidebars on pp. 13-15). Note that the grail found strapped to any particular person can only be opened *by that person,* while the grail that was found on the stone can now be opened by anyone.

This will set off a further hubbub. With hundreds of people in the area, and (probably) only one or a few grails filled, there won't be enough food and luxuries to go around. Anyone who set his personal grail on the stone will have to be careful with the contents, or deliberately generous.

Exploring

At this point the PCs may wish to gather some friends and do a little exploring. Anyone wishing to cross the River will need to make Swimming rolls (remember, the River is a mile wide and fatigue rolls are required every 100 yards). Cautious individuals will probably avoid the River in the beginning. Careful observation will show that it teems with fish life (later it will be clear that it holds nothing *but* fish). Minnows and six-inch fish can be seen in the shallows; an occasional splash shows that there are larger fish, too. And *something* ate that body. Nothing in the River will eat a healthy swimmer (except the occasional out-of-sorts riverdragon), but they don't know that.

The area of most interest to the PCs should be the wooded foothills and the rocky cliffs behind them. A number of skill rolls are required as the group studies the land and its features. A successful Botany roll while studying the plant life will identify oaks and yews at the lower elevations, while tall red pines dominate the area near the cliffs. A massive tree, unknown on Earth, with broad leaves and flowery vines, is also common in the highlands. This is an *irontree* (p. 12), so called because its wood is highly resistant to any form of damage, including fire. There are also many clusters of bamboo; some grow 100 feet tall, while another variety has massive stalks three feet wide.

It will take more than two hours of hiking to reach the cliff face, though it is less than five miles as the crow flies. The plains and gentle hills give way to progressively wilder and rougher terrain. When the cliff face is reached, anyone making a Geology roll will notice a lack of sedimentary and metamorphic rocks. Most of the stone appears to be basalt; a few nodules of flint and chert are present. Everyone will notice a complete lack of animal life . . . even small insects are absent. Furthermore, on an IQ roll, anyone looking at the grass will notice that there is only one kind of ground cover, though it is taller here. There are no weeds. The grass, however, is tall and very strong; in fact, it will be hard for anyone to break or tear it bare-handed.

The PCs may wish to fashion crude tools or weapons from the limited resources at hand. Piles of small rocks line the bottom of the cliff face; these can be used to whittle bamboo shafts into arrows and javelins. Spearheads can be made by using a large stone on a smaller one, which in turn can be fastened to a shaft using the irontree vines. However, neither vines nor grass can be conveniently cut until a flint cutting edge can be produced.

Manufacture of any such primitive weapons requires an Armoury/TL0 or Survival roll; each attempt takes an hour, and a successful roll produces one tool

Professor Martin Bixby

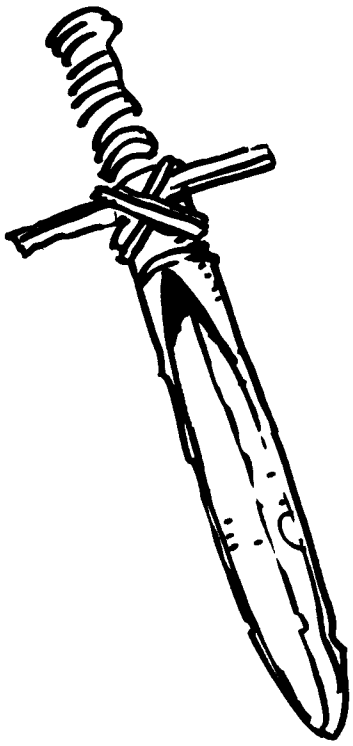
Fictional; born 1927, died 1983 (TL7).
Nationality: American.
ST 9, DX 9, IQ 15, HT 12
Basic Speed 5.25; Move 5
Dodge 5
Appearance: 5'5'', round-faced, owlish.
Advantages: Eidetic Memory (first level); Literacy.
Disadvantage: Honesty.
Quirks: Dozes off occasionally; Falls into "classroom lecture" mode of speech.
Skills: History-12; Linguistics-16; Research-15; Teaching-12; Writing-12.
Languages: English-16; Esperanto-14; French-14; German-14; Greek (Ancient)-13; Greek (Modern)-12; Italian-12; Latin-13; Russian-12; Spanish-14.

A full professor of Linguistics and Languages at Princeton University, Martin Bixby Ph.D. was a renowned scholar of Romance languages and an earnest student of the Indo-European linguistic tradition. He died of a cerebral hemorrhage while at the peak of his career. He hopes the Riverworld will provide a test for his skills.

Bixby is a sincere, scholarly man. He will have no supernatural beliefs about his resurrection and will side with those looking for a scientific explanation. He will also be an invaluable interpreter of the many languages spoken in the Rivervalley.

or weapon. Many PCs will be attempting these rolls at default, and the artifacts they produce may be rather amusing.

As they travel, they will come across scenes similar to those they left . . . grailstones, groups of confused people, etc. Many will have also made weapons and may accuse the PCs of being invaders. The grailstones will erupt again at noon and again just before sunset; each eruption will leave ample supplies in any grail that was on a stone at the time.



Kur

Fictional; born 2637 B.C., died 2605 B.C. (TL1).

Nationality: Sumerian.

ST 12, DX 11, IQ 9, HT 12

Basic Speed 5.75; Move 5

Dodge 5; Parry 5

Advantage: Literacy (in Sumerian cuneiform).

Appearance: 5'6", slender, swarthy, with high forehead and deep-set eyes.

Skills: Architecture/TL1-10; Artist-12; Bow-11; Merchant-13; Pottery-12; Sword-11.

Language: Sumerian-11.

Kur lived in ancient Sumeria, a Mesopotamian civilization that was eventually absorbed into Babylonia. He was a painter and a potter, and sold his works in his native city-state of Erech.

Kur will be a valuable friend for those attempting to rebuild civilization. He has a working knowledge of pottery, brickmaking, and TL4 architecture techniques. His language is ancient, but scholars of Ancient Greek will be able to understand it at -3 to skill. Kur will accept the Riverworld at face value, and will not be especially curious about its nature.

Madness on the Banks

After the last grailstone discharge of the day, just before sunset, each person discovers an unwrapped piece of chewing gum in his grail. Chewing gum is an American invention, developed in the mid-1800s (although Indian tribes chewed *chicle* or spruce resin centuries before the Europeans arrived). Consequently, pre-20th-century folk won't know what this is unless someone tells them. However, there are likely to be a few 20th-century people scattered in every group, and the coffee smell will encourage people to experiment. The grail gum is *dreamgum* (see p. 36). When chewed, dreamgum causes heightened perception and euphoria, followed by hallucinations and a loss of inhibitions.

PCs chewing the dreamgum will experience the above effects, and will eventually be under the GM's control. Each person will behave in a *very* uncivilized manner as all of his subconscious "demons" are unleashed. Everyone in the Valley who chewed the gum (which will be a majority) will experience the same effects, and a mass orgy of violence, assault and murder will ensue. The effects of the drug will last several hours, after which the participants will collapse from exhaustion or injury.

Only those who actually chewed the gum will be affected. However, those who did not participate must make Fright Checks at the sight of their companions' madness! And if the party is in a populated area, they may have to fight off the attacks (or affections) of other gum-chewers.

The following morning, the memory of the madness will seem like a horrible nightmare until the physical evidence is clear. This will cause hysteria in many (make a Fright Check at +2 for anyone who participated), since a lot of people won't realize that it was the gum that caused the experience. PCs should make IQ rolls to connect the gum to the madness (even if they realize it was something in the grails, it might have been the food, the drink, or the smoking materials). The lingering effect of the dreamgum on the PCs is left to the GM — phobias and other psychological disadvantages may be more pronounced because of it. For more on dreamgum and its effects, see the sidebars on pp. 36-37.

Further Exploration

Over the next few days, as the highlands are explored, several interesting discoveries will be made. First, there are other grailstones — not as common as those on the Riverbank, and not regularly spaced, but still plentiful. They do not have the demonstration grails, or "freebies."

Second, there are many streams which flow downward to the River. They have their source in ice-cold cataracts falling down from the cliffs.

Third, there are *no* mineral resources apparent except the flint nodules and (perhaps) larger deposits of flint in a few places; see p. 19. For the time being, tools and weapons will be of stone and bamboo.

The PCs will probably want to explore a wide area of land, perhaps even making a major land journey up or down the length of the Valley. (Little do they realize that "the length of the Valley" means!) The GM should bring in NPCs to interact with them along the way.

Newcomers

After a few days, the party will encounter their first "translated" Valleydweller. As the group waits for their morning meal by the grailstone, they see a shimmering in the air . . . and a nude human body, complete with grail, appears lying on the grass.

The newcomer wakes and looks about, amazed. Then (through a translator, if necessary), he tells his story. He was originally resurrected in an area populated mainly by a short, swarthy race (Karankawa Indians, though it is unlikely that either he or his listeners will know this). The Karankawas' first act upon resurrection was to beat all the non-Karankawas senseless. Over the next few days, they killed them a few at a time, cooking them on the grailstones to supplement the grail meals. The newcomer will describe the Karankawa's behavior in as much detail as his hearers can stomach. He is tremendously relieved to be alive again; he had seriously come to suspect that he was in Hell.

Over the next few days, it becomes apparent that these re-resurrections, or "translations," are common. Evidently, though one can die on this strange new world, one does not have to *stay* dead! However, there is no word of anyone dying and then reappearing in the same place. Apparently, when you are "translated," you may appear far away.

The particular identity of the first newcomer is not important. The GM may use this as an opportunity to introduce any NPC that he wants to attach to the party. By now, the Riverdwellers have realized that the Valley contains people from every time and place they can imagine!

Clothes

Twenty days after the original Resurrection, the grails skip a meal, providing "kilt-cloths" instead (see p. 15). Most of the Valleydwellers are quite happy to use these as clothing; between this, and the fact that their hair is growing back, morale in the Valley improves.

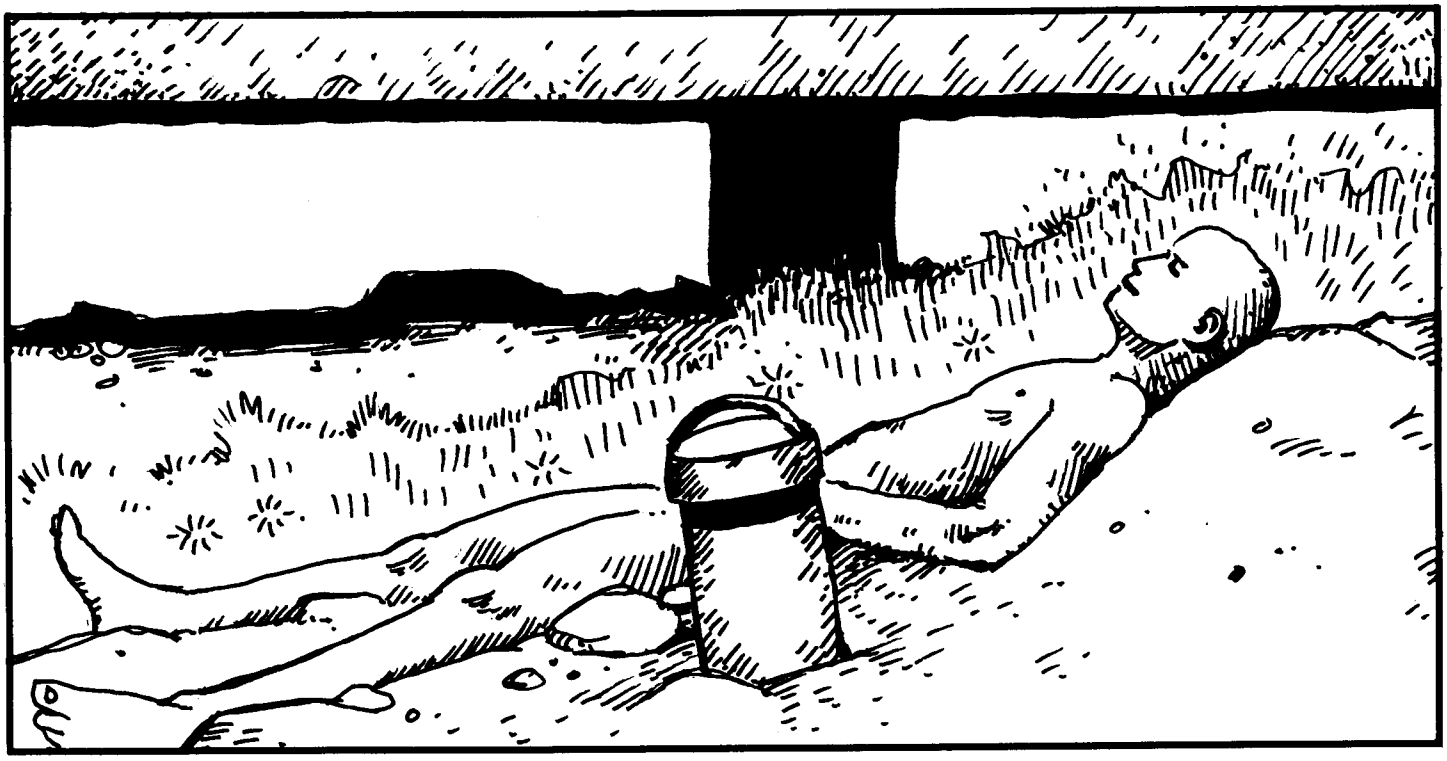
If the conflict described on the following pages has not already started, the appearance of the clothing will set it off; clothed humans are far more aggressive than naked ones.

Manuelo Toccini

Fictional; born 1601, died 1660 (TL4)
Nationality: Florentine (Italian).
ST 9, DX 12, IQ 12, HT 13
Basic Speed 6.25; Move 6
Dodge 6; Parry 8
Appearance: 5'7", slender, with dark, chiseled features.
Advantages: Charisma +2; Handsome; Intuition.
Disadvantages: Lecherousness.
Quirks: Loves good food and wine; hates getting up before noon.
Skills: Astronomy-11; Architecture-16; Artist-14; Dancing-12; Fencing-12; Literature-11; Poetry-11; Savior-Faire-13; Sex Appeal-13.
Languages: Latin-10; French-10; Italian-14.

Toccini is a product of the late Renaissance, a talented painter, writer, architect and courtier. A dedicated student of Brunelleschi and other great architects of the time, he never achieved prominence because of his notorious weakness for the opposite sex. A scandal among the Florentine nobility, his reputation overshadowed his genius.

Toccini has great scientific curiosity and an artistic appreciation of beauty. He will be fascinated by the Riverworld and will want to learn its secrets. However, his primary interest will be women, and the fair sex will find him easy to manipulate.



Ling Su

Fictional; born 644, died 681 (TL3).
Nationality: Tibetan.
ST 8, DX 9, IQ 11, HT 12
Basic Speed 5.25; Move 5
Dodge 5
Appearance: 5'7", 150 lbs., stone-faced, with piercing eyes.
Advantages: Charisma +4; High Pain Threshold; Strong Will +3.
Disadvantages: Honesty; Pacifism (Total non-violence).
Skills: Diplomacy-11; Theology (Mahayana Buddhism)-15.
Language: Tibetan-12.

Ling Su is a Buddhist monk. He lived during a period when Buddhism was being introduced into Tibet to form Lamaism, or Mahayana. Ling will spend most of his time in meditation or yoga. He will see yhe Riverworld as he saw Earth . . . a temporal illusion to be transcended.

Ling is a strict pacifist and will harm no one, even in self-defense. He will protest any battle through peaceful demonstration and self-sacrifice (even to the point of death). He will inevitably attract followers; even those who do not speak his language will be drawn to him.

The Soldier and the Explorer

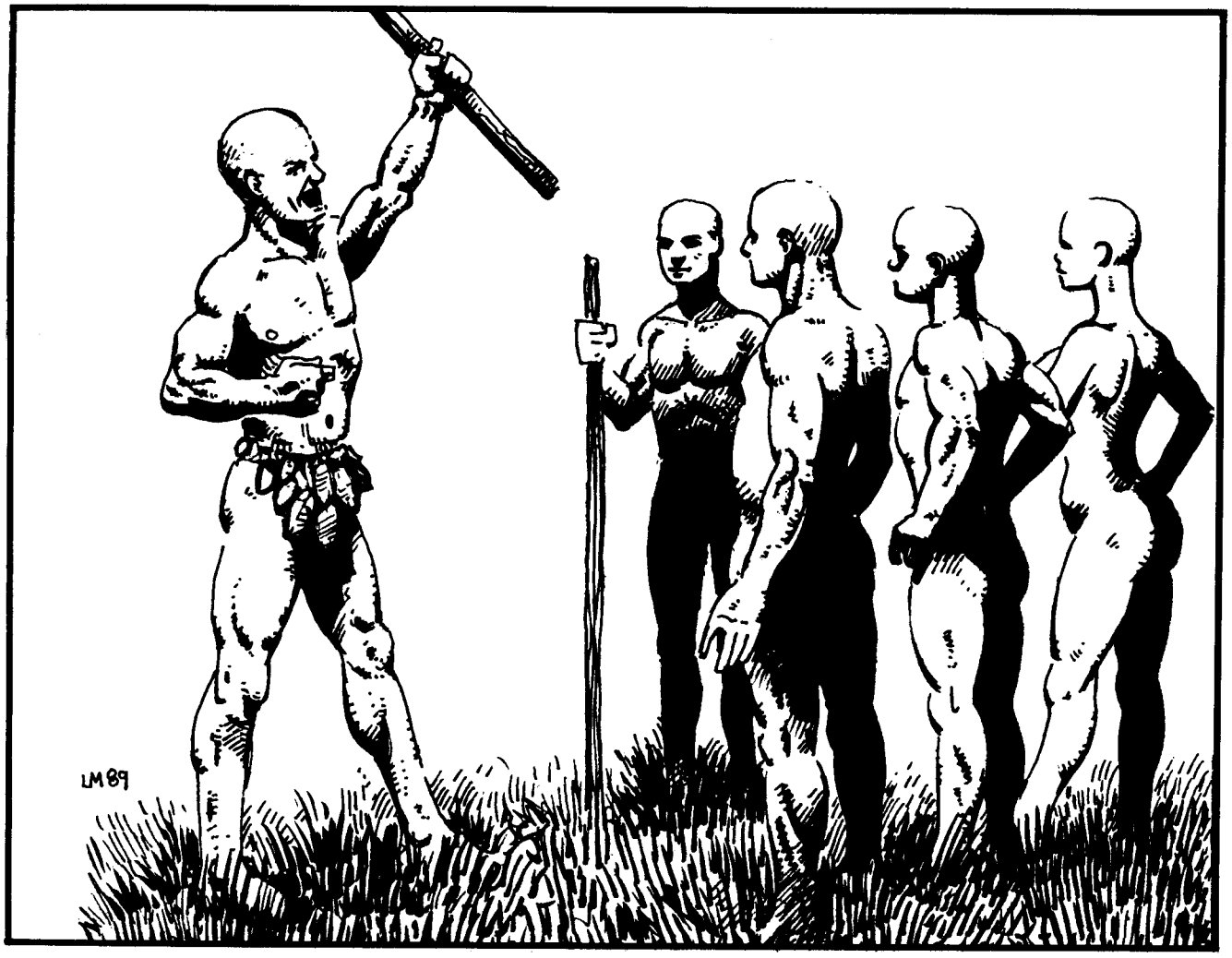
Eventually, the PCs should decide to settle down among a group of the Valleydwellers and start thinking about constructing shelters, boats, and the like. The GM can coax them into doing this by bringing in the two central figures in this adventure.

The local population has splintered into two distinct groups. Each group seems to identify with a particularly charismatic leader. The PCs can learn of the leaders by mingling among the Valleydwellers in the area.

One group is dominated by Lord Kitchener (see sidebar, p. 115). He insists that if indeed all of humanity has been resurrected here, then it will become a very hostile environment very soon. He is for creating a military union from which to build a defensive position. Already grail provisions have been stolen by greedy people . . . we must protect ourselves and our grailstones! Kitchener's real ambitions are made clear in his character description (sidebar, p. 116).

The other group is drawn to Francisco de Orellana, the Spanish conquistador who explored the Amazon river valley (see sidebar, p. 116). De Orellana claims that the answer to this mystery lies at the source of the River, and he is trying to mount an expedition there. He fears Kitchener's plans, and does not want to see resources here used solely for military purposes. Instead, he wishes to woo the talented Kitchener to his views.

The gamemaster may present both leaders to the PCs in any manner he chooses. Perhaps followers of each one are trying to persuade everyone to see things "their" way. If the PCs have travelled here from some other place, Kitchener and de Orellana may wish to greet them personally. The PCs should



be faced with a choice of allying with either personality, or perhaps starting a faction of their own.

Once they have hooked up with either Kitchener or de Orellana (perhaps even splitting up the group), they should interact with other members of the alliance and learn of their leader's plans. The GM should decide what other NPCs are in each group, based on the information provided in the sidebars. Here is what the PCs will learn about Kitchener and de Orellana, though the "slant" of the information will depend on which group they ask:

Kitchener's Group

Lord Kitchener fought for Her Majesty Queen Victoria in the late 1800s, in campaigns throughout Asia and Africa, and became Secretary of State for War during the Great War. He presumably died in 1916 when his ship was sunk by a mine, but then he found himself awakening on the banks of this mysterious river. His experience with others here leads him to conclude that the entire human race is present in the Valley, and it is only a matter of time before the Napoleons of humanity begin their march upon it. Therefore, defense should be the first priority. Kitchener wishes to secure at least two grailstones on this side of the River before considering a River-crossing to take stones on the opposite bank. He has already put some followers to work making spears, and he is attempting to create a bow out of tightly wound grass. He considers de Orellana a fool to even think about building a ship and expecting to survive the jealous attacks of others along the way. He would rather recruit him as an experienced soldier, but de Orellana is adamant.

De Orellana's Group

Francisco de Orellana left Pizarro's South American expedition to follow the course of one of the world's great rivers, the Amazon. He wishes to do the same here, and needs hardy souls to help him construct a vessel and seek the source of the River. He has no quarrel with Kitchener, and would rather see him join the expedition, but fears that he will waste resources here to mount his army. De Orellana will not leave until he has dealt with Kitchener, fearing that he will lose the respect of his followers if he does otherwise.

The Renegade and the Agent

Two of the NPCs (not Kitchener or de Orellana) are Ethicals assuming the guise of terrestrials. The GM should study all of the NPCs provided and choose which two will be the imposters. One will be a "renegade," attempting to influence the humans toward discovering the existence of the Ethicals (to whatever end is up to the GM). The other is a loyal agent keeping an eye out for renegade activity. The GM may have one of the PCs be an Ethical, as per the guidelines on p. 109, but this is not recommended for players unfamiliar with the *Riverworld* series and background.

The renegade will be most interested in de Orellana and his attempt to stop Kitchener. He will ultimately assist in the construction of the riverboat, but will first do what he can to keep Kitchener from taking over the area. He will help arm de Orellana and his comrades with weapons, and will be the first to plan tactics against Kitchener's attacks.

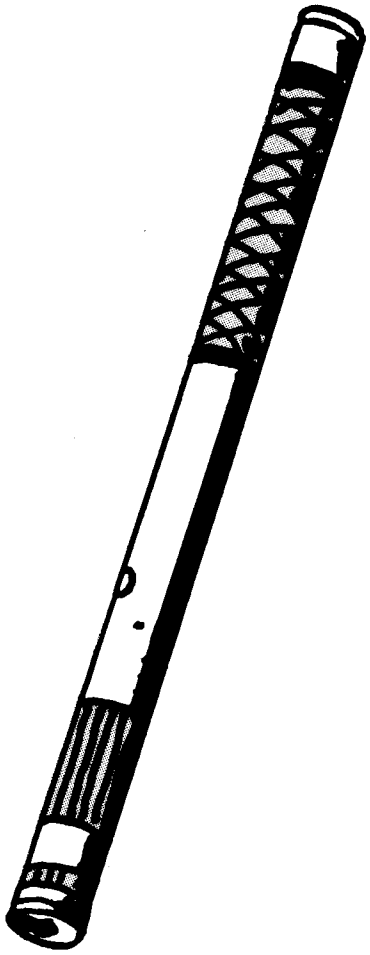
The renegade will also spread information about the Ethicals and the Dark Tower. The GM must take care to do this subtly, so as not to give away his identity. One way to do this is to have him appear to one of the PCs in the middle of the night. During such a visitation he can speak enigmatically of a "tower of stone at the end of the River", or "deities at the north pole." In other words, give the PCs something to think about, but don't give the whole show away.

Olk

Fictional; born 80,221 B.C., died 80,194 B.C. (TL0).
Nationality: NA.
ST 15, DX 11, IQ 8, HT 14
Basic Speed 6.25; Move 6
Dodge 6
Appearance: 5'2", 170 lbs; squat, buck-toothed.
Advantages: Charisma +2; See Ethical Markings (see p. 37).
Disadvantages: Cowardice; Pacifism (Self-defense only); Unattractive by *Homo sapiens* standards.
Skills: Armoury/TL0-12; Axe/Mace-10; Cooking-10; Gesture-11; Spear-11; Survival (Plains)-12.
Language: Neanderthal (her tribe)-7.

Olk is what this Neanderthal woman calls herself. It seems to mean "big teeth," for that's what she has. She speaks a rudimentary (and, of course, undocumented) language, unrelated to any modern tongue (gesture communication will be needed). She is warm and friendly; she wants to like others and to be liked, and others tend to accept her almost immediately despite her appearance.

She is more frightened of beasts then of men (she will be terrified of dragonfish). She will only fight to defend herself, and this she does adequately with primitive weapons. Her greatest skill is in the making of such weapons, and this makes her a valuable ally.



Jeffrey Martin Carter

Fictional; born 1961, died 1983 (TL7).
Nationality: American.
ST 9, DX 8, IQ 15, HT 13
Basic Speed 5.25; Move 5
Dodge 5
Appearance: 6'1", slender, dark.
Advantages: Charisma +1; Handsome.
Disadvantages: Pacifism (Self-defense only); Stuttering.
Quirks: Loves coffee; miscellaneous nervous habits; no patience with stupidity.
Skills: Acting-16; Astronomy/TL7-13; Computer Operation/TL7-17; History-12; Hobby (Gaming)-18; Hobby (SF/Fantasy)-16; Writing-16.
Language: English-16.

Jeff Carter was an on-again-off-again college student who was fascinated by reading and games. He died at the age of 22, in a traffic accident. Jeff is greatly intrigued by the Riverworld, and will want to learn all its secrets. He abhors war, and will resolutely stay out of the Kitchener/de Orellana conflict. Though he suffers from an annoying stutter, his pleasant demeanor and wry sense of humor make him good company.

The agent will keep a vigilant eye out for the renegade. He will question the PCs about any "mysterious incidents" or unusual conversations they may have had with others. Anyone appearing to let on more than they should know will the draw the agent's attention. He will try to stay out of the Kitchener/de Orellana squabble, preferring to watch from the sidelines for any malfeasance.

Drawing the Lines

The following scenes occur the evening before Kitchener launches his attack:

Kitchener and his group, some 550 strong, have established their base of operations at a grailstone (the "north stone.") Anyone else approaching this stone to replenish their grails will be dealt with harshly. De Orellana's group of about 350, plus an equal number of neutrals, uses a stone a mile south of Kitchener's. De Orellana feels that the stones are for everyone's use and resents Kitchener's monopolization.

Over a period of about a week, the area becomes tenser. Many people simply move away, but they are replaced by others drawn to the rumor of excitement. Word spreads that Kitchener will try to take the southern stone tomorrow. The Spaniard's plan is to defend it to the point where too many people are dying (in his judgement), then evacuate as many as possible aboard rafts. His group (including any PCs allied with him) spend the evening building makeshift rafts from bamboo shafts.

One of de Orellana's loyalists will implore the conquistador to leave tonight before any blood is spilled. De Orellana will refuse, stating that "to give in now is to give in to all the warring kings of history." Nonetheless, he is willing to send an emissary of peace to Kitchener, and will ask for a volunteer (perhaps one of the PCs?). The emissary is to appeal to Kitchener's sense of adventure, and offer a post as chief of military matters on de Orellana's expedition.

Kitchener will receive the emissary without quarrel, and will listen intently but give no ground. He considers the expedition to be a ludicrous idea, and would sooner "be chief of military matters aboard a sinking canoe." He urges the emissary to join him or prepare for war.

At this point, most of the remaining neutrals leave in search of more peaceful ground. Everyone remaining, with a few significant exceptions, has taken sides, and is busy making weapons, building rafts, or planning tactics.

After the evening's grailstone discharge, the renegade (who is allied with de Orellana) will bring forth a device which he says he got from his grail; he is, of course, lying. It is an Ethical stun wand (p. 92), designed to self-destruct (p. 98) after 500 shots. If nobody else experiments with it, the renegade will pretend to tinker with the device. Either way, someone will eventually be knocked out, and after some initial terror and a few wasted charges, the stun wand will be understood well enough to be useful. The renegade, wishing to protect his cover, will not insist on keeping the device himself, as long as it is handled by someone loyal to the Spaniard.

The War Protestor

Ling Su, the Buddhist monk, will protest the upcoming battle by proclaiming that he and his followers will seat themselves between the two grailstones at dusk and remain there until Kitchener and de Orellana reach some kind of armistice. Kitchener will be undaunted by this action, while de Orellana, having no concept of peaceful demonstration, will implore Ling to join his group.

The Battle of the Stones

Kitchener will try to seize the south grailstone at dawn. He is commanding about 550 troops, while de Orellana will try to defend the stone with about 350 men. To resolve the battle, the GM may wish to use the mass combat rules presented in Appendix 1; if so, the stun wand will be worth a +3 bonus to de Orellana's effective Strategy skill. However, the result should still be that Kitchener will decisively win the battle unless the PCs take some sort of drastic action to prevent it. He has superior forces and superior skill.

The PCs have several options here. They can declare neutrality and stay out of the battle completely, perhaps even joining (and dying with) the Buddhists. They may take the opportunistic approach and side with Kitchener when it becomes obvious that he will emerge victorious; he is, after all, a much more skilled leader and administrator. Maybe in time he will become more tolerant.

Or they may try to help de Orellana's cause, using any Tactics, Leadership or Combat skills available to them. Should de Orellana pass battle leadership to a skilled strategist, he could win. Otherwise, he is in trouble. The Spaniard is noble-hearted but naive and egotistical. If he had better judgment, he would not have gotten into a position where honor required him to fight!

Aftermath

What happens next depends on the battle's outcome. Kitchener's defeat (at the hand of the PCs, no doubt) will draw more people to de Orellana's side, and enhance the proposed expedition (after all, what's really at stake for de Orellana is his worth as a soldier and a leader). However, if Kitchener is either victorious or only marginally defeated, he will stick around to hamper de Orellana's plans. De Orellana will then leave with a much smaller group of followers to find others who will share his dream.

The fate of the renegade is open to question. Perhaps PCs grew suspicious and made their thoughts known to the agent, in which case the renegade will be dealt with by the Ethical Council. If the PCs have befriended him, the renegade will prove to be a most valuable ally in adventures to come.

If the adventure is the beginning of a major campaign, a number of storylines can be pursued following the battle. PCs allied to the victorious party could begin setting up a nation to begin the acceleration of technological development. Those sharing de Orellana's interest in a River expedition can begin to build a boat and screen recruits for the voyage. If the renegade has tickled the PCs' curiosity about the Ethicals and the Dark Tower, de Orellana's expedition could be just the ticket for a major quest to reach the Polar Sea. In any event, the River holds enough mystery and adventure along its banks to keep the players intrigued for a long time.

Leonard Jorenson

Fictional; born 1921, died 1978 (TL7).
Nationality: American.
ST 8, DX 11, IQ 15, HT 12
Basic Speed 5.75; Move 5
Dodge 5
Appearance: 6'3", very curly hair (when it grows back), droopy eyes.
Advantages: Mathematical Ability.
Disadvantages: Stubbornness.
Quirks: Absent-minded at times; sensitive about possible anti-Semitism.
Skills: Engineer/TL7(Rocketry)-18; Mathematics-16; Physics/TL7-20; Research-14; Teaching-12.
Languages: English-15, Yiddish-9.

Jorenson was a superb research physicist at University of California-Berkeley. He was enlisted by the Defense Department in WWII to help develop rockets. After the war he went back to research and teaching. He helped shape the U.S. space program as a consultant to NASA.

Jorenson's scientific skills will be in demand by both sides, but he will be very reluctant to become involved in the battle. He is sure that the Riverworld is a planet close to Earth and that it was reached by human space travelers. The Resurrection was done by humans from the future for some unknown purpose.

Mabel Thomas

Fictional; born 1801, died 1866 (TL5).
Nationality: American.
ST 7, DX 9, IQ 9, HT 12
Basic Speed 5.25; Move 5
Dodge 5
Appearance: 5'7", very dark.
Advantages: Strong Will +2, Very Beautiful.
Disadvantage: Fanaticism (the abolishment of slavery).
Quirks: Distrusts whites; distrusts men; combines Christian and shamanistic beliefs.
Languages: English-10; Swahili-6.
Skills: Clothesmaking-14; Cooking-14; Detect Lies-9; Fast-Talk-14; Tracking-10.

Born a slave on a southern plantation, Mabel worked with dissident Southerners and with the Underground Railroad to free her fellow slaves. While she had many chances to escape, she stayed behind and help others. Finally, still active and rebellious at 65, she was caught and hanged.

Mabel has an understandable distrust of whites. Generally, she will be friendlier with women than men. Kitchener turns her stomach; she will do anything she can to stop his coming to power. She will have no strong opinion of the Riverworld, other than knowing it must be part of God's plan for man's salvation.

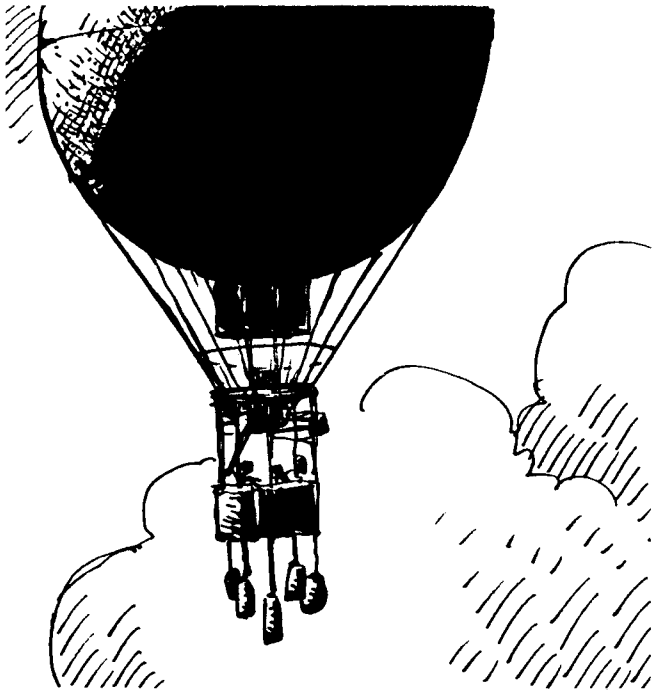
BIBLIOGRAPHY

This list of books includes not only those consulted by the author for the preparation of ***GURPS Riverworld,*** but also several that would aid the GM in researching his own campaign.

The *Riverworld* Series

In this book, references to the *Riverworld* stories will be given in a shorthand form, indicating the volume and page number. For instance, 0-22 refers to page 22 of "Riverworld;" II-200 refers to page 200 of *The Fabulous Riverboat,* and so on. All references are to the Berkley paperback editions.

0 — "Riverworld." This novelette appears in Farmer's collection, *Riverworld and Other Stories,* and was written in 1966, during the time Farmer wrote the latter half of the first Riverworld novel. It features Tom Mix allied with a nation of 17th-century Englishmen in their war against an inquisitor. There are many good adventure ideas here.



1 — *To Your Scattered Bodies Go* (1971). The first novel of the series introduces Sir Richard Francis Burton, Alice Hargreaves, Monat Grrautut, Herrman Göring, and the Riverworld itself. Burton meets the Mysterious Stranger and starts on the Suicide Express.

2 — *The Fabulous Riverboat* (1971). The scene shifts to another part of the River, where we meet Sam Clemens, Joe Miller, and John Lackland. Sam is visited by the Mysterious Stranger. The state of Parolandro is created and the fabulous Riverboat built. But when it steams up-River, Sam is left behind.

3 — *The Dark Design* (1977). Sam Clemens, in the second Riverboat, steams up-River in pursuit of King John. Richard Burton and his companions are now aboard John's boat. Tom Mix reappears; he, too, has been visited by the Mysterious Stranger. Meanwhile, the engineers back in Parolandro have begun an airship with which they hope to reach the Dark Tower itself, and it becomes clear that something has gone very wrong with the great plan of those who built the Riverworld!

4 — *The Magic Labyrinth* (1980). Plot and counter-plot continue . . . between Sam Clemens and King John, and between the renegade Ethical and the agents of the Operator. The great machinery of the Riverworld is beginning to break down. After a climactic battle between the two great riverboats, many of the survivors join forces and make their way to the head of the River, to the mysterious Dark Tower itself.

5 — *Gods of Riverworld* (1983). The survivors of the expedition, finally within the Tower, begin to learn its secrets. But someone, or something, is working to kill them and to pervert the great computer itself, threatening everyone on the Riverworld with final extinction.

River of Eternity (Huntington Woods: Phantasia Press, 1983). This is an expanded revision of *Owe For The Flesh,* the original Riverworld story written in 1952. It has not been referenced in this volume, but is of interest nevertheless!

Critical Comment

Brizzi, Mary T., *Philip José Farmer* (Mercer Island: Starmont House, 1980). A good general biography and overview of his fiction.

Chapman, Edgar L., *The Magic Labyrinth of Philip José Farmer* (San Bernadino: Borgo Press, 1984). The best critical study of Farmer's work available — one entire chapter is devoted to the Riverworld series.

Secondary Sources

Becker, Beril, *Dreams and Realities of the Conquest of the Skies* (New York: Atheneum, 1967).

Burton, Sir Richard Francis (translator), *The Kasidah of Haji Abdu al-Yazdi* (New York: Citadel Press, 1880).

Carroll, Lewis, *Alice's Adventures in Wonderland* (London: MacMillan, 1866).

Donovan, Frank Robert, *River Boats of America* (New York: Crowell, 1966).

Gibbs-Smith, Charles Harvard, *Aviation: A Historical Survey* (London: H.M. Stationery Office, 1970).

Green, William, *The Aircraft of The World* (New York: Arno Press, 1980).

Hartcup, Guy, *The Achievement of The Airship* (North Pomfret: Newton Abbot, 1974).

Jackson, Robert, *Airships in Peace and War* (London: Cassell, 1971).

O'Neil, Paul, *The Rivermen* (New York: Time-Life Books, 1975).

Robinson, Douglas H., *Giants in The Sky* (Seattle: University of Washington Press, 1973).

Stewart, Oliver, *Aviation: The Creative Ideas* (New York: Praeger, 1966).

Ventry, Lord and Eugene M. Kolesnik, *Airship Saga,* 1982.

GLOSSARY

Many terms unique to the Riverworld are used throughout these rules. If an unusual word is not listed here, then it is probably defined in the text; check the index.

A.R. After Resurrection. The usual method of dating events on the Riverworld.

agent: An Ethical who is loyal to the Council and who assumes the disguise of a terrestrial human in order to mingle with the Valleydwellers and observe.

All Souls' Day: Resurrection Day.

android: An artificially-created organism, usually designed by the Computer for one specific task. Androids can look completely human, or they may have a strange or fantastic appearance; it is up to the person instructing the Computer.

batacitor: A TL8 device that can capture a huge flow of electrical energy quickly and store it like a battery. Ethical agents taught some Riverdwellers how to build these.

beamer: A beam weapon used by the Ethicals. On the lowest setting, it stuns; on higher settings it can slice through almost anything, including a moderate thickness of *charruzz*. See p. 92.

candidate: Ethical term for any Riverdweller, because they are all "candidates" for true immortality.

charruzz: An extremely dense but lightweight metal developed by Monat's race. Most Ethical devices, including the grails and grailstones, are made of *charruzz*. Items made of this material cannot be damaged, let alone penetrated, by anything on the Riverworld short of an Ethical beamer.

Church of the Second Chance: A new religion which has developed on the Riverworld. It teaches that the Riverworld was created by advanced science, but that the creators were acting as direct agents of God, and that its purpose is to give humanity a "second chance" at salvation. Second Chancers believe in moderation and non-violence. See p. 21.

Computer: The Ethicals have many computers, but when they refer to "The Computer," they mean the huge protein-brain in the Dark Tower, which controls all significant aspects of the Riverworld operation, including the Dark Tower itself, the *wathan* catcher, and the grailstones which create food and replacement bodies.

copia: A grail. From "cornucopia."

copiastone: A grailstone.

Council: See *Ethical Council of Twelve.*

Dark Tower: The Ethicals' headquarters building at the north pole of the Riverworld.

The Day of the Great Shout: Resurrection Day.

down-River: The direction toward the River's mouth, *with* the current.

dreamgum: A drug distributed to the Valleydwellers in the form of chewing gum. Dreamgum causes hallucinations and a loss of inhibitions; it is psychologically highly addictive.

e-m converter: A cabinet-like object which can produce any item or substance through direct energy-matter conversion. The converters are controlled by the Computer; goods are requested by input to the Computer. No converters are known to be outside of the Dark Tower, but it is possible that concealed converters might be located along the Valley for use by agents.

Ethical Council of Twelve: Usually simply "the Council," a committee of 12 human Ethicals who oversee and regulate the Riverworld Project.

Ethicals: General name for several races who were responsible for creating the *wathans* and for constructing and operating the Riverworld Project. Except for Monat, all of the Ethicals on the Riverworld are humans.

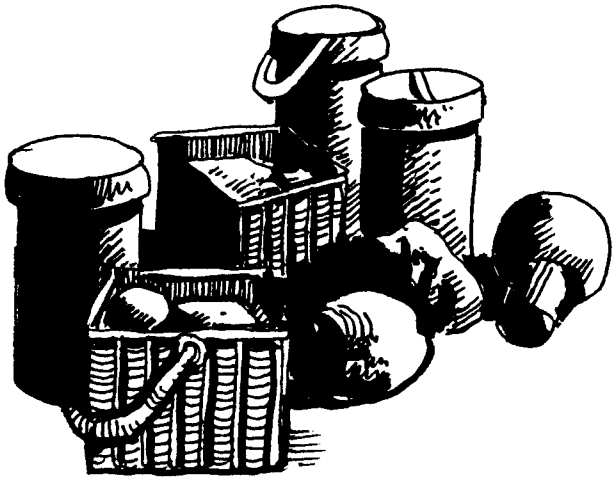
free-grail: A grail which will open for anyone. Also "freebie."

Gardenworld: The home planet of the human Ethicals; the planet on which Monat's race resurrected all humans who died on Earth before the age of five.

Gardenworlders: Ethicals consisting of Monat's race and humans who died on Earth before the age of five. The Ethicals on the Riverworld were all once Gardenworlders.

Going On: In Second Chancer teaching, the uniting of the soul, or *ka*, with the Godhead; the end of the cycle of deaths and resurrections.

grail: Bucket-shaped receptacle containing computer codes that regulate the conversion of grailstone energy into food, clothing, and luxuries. Every Valleydweller is given a personal grail upon his resurrection; when the grailstone refills it, it can only be opened by the owner. "Freebie" grails are demonstration grails that can be used by anyone. There are dozens of different words for "grail" — everybody got one on Resurrection Day, and every little group called it something different. Other terms include copia, bucket, holy bucket, glory bucket, lunch pail miracle pail, pandora, dora, pandoro, and tucker box.



grail slave: A Valleydweller whose grail is forcibly held by someone else. The *grail slaver* (the one holding the grail) usually keeps luxury items from the grail while giving the grail slave only basic sustenance.

grailstone: One of the large, mushroom-shaped structures lining both Riverbanks, which together form a network of energy-matter converters. Three times daily, electrical discharges from the grailstones are converted into food, clothing, and luxury items by the grails. The discharges occur at local sunrise, noon and sunset. Thus, they are sequenced across the planet's

surface, but all the discharges visible from any one location will seem simultaneous.

grog: Liquor made from the native Riverworld lichens and flavored with irontree vine blossoms.

hornfish: A six-foot predatory River fish, not dangerous to humans, whose body yields a great variety of useful materials, including the horn that gives its name. Its vertebra is used as the symbol for the Church of the Second Chance.

lazarus: Anyone resurrected on the River. Later, anyone brought back to life in one of the "little resurrections."

left bank: The Riverbank on one's left when facing down-River.

light-rod: An Ethical device which can make someone's *wathan* visible. It also serves as a mundane flashlight.

Monat's race: Name given to the extraterrestrial race who built the *wathan* generators on Earth and who started the Gardenworld and Riverworld projects.

mushroom: A grailstone.

Operator: The title of Monat Grrautut (see p. 85). He was the chief programmer and operator of the Computer.

pandora: A grail.

Polar Sea: The body of water, 60 miles in diameter, at the north pole of the Riverworld. The great River both begins and ends here. In the center of the Polar Sea stands the Tower.

Project: The wholesale resurrection of humanity on the Riverworld for the purposes of *wathan* development, as regulated by the Council. The Project is to be executed in two phases, each phase resurrecting a different population of humans for a limited period of time.

renegade: An Ethical who is opposed to the Council and who works against the laws and goals of the Project.

Resurrection Day: The first day of each of the two phases in the Project, when the humans are brought back to life on the Riverworld. A *Resurrection Day campaign* is any *GURPS Riverworld* campaign that begins on Resurrection Day.

resurrector: A specialized e-m converter (see above) which can make a precise image of a human (or alien) body. With access to a resurrector and an up-to-date body record, one can live forever.

right bank: The Riverbank on one's right when facing down-River.

River: The 20-million-mile-long river that winds its way across the surface of the Riverworld.

riverdragon: The largest and most dangerous fish in the river, over 100 feet long. See p. 11.

Riverdwellers: The terrestrial humans resurrected on the Riverworld. See "Valleydwellers."

Rivertad: Valleydwellers who died at an age greater than five and less than 25 were resurrected at the age they died. A "Rivertad" is anyone who was resurrected at such a young age that he or she remembered little of Earth.

Rivervalley: The River and the area of land on either side of it, generally about ten miles wide, between two mountain ranges.

stone: One mile along the River. Sailors and other travelers describe River distances in terms of the number of grailstones passed, and the stones are a mile apart, so a trip might be described as "about 800 stones down-River."

stun wand: An Ethical weapon which renders its target unconscious but does no permanent harm.

Suicide Express: Term used by Burton, and others, to describe rapid random travel by suicide and resurrection.

suspended: A *wathan* is "suspended" when the Computer is given orders to hold it indefinitely without reincarnation. When someone's *wathan* is suspended, he "stays dead" until the person who gave the original orders countermands them to the Computer.

Tower: See "Dark Tower."

translation: The "little resurrection" by which someone killed on the Riverworld is reborn somewhere else in the Valley.

up-River: The direction toward the River's source, *against* the current.

Valleydwellers: The terrestrial humans resurrected on the Riverworld. Also called Riverdwellers, resurrectees, lazari, souls, and many other terms.

wathans: The artificially-created entities of energy that provide self-awareness for intelligent, highly-evolved species. They are used in conjunction with synthetic bodies to resurrect such species after death.

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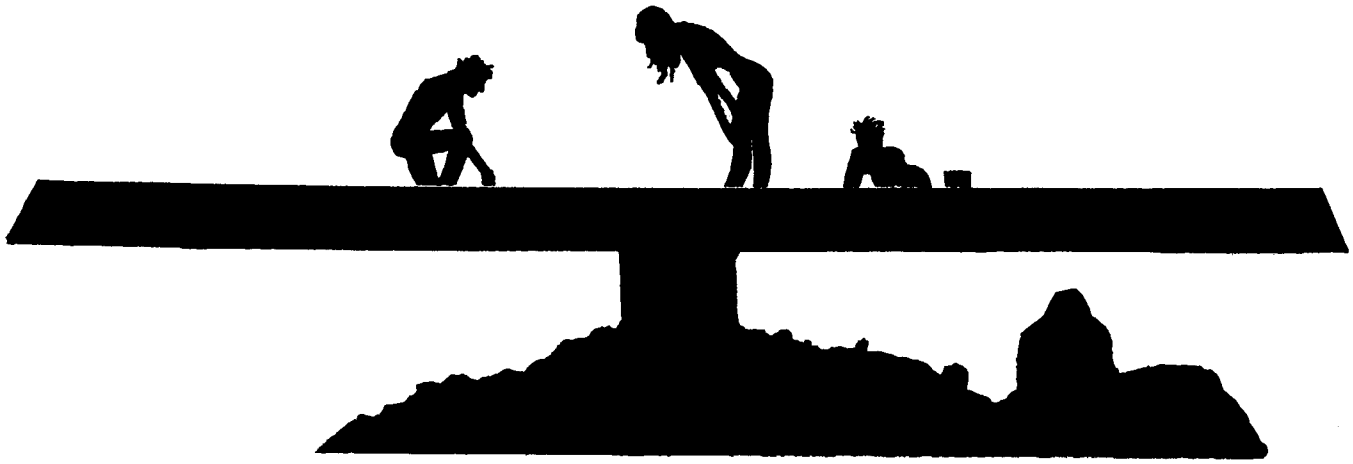

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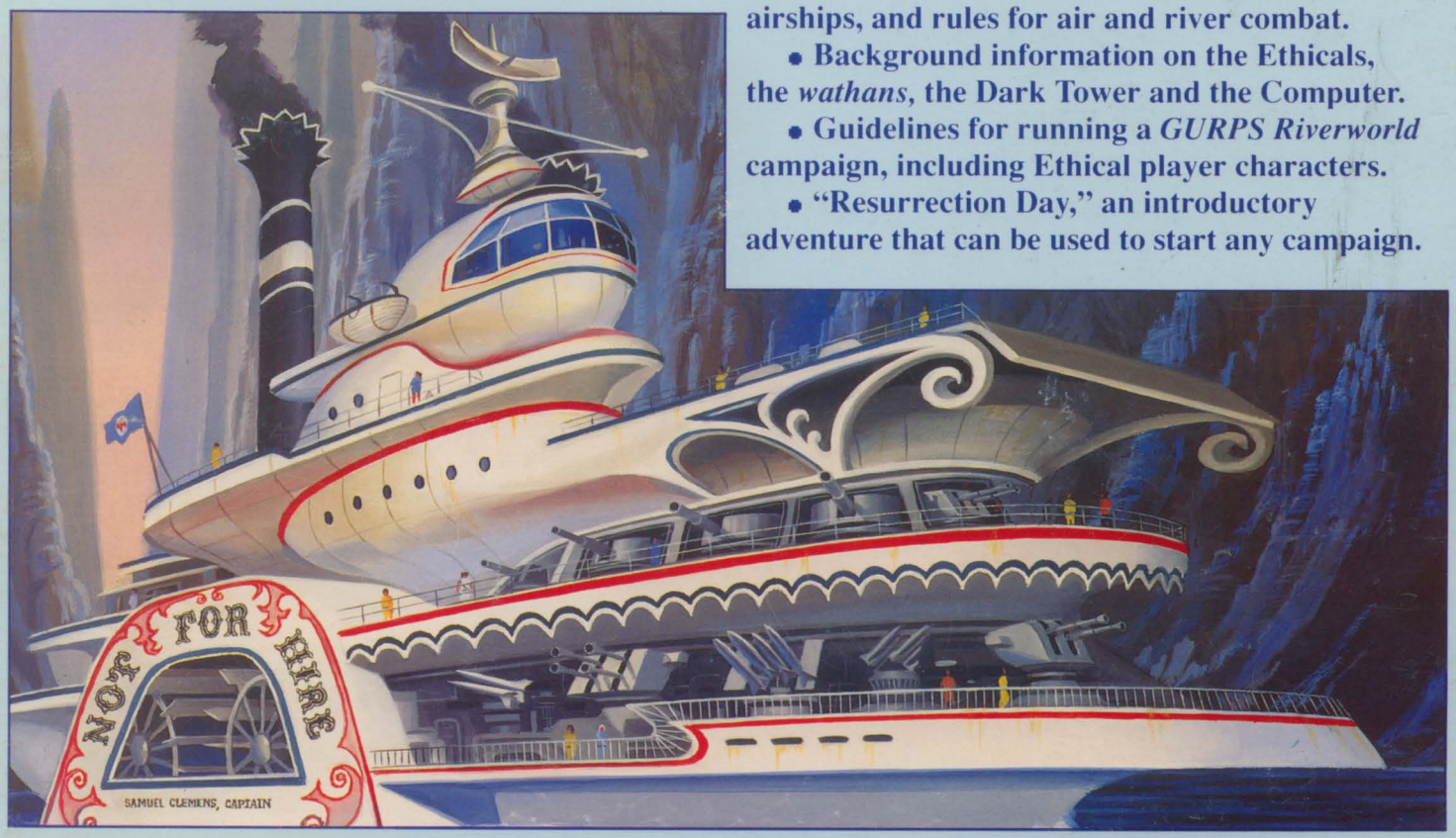

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