

# The Path of Cunning



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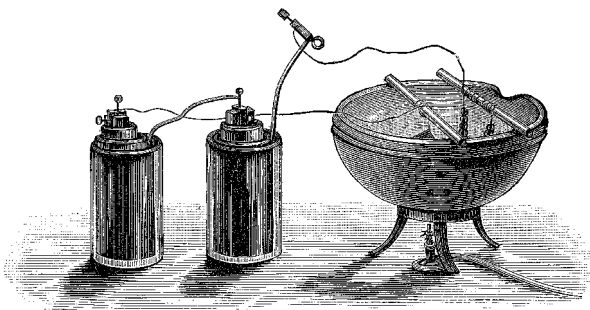
Issue 4. Edited and published by Roger Bell\_West ([roger@firedrake.org](mailto:roger@firedrake.org)) and John Dallman ([jgd@cix.co.uk](mailto:jgd@cix.co.uk)). Freely available from <https://tekeli.li/path-of-cunning>. All contents are visible to Internet search engines.

Postal address: 92 Lichfield Road, Cambridge, CB1 3TR, United Kingdom. ISSN 2632-9298.

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## WE ATEN'T DEAD

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John Dallman and Roger Bell\_West

But we have been a bit busy, with other things for reasons of life and pandemic. Special thanks to the various GURPS writers who contributed designers' notes to this issue, some of whom have been waiting for a while to see these come out.

### Why we're so late

John: I have been very over-committed for most of the last two years.

In July 2021, my mother fell ill, and I had to go and live in London to take care of her, while still holding down a full-time job. That lasted until May 2022, when she got much better, and was both physically and emotionally draining.

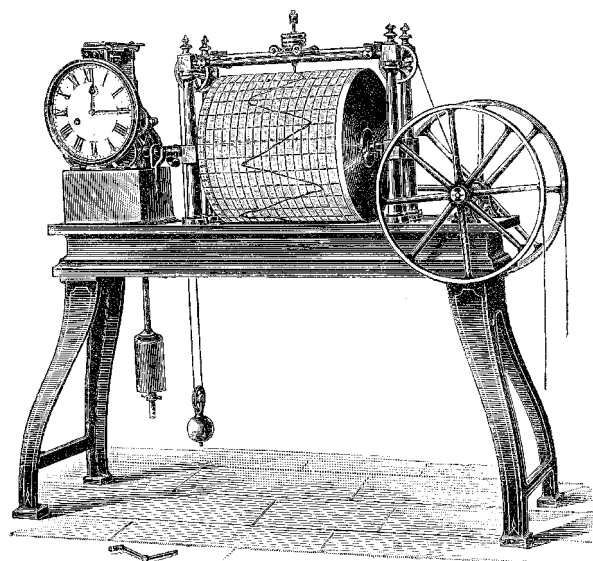
While recovering from that, I caught COVID-19. It was not terribly severe, thanks to vaccinations, but I wasn't in the best of condition when I went down with it.

And that seems to have made an undiagnosed heart problem that I was suffering from much worse. Before then, I got episodes of heart palpitations and shortness of breath about once a year, only in very hot weather. I thought it was heat exhaustion. They started happening every few weeks, and I spent several nights in A&E (that's British for "the emergency room") hooked up to an electrocardiograph (*Bio-Tech*, pp. 126-27) with lots of beta-blockers.

This got fixed via "Cardiac Ablation" a *definitely* TL8 procedure that isn't in *Bio-Tech*. They run wires in through your veins to your heart, take control of its electrical system, work out which bit is malfunctioning, and kill it with small doses of microwaves. You need to be awake for this, because it doesn't hurt much, unless it goes wrong. The patient is the alarm system for that.

That fixed my heart. But the rest of me took a while to recover. I've also been running three projects at work to catch up with all the work I didn't do last year. I don't have to *do* all that work, but I have to train the people to do it. It's fun to see people you've taught doing work better than you could!

But now, I can return to PoC. We don't plan to wait so long before the next issue.



### Managing Growth

Roger: GURPS supports campaigns with quite distinct levels of character power, from mundane kids looking into a problem in their neighbourhood to cosmic-level superheroes. That's easily enough handled with a point budget; but what happens when power levels rise over a long-running campaign?

The core of it for me is to have, at every stage, challenges that are interesting and indeed *challenging* – not necessarily in terms of combat effectiveness, which in GURPS isn't always closely tied to point budget anyway, but in terms of the

sort of people they are and the sort of problem they're tackling. In *Irresponsible and Right*, the characters moved from small-scale investigative missions to getting involved with plots that would significantly affect the course of the war; by the later stages of the campaign, preparing for a session mostly consisted of finding out what *they* wanted to do rather than assigning them missions. In *Infinite Cabal* our PCs started as relatively mundane people (by the standards of magicians, anyway) and ended up shaking the foundations of the worlds.

If one starts at the bottom, the first tranche of increase in effectiveness comes from simple skill numbers: a good "ordinary folks" professional skill of 12-13 (p. B172) drifts up to 17-18. One can go further with this, but I find that once this sort of skill level is attained players tend to *broaden* their characters instead: they're good enough at their primary skills X and Y, so instead they start buying up Z and A – and once enough points are available they'll raise attributes. The same applies to advantages: the combat specialist develops a talent in security systems, or the air mage spreads out into water.

Even with a relatively high experience award per session, it takes a while to save up for new "big" powers, and more skills are always tempting ways to spend points for an immediate reward. One way of cutting this tendency back, if desired, is to batch up experience and award it all at once at the end of an adventure.



If players are spending too many points on immediate gains, the GM may allow them to "sell back" skills in favour of attributes: for example, take one level off each of several IQ-based skills, and put the points gained thereby (plus some more) into raising IQ directly. No skill level may drop, but all other IQ skills will rise. In terms of simulation, this can reflect a rationalisation of experience gained over an extended period. It's probably worth retaining attribute limits, per p. B14, unless you want a truly superheroic feel. ***GURPS Social Engineering: Back to School*** has a stricter version of this (pp. 10-11). This requires *every* relevant skill with 2 points or more that depends on a particular stat to be decreased.

Adding a new character to a long-running game takes care, because any character built *ab initio* on a single point budget with a single goal will be more efficient than one built up over time with different point expenditures in different phases of the campaign. For this reason I tend to use the lowest point total in the group as a guideline. What's more, there may be a substantial amount of lore that the player needs to catch up on: a campaign is after all more than the checklist of rules in use. A campaign log is very helpful here, but it can never be both complete and short enough to be usable; memories from people who were there are essential to get the flavour of something.

A growing campaign lends itself well to something like what Robin Laws calls a "gratification beat": perhaps a particular foe was a major threat early in the campaign, but is now merely a minor inconvenience. Because of this, though, it's easy to escalate and very hard to scale back: "The entire universe is in danger *again*? That's the third time this week..."

# Libraries for GURPS: Stats and Staff

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Shimmin Beg

## Overview

GURPS currently doesn't have a system for presenting libraries along the lines of the Organization Stat Block in *GURPS Boardroom and Curia*. While organizations *can* be used, they have features that a library typically doesn't need (such as Enemy Value) and don't offer support for important aspects of a library (such as quality of collections, whether you're allowed in, and just how easy it is to pilfer a *Necromicon*).

As a former library employee of many years, not to mention an enthusiast of weird and occult mystery genres where books feature heavily, that seems an omission worth addressing.

This article is an attempt to put together a coherent system for libraries, with modifiers that represent features of the library and apply sensible modifiers to relevant tasks. Two sample libraries are presented. It also outlines common library staff roles and responsibilities, and suggests a method for handling skewed loyalties within the organization rules.

For simplicity, "books" is used throughout this article to represent the items in a library's collection.

## Library Stats

**Mission Statement:** Who does the library serve? Why does it exist? What is it trying to achieve?

**Type:** As for an organization. An additional option of "Public Service" for public libraries is presented below.

**TL:** A library's TL is typically the tech level of the society where it operates, or its associated

organization (if any).

**Wealth:** Wealth is an approximation of the resources at a library's disposal. This statistic uses the same levels as the Wealth advantage (p. B25). Most libraries have Wealth in the Struggling to Comfortable range. Wealth is a general indicator of the size and quality of facilities and equipment used for everyday operations. Note that Wealth for a library does *not* include the value of actual library collections.

**Readers:** The people who the library serves, either members of the public or members of the library's associated organization. In personal libraries or small societies, the 'staff' and the 'readers' may be the same people, in which case no Readers should be recorded.

**Loyalty:** Figures should be given separately for Readers and Staff.

**Traits:** Traits may apply to the library itself, to Readers and/or to Staff. Indicate this on the trait, for example Hidebound (Readers) or Zeroed (Library).

**Staffing:** Summarizes the staff members at the library, divided by role.

**Contacts:** Contacts and Contact Groups that might be found via the library, and their likely skills.

**Collection:** This represents the size, completeness and overall quality of the library's holdings. It's roughly equivalent to the categories given in *GURPS Low-Tech* and *GURPS High-Tech*.

**Knowledge Level:** The difficulty range for which the library is a useful resource. Specific to each collection.

**Security:** There are three facets to a library's Security: the security of the premises against illicit entry, the difficulty of accessing or removing materials without permission, and the

library's ability to detect these activities and to investigate them after the fact.

**Exclusivity:** Libraries range from the fully public to membership-only. Some memberships are easy to obtain, while in other cases even discovering the library's existence may be a challenge.

**User Rights:** The ways in which a reader can use the library once admitted, particularly copying and borrowing rights.

**Languages:** Lists the main languages of the library collections. Characters without appropriate language skills will be limited in their use of the library.

**Accessibility:** Describes how convenient the library is for readers with disabilities or atypical requirements. Physical access, options for using the library collections, staff experience and responsiveness, and environmental adaptation.

**Opening:** The times when the library is open for use.

## Wealth

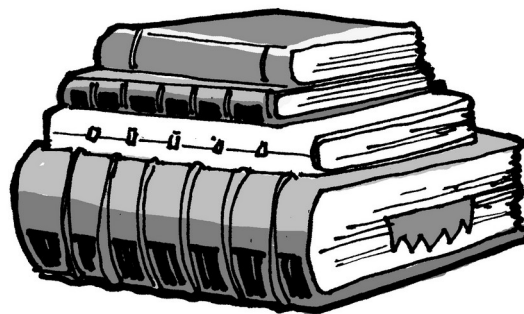
Wealth is an approximation of the resources at a library's disposal, *with the exception of actual library materials*. The reason for this should be obvious: there is often only a tenuous connection between the nominal value of a library's collections and the library's environment or day-to-day finances. Moreover, libraries generally don't treat their collections as fungible resources in the same way that other organizations use their assets.

This statistic uses the same levels as the Wealth advantage (p. B25). Most libraries have Wealth in the Struggling to Comfortable range. In addition to being a major factor in the library's Resource Value (*GURPS Boardroom and Curia*, p. 10), Wealth is a general indicator of the size and quality of facilities and equipment used for everyday operations.

**Poor:** The library has minimal equipment, and what it has is outdated, frequently second-hand, and possibly improvised (p. B345). Supplies are scant. Premises are temporary, in poor repair, and/or deeply unsuitable to actually using the library (for example, books may be kept in shoeboxes in a member's garage, the building may have incurable damp, or readers are forced to crouch and crawl to access shelves). Very few services are available beyond the absolute basics, particularly anything with a cost. Staff are likely to be volunteers. Repairing or replacing stock is a major challenge, and the library stock is not up-to-date, perhaps also donated. Minimal records are kept, likely a simple logbook showing which items have been lent to whom.

**Struggling:** The library's equipment is likely to be cheap and/or outdated (for example, pen and paper in the typewriter era, or electric typewriters in the early days of computing) and prone to malfunction. Premises are shabby, old-fashioned and don't meet modern expectations of convenience or facilities. Books are marked as property of the library. There are some paid staff and a slow stream of new stock acquisitions. Additional services such as a payphone or coin-operated photocopier may be available. The library's records are simple, and little complex analysis is possible.

**Average:** The library's equipment is of reasonable quality and has regular maintenance. The premises are suitable for use as a library, in good repair and have basic amenities (such as





parking, and toilets for readers' use). The library is run by a full-time librarian with a small staff, supplemented by part-time staff or volunteers if necessary. Funds and staff are sufficient to offer readers a range of additional services, such as ordering materials from elsewhere, computers for readers' use, and assistance with paperwork. Pens, notebooks and similar items may be available for purchase. Storage lockers or a cloakroom may be available. Basic records such as circulation counts, fines history and a reader's recent loans are kept.

**Comfortable:** The library has pleasant and well-organized premises that are suitable for the purpose. Both the premises and equipment are up-to-date, with repairs completed promptly by professionals and items replaced if necessary. Funding is sufficient to purchase the latest editions of major reference works and bestsellers, but some stock is outdated. Architectural, engineering or technological methods help to keep the stock in optimal condition by controlling temperature, humidity and vermin. Facilities may include a café or restaurant, reservable meeting rooms, and equipment available for loan or purchase. There are enough experienced staff to provide whatever advice and guidance is necessary, perhaps even assisting with research. Readers can attend a range of events on a regular basis (such as lectures, training courses, clubs, readings and children's groups).

**Wealthy:** The library is luxurious and convenient, either a magnificent older building that has been adapted skilfully to modern needs, or purpose-built premises designed around the needs of the library. Equipment is modern, in excellent condition, and may be of Good quality. A range of methods are used to preserve stock, and outdated or damaged materials are regularly replaced. Professional staff manage the building, with regular training in the latest methods, and readers can easily find a staff

member to assist them with any reasonable request. A wide range of services are available, and many are free of charge. For extensive research, a number of professional researchers can be hired from a vetted list kept by the library. Facilities include high-speed Wi-Fi in a modern library, free supplies of most materials a reader might need, and private carrels for long-term research. Librarians can supply extensive lists of relevant material, given sufficient time to prepare. The library maintains detailed records, which are analysed to aid in managing the collections and in optimizing the services they provide. Researchers can request less-used materials from a secondary collection, either an external archive or a network of cooperating libraries.

**Very Wealthy:** The library has opulent premises that are both comfortable and convenient to use. Equipment is brand-new and at least Good quality, and the best gear available at the TL is sometimes used. Facilities range from a selection of cafes to childcare, individual parking spaces, full-VR rooms and almost anything else a reader might need. The latest cutting-edge technology is used to preserve the collection for long-term use. Collections are constantly reviewed, ensuring the latest editions are always available and keeping fiction collections bang up-to-date. Extensive archives outside the main premises allow researchers to find older editions and little-used works as they require, and these can be rapidly delivered to the library for use. It may be possible to have books delivered to and collected from private premises. Elaborate record-keeping allows the library to predict your requirements, and tailored lists of recommendations can be provided if the reader wishes. Expensive precautions are taken to protect the stock against deterioration, disaster and accident.

## Readers

Similar to an organization's Members, Readers represents the number of active library memberships or regular library users. Where libraries are affiliated with an organization, the second figure is typically the same as the organization's membership. Staffing is recorded separately.

### **Reader Loyalty**

This represents the Loyalty of the library's users to the library and its goals. It otherwise functions as for an organization.

### **Reader Traits**

Many libraries serve a broad pool of users with no particular Traits in common. It otherwise functions as for an organization.

## Staffing

This indicates the number of people involved in operating the library, typically employees. Staffing has its own Loyalty and Staff Traits, which apply specifically to these people.

## Staff Traits

Like an organization, the staff of a library may have a number of less-common traits. Allocate these as for an organization: some traits are requirements (Clerical Investment for a religious library, for example) while others require a frequency modifier. Code of Honor (Professional) may be appropriate in settings where librarianship has widely-agreed professional and ethical obligations. Hidebound, Miserliness, and Sense of Duty are plausible, while a professional habit of finding answers could manifest as a Quirk of "Instinctively helpful when answering questions". A librarian focused on serving a particular group of readers might have Charisma (teenagers) or Charisma (curmudgeonly academics) at one-third cost (reduced as per Reputation categories, p. B27).

## Contacts

Contacts for a library are calculated in the same way as for an organization. Any public or institutional library will typically have Professional Skill (Librarian), Research and Teaching.





## Collection

This represents the size, completeness and overall quality of the library's holdings. It's roughly equivalent to the categories given in *GURPS High-Tech* and *GURPS Low-Tech Companion 1*, but more granular. A library may contain multiple Collections on different subject areas; each Collection represents the books relating to a single skill (or specialty, where required) and has its own skill modifiers (*GURPS Low-Tech Companion 1*, p. 33) and traits.

### Collection Size

This represents the physical space occupied by a collection, or the number of volumes for non-physical media.

At higher TLs where digital media are common, the lack of a storage space requirement makes large collections much more viable. Open-access publishing, pirating and sharing of files can also allow individuals to amass large collections without vast expenditure.

*GURPS Low-Tech Companion 1* contains additional rules on the influence of different materials, production methods and formats on library cost, weight and space requirements (pp. 33-34).

### Quality

The Quality of a collection indicates its intellectual value, and may be Improved, Basic, Good or Fine. This often correlates to the collection's size, but it's by no means assured. Important considerations include the skill of the person who assembled the collection, and whether the materials are up-to-date. An extensive collection of works on physical science completed in 500BCE is of limited use in 2020 CE, no matter how good it may have been

originally. A computing library from 1980 is of even less use in 2020.

**Improved:** A hotchpotch collection of semi-relevant, outdated or inferior works. This is "improvised equipment"; if the GM allows a Research roll, it should be at -2 or worse.

**Basic:** A collection of major works offering broad coverage of the field. Allows an unmodified Research roll.

**Good:** The collection holds not only major works on the topic, but relevant critiques and alternate perspectives. Gives +1 to Research.

**Fine:** The collection includes cutting-edge work from the most innovative scholars, rare original texts, comprehensive reference works, and compilations of key data. Gives +2 to Research.

**Very Fine:** The collection is a meticulously-curated selection of the most relevant, modern and influential texts, supplemented with high-quality reference works, acclaimed works of criticism, and lesser-known works that are nevertheless of excellent quality and originality. Outdated material is replaced or clearly labelled as such, with newer texts suggested. Gives +TL/2 to Research.

### Search Tools

A library may have a range of tools available to help researchers. For a library with a homogenous collection, this can be represented simply as a quality modifier (+0 if blank).

See *GURPS Low-Tech*, p. 48 for details of tools used to assist in searching physical collections. Catalogues and colophons are the primary tools for searching a collection, while line and page numbers, indices and tables of contents are helpful when using a specific text.

At higher TLs, software catalogues and databases are typically used. Due to its limited purpose and straightforwardness, a Basic digital library catalogue is Complexity 1, two levels lower than the common Complexity level (see *Search Tools*, *GURPS High-Tech*, p. 22).

## Value

The artistic quality of books influences a collection's value, as does the rarity of materials. See *GURPS Low-Tech Companion 1*, p. 33, for the influence of artistic quality.

## Knowledge Level

This represents the overall intellectual level of the collection. A primary school library is unlikely to be much help with a PhD, and a university library unlikely to have materials for a complete beginner in many subjects. A Knowledge Level is represented by a difficulty range, and a collection is only useful for questions whose unadjusted difficulty falls within that range. Suggested levels:

- Children's library: +5 and above
- High school library: -1 to +5
- University library or scholar's collection: -6 to +1
- Research institute collection: -10 to -4
- Public library: -1 to +6

Note that if a library contains multiple collections, their Knowledge Levels may vary.

## Security

There are three facets to a library's Security: the security of the premises against illicit entry, the difficulty of accessing or removing materials without permission, and the library's ability to detect these activities and to investigate them after the fact. A library's Security is influenced by the library's Wealth, but also varies with the nature and value of the collection, its

attractiveness to thieves, and the historical use of premises.

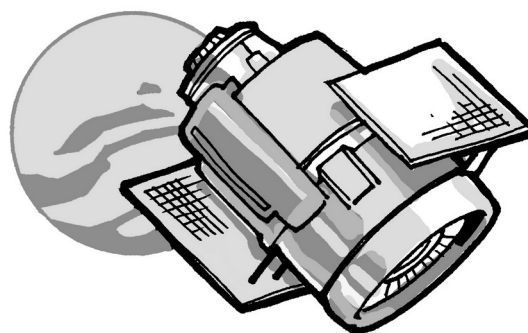
Libraries typically have an additional layer of security, designed to protect the collections against damage or disaster. This may well be more robust than the protection against physical intrusion. Fire and flood detection systems can be as simple as guards employed to watch for problems, or animals that will call out if they smell smoke. Modern libraries may have sophisticated smoke and heat detectors, smoke and fire curtains to isolate areas, and inert gas suppressant systems.

Security can be applied as a catch-all penalty on skill rolls made to break or sneak in, steal or copy items without permission, and cover tracks. This is identical to Basic Abstract Difficulty (BAD) in *GURPS Action*.

## Barriers

A typical library is, at a minimum, protected by walls and a roof to keep out weather and vermin. Nevertheless, there are some examples of outdoor collections with negligible barriers to entry. These are typically short-term initiatives such as art projects or literacy drives, or in physically secluded areas such as luxury hotel grounds.

The minimal level of barrier to entry is lockable doors. The rare exceptions are the libraries of



people with technology or magic that allows them to enter and leave without any door. At higher TLs, doors may include key-card or chip scanners, or even biometric locks in the case of highly restricted libraries. Magical libraries may require knowledge of a particular password or spell, or have magical equivalents of these technologies. Rules for doors, bars and locks can be found in *GURPS Low-Tech* pp. 118-122 and *GURPS High-Tech* pp. 202-205.

### **Theft Prevention**

The high cost of early books led to the use of locked boxes for storage. At TL3, chained libraries are a common solution to physically prevent removal of books. An unusual alternative is the use of lockable reading alcoves as a form of cage; a reader consulting any valuable book is locked in by the librarians. Where funding allows it, a guard may inspect each visitor's bag for suspicious items (on the way in) and stolen items (on the way out).

Scholarly and archival libraries often reduce the risk of both theft and accidental damage by strictly controlling what a reader can bring inside. Under these systems, personal property is stored in a locker or cloakroom before entering the library. Any items being taken inside must be placed in a basket or a transparent bag, which is inspected by the staff on the way in.

In a typical public or academic library, staff rarely have the Search skill. Prestigious libraries with rare collections, or those that employ security staff, may have received training. The following modifiers to Holdout are appropriate for common library materials:

- 1: CD without case, pamphlet
- 2: Mass-market paperback, unbound journal issue
- 3: Textbook or hard-cover novel, bound journal volume, thesis

### **Detection and Investigation**

Many libraries, especially at lower TLs, have no means of detecting security breaches in progress or identifying the culprits. However, some simple measures are available at any TL. Human and animal guards can sense intrusions, and may remain on the premises all night. 24-hour libraries may have staff on hand at all times, while in other cases a number of staff may sleep on the premises. In the case of low-TL libraries, someone may sleep in the library itself.

Lower-TL libraries can install mechanical detectors to notice intruders or unauthorized access to particular collections. *GURPS Low-Tech* (pp. 123-124) lists simple alarms such as beaded curtains and nightingale floors. The chained books of mediæval libraries can function as alarms as well as physical barriers to theft. Bookcases could also be fitted with bells to alert librarians when a book is moved. Societies with relatively advanced mechanical skills could install sophisticated pressure-based alarms that transmit information to a guard, indicated not only that a book has been moved, but *which* book. At higher TLs, motion detectors and many other devices are available (*GURPS High-Tech* pp. 205-207).

Identifying and tracing the culprits after the fact is more challenging. At low TLs, skin-marking dyes might be spread on surfaces to prove a thief's guilt, though it doesn't help locate them. From TL7, security cameras become available (*GURPS High-Tech* p. 206) and relatively widespread. More sophisticated measures are rarely available outside the most high-status and best-funded libraries.

### **Exclusivity**

Libraries range from the fully public to membership-only. Some memberships are easy to obtain, while in other cases even discovering

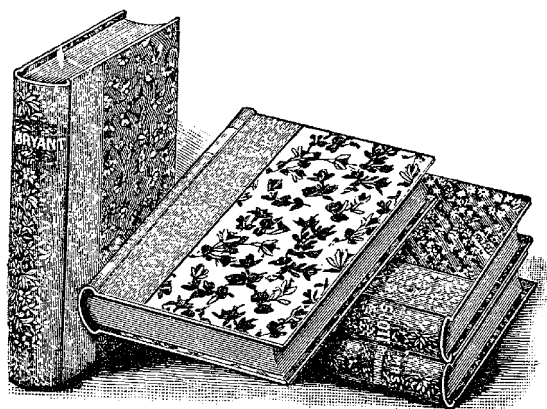
the library's existence may be a challenge. Exclusivity serves as a difficulty modifier on any influence skill used to gain access. Any specialist skill appropriate to the collection in question may be used as an influence skill for this purpose.

**Unrestricted (automatic success):** Anyone can use the library without a requirement to register. This may be due to an open policy, a panopticon society where registering would be redundant, or universal registration. More likely in reference-only collections.

**Members-Only (-5 to +5):** You must become a member to use the library, but there are no special requirements for membership. Registration is at the staff's discretion. Libraries designed to serve the public typically have a large positive modifier; you're entitled to use them even if you lack social skills. An academic or research library that requires scholarly credentials has a negative modifier.

**By Permission:** The library is only for the use of its owners or a small and specific group. At this level, access to the library is less a matter of criteria and more one of connections. Would-be visitors need to convince the owner to grant access. Private libraries fall into this category.

The following special traits can modify Exclusivity.



**Demographic (-X, group):** Use of the library is limited to a particular *demographic* group (such as age, gender, race, species), either by custom or by regulation. The level of this trait indicates how strictly this restriction is applied in practice. Apply this as a modifier on skill rolls to gain access if you don't fit (or fake) the criteria.

**Affiliation ( $\pm X$ , group):** Use of the library is limited to people associated with an organization or faction. The level of this trait indicates how strictly this restriction is applied in practice. Apply this as a modifier on skill rolls to gain access if you aren't an affiliate (or successfully faking it).

**Select (-X, Status):** The library is socially exclusive. The level of this trait indicates how strictly this restriction is applied in practice. Apply this as a modifier on skill rolls; however, you also add your Status on rolls made to gain access. In some circumstances, Reputation may be used instead of Status.

**Authorized (-X, Rank):** The library restricts access to a particular group, *and* limits access within that group. You *cannot* access the library by normal means unless you have the appropriate Rank, and the modifier applies even so. However, you add your Rank on rolls made to gain access. This replaces Members-Only.

## User Rights

The ways in which a reader can use the library once admitted, particularly copying and borrowing rights. Rights often vary with the type of membership the person has. A doctor may have full borrowing privileges in a hospital library, while a patient can only use it for reference.

**Limited Reference:** the reader can consult part of the library, typically the open-shelf collection, but has no access to other collections.

**Reference:** the reader can consult the library's books and take notes, but can't borrow them or make direct copies. Archives of personal papers and manuscripts sometimes forbid copying in this way, especially if they are unpublished. Confidential corporate and official papers may also have this restriction.

**Copying:** the reader is allowed to copy books. Methods include individual copying; scribes who can be hired to make copies; or use of technology (or magic) to duplicate the work directly. In the latter case, for rare and fragile items the library staff will typically do the actual copying.

**Borrowing (X, duration):** the reader can borrow some number of books for some period of time. For example, a public library might allow Borrowing (8, 2 weeks) while a research institute might allow Borrowing (50, 1 year).

**Off-Site Access:** relevant only to TL 8 and above, when remote access is possible. In many cases, access to certain digital resources is restricted to on-site only. A particularly common arrangement is that readers with reference-only access to the library aren't permitted off-site access.

## Languages

Lists the main languages of the library collections. Characters without appropriate language skills will be limited in their use of the library.

## Accessibility

Describes how convenient the library is for readers with disabilities or atypical requirements. Accessibility summarizes the ease of entering the premises, options for using the library collections, staff experience and responsiveness to readers' particular needs, and how readily the

environment can be adjusted to individual needs. For simplicity, this is given as a single modifier. Positive Accessibility reduces any penalties from Disadvantages (such as Bad Sight, Blindness, or limited mobility) to a minimum of 0. Negative Accessibility imposes *additional* penalties.

## Opening Hours

The times when the library is open for use. Access outside these hours requires negotiation, if it is possible at all. Library hours are influenced by the intended audience and their requirements. Hospital libraries are often open 24 hours for urgent consultation by medical staff, while the special collections of a local charity may be open one afternoon a week. Personal libraries typically don't have opening hours, since visitors must request access to the collection.

Some libraries have variable hours depending on membership; an academic may have 24-hour access to a collection via their own key or key-card, while students can only visit from 9-5.

## Type

Libraries can select from the Types available to organizations (see *GURPS Boardroom and Curia*, pp. 11-13). They have the following additional option:



## Public Service

The organization is established to provide a particular service (or range of services) to the general public. Unlike a charity, it operates as an arm of government (whether national or local), placing restrictions and requirements on the organization's activities. Public Service organizations usually have at least one Professional skill as a Contact skill. They typically also have Administration, Area Knowledge, and other skills appropriate to their area(s) of expertise, such as Research or Literature for a library, or Law for a civic advice bureau.

## TL

A library's TL is typically the tech level of the society where it operates, or its associated organization (if any). However, it's relatively common for libraries to have a lower TL than their society. Collections accumulated over decades or centuries remain in their original TLs, and working through a whole collection to apply new technologies can be a major undertaking. Funding for libraries is often limited and largely earmarked for purchasing books or staffing. This restricts the ability to pay for new technology or to modernize collections and systems.

As a result, many libraries have a mixture of TLs representing different collections. Newer or heavily-used books may have standardized shelf-marks, barcodes linked to the catalogue, and magnetic security strips, while older items retain a previous classification scheme and physical issue cards. In some cases, more than one catalogue is in use, particularly when older items haven't been transferred from card catalogues to a digital system.

## Additional Stats

A library can be allocated additional stats that mirror those used for organizations. In most cases these aren't necessary.

**Startup Cost, Resource Value:** calculate as for an organization.

**Patron Value, Enemy Value:** A library using the rules above is rarely a suitable Enemy or Patron. If necessary, create an organization for the library and use that to allocate it as an Enemy or Patron.

**Ally and Dependent Value:** More common than patronage or enmity, a library might well be the source of an Ally (it worked out for Buffy, and indeed Rincewind). Librarians, researchers and scholars are an obvious option, but security guards and technicians also work there. Libraries of the right sort can be a good place to encounter plucky kids, homeless veterans, authors, and others who find it a welcoming place to be.

**Rank:** Where Rank is applicable, staff would have a Rank appropriate to the associated organization, such as Military for a naval library or Religious for an ecclesiastical library. Public library staff might have an Administrative rank.

**Income Range:** Typically Poor to Average for the majority of staff, representing low wages and a tendency towards part-time roles (and in some cases, student debts). A small number of senior management positions may be Comfortable or even Wealthy, especially in high-prestige libraries.

**Reputation:** Libraries generally have a mildly positive Reputation. They are recognized as institutions of knowledge, cultural archives, or as public services. A library may have a negative Reputation amongst revolutionaries, forces



looking to undermine institutions, those opposed to the information it contains or gate-keeps, or political groups who object to its activities.

## Control Rating (CR)

See *GURPS Boardroom and Curia*, p. 13. In the vast majority of cases, libraries have a Control Rating of 1, with their only disciplinary measures being to issue small fines or restrict access. More extreme measures are typically associated with an affiliated organization. A university library would refer disciplinary complaints to the university, while a corporate library would contact a manager or HR.

## Sample Libraries

### Frogden Village Library

Frogden is a village in rural Lincolnshire, with poor connections to nearby towns and few facilities. Most residents are elderly, and the library is the main source of social and practical support programs.

**Mission Statement:** Frogden Village Library aims to offer knowledge and learning opportunities for people of all ages, and be a hub for a vibrant local community by offering relevant programs and services.

### Resources and Capabilities

**TL:** 8. Frogden's equipment was installed in the early 1990s.

**Wealth:** Struggling

**Collections:** *STEM:* Small Improvised; *Arts & Humanities:* Small Basic; *Fiction, Local Studies:* Modest Basic.

**Search Tools** +0

**Value** \$175,000 (around 5,000 volumes).

**Knowledge Level:** -1 to +3 (local studies -3 to +3)

**Security:** Plate glass & metal door with standard lock; ditto fire exit & windows (no external locks). Surveillance camera covering library desk. EM detector gate at entrance. Motion-activated exterior floodlights (some broken).

**Exclusivity:** Members-Only +5.

**User Rights:** Reference and Copying (no registration required); Borrowing (12, 2 weeks) for members.

**Languages:** English

**Accessibility:** +2. Though short on funds for equipment or adapting the building, the library's position near sheltered housing means the staff are experienced at supporting readers with accessibility issues.

**Opening:** 10am-4pm on weekdays, Saturday mornings. Building in use for community activities most evenings and Saturday afternoons.

### Social Attributes

**Type:** Public Service

**Contacts:** Administration-12 [1]; Research-12 [1]; Teaching-12 [1]; Professional Skill (Librarian)-15 [2].

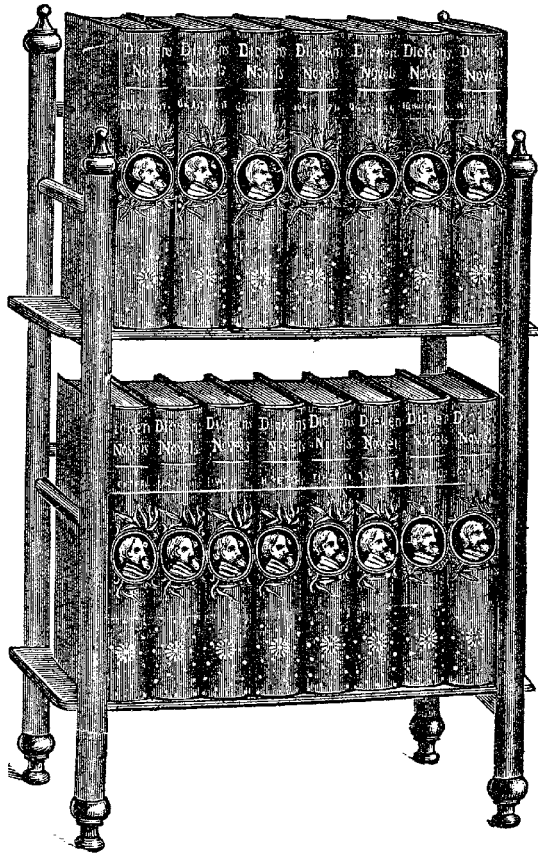
**Readers:** 200

**Loyalty (Readers):** Good (13; +1)

**Traits (Readers):** Social Regard (Venerated) (12 or less, -34%) [7/level], Green Thumb (9 or less, 50%) [3/level]

**Staffing:** 1 librarian, 2 library assistants, 1 part-time shelver

**Loyalty (Staff):** Very Good (aims and colleagues; 16; +3)/Poor (administration; 8; -1)



## The Marsh-Ward Library, Miskatonic College of Liberal Arts

Established by a generous joint bequest, the Marsh-Ward library is the pride of MCLA and attracts scholars from far and wide.

**Mission Statement:** “The Marsh-Ward Library provides integrated library and information services in support of the College’s overall aims and objectives, as embodied in the mission statement and strategic plan.”

## Resources and Capabilities

**TL:** 8.

**Wealth:** Comfortable

### Collections:

*General Collection:* Average Good, **search tools** +1; any arts & humanities; **KL** -6 to +1.

*Maritime Collection:* Modest Good, **search tools** +0; Navigation (Sea)/7, Seamanship/7; **KL** -4 to -1.

*Marsh Collection:* Modest Fine, **search tools** -2; Anthropology, Religious Ritual and Theology (Polynesian); **KL** -6 to +0. Contains a number of rare and valuable books which are reference-only.

*Ward Collection:* Large Basic, **search tools** -5; History (C18th to C20th USA), Occultism; **KL** -8 to -2. Contains many rare and valuable books which are reference-only.

**Total Value** \$700,000 (around 20,000 volumes).

**Security:** Plate glass & metal doors with standard lock; ditto fire exits & windows (no external locks). Surveillance cameras throughout. RFID detector gates at all exits, all items tagged. Motion-activated exterior floodlights. Fire curtains and halon fire suppressant system. Motion sensors in computing rooms linked to central university security team. Fire resistant interior doors throughout. Special collections are protected by additional key-card locks (permanent library staff only; unlocked 9-5) and rarer books are in steel cabinets with tough Good locks.

**Exclusivity** Affiliation (-4, MCLA) or Members-Only +2 (reference & copying) for General Collection.

### **User Rights:**

*External Reader:* Reference and Copying (General Collection).

*Student:* Reference and Copying (any), Borrowing (General Collection, 12, 2 weeks)

*Academic:* Reference, Copying, Borrowing (any, 30, 1 semester)

**Languages:** English, French, German (all collections); Polynesian languages (Marsh Collection); Arabic, Latin (Ward Collection)

**Accessibility:** +3, though rarer items in the special collections are too fragile to use with some assistive technologies (+1). Fully wheelchair-accessible.

**Opening:** 7am-11pm for students. Academics can register for 24-hour access to the General Collection; they must complete the mandatory Out-of-Hours Working health and safety course.

### **Social Attributes**

**Type:** Teaching

**Contacts:** Academic skills-18 [3].

**Readers:** 25,000

**Loyalty (Readers):** Neutral (library staff; 10; +0)/Poor (rules; 8; -1).

**Traits (Readers):** Alcohol Tolerance (9 or less, 50%) [1], Single-Minded (9 or less, 50%) [1].

**Staffing:** 5 librarians, 2 cataloguers, 12 library assistants, 10 part-time invigilators, 10 part-time shelvees.

**Loyalty (Staff):** Poor (administration; 8; -1)/Good (other; 16; +3).

**Traits (Staff):** Hidebound (12 or less, -34%) [-5], Administrative Rank (9 or less, 50%) [3/level].

## **Librarians and Related Species**

Library work is often low-paid, though there are exceptions in senior management and some technical roles. Many positions are part-time or casual. Nevertheless, there are substantial barriers to entry: many roles require an undergraduate degree, a traineeship or both. Librarians are typically expected to have a Masters in Librarianship or Information Management. In some countries and time periods, a librarian also needs to achieve Chartered status to have a successful career.

While 'librarian' is a catch-all term used by members of the public, modern library staffing splits into a number of distinct roles. These roles may be important either in interactions with the library, or when creating characters who work there, so they are summarized here. Please note that terminology can vary considerably, so a "library assistant" role in one library might be called "invigilator", "library technician", or "information assistant" in another; no offence intended.

In ancient times, when literacy and written archives were more highly prized, the post of librarian could be a very important one and correspondingly well-paid (alas for those days of long ago!).<sup>1</sup>

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<sup>1</sup> Bushnell, p. 31.

## Librarian

Librarians are responsible for the overall running of the library, including budgets, staffing, strategic decisions, purchases, initiatives and keeping the readers satisfied. Where a library is part of a larger institution or a library service, the librarian also liaises with the larger organization, and may have to negotiate funding and deal with corporate politics. While librarians may staff a library desk, many librarians work in an office or in separate premises entirely.

Projects and events are usually headed by a librarian. In a public library, a librarian will lead reading sessions, author visits and educational sessions.

Large libraries or library systems may employ specialist librarians who don't manage libraries. These roles include original cataloguing, caring for rare book collections, and managing electronic resources.

Even in substantial modern-day libraries, not all librarians are trained professionals. The role might be part of another position, such as a priesthood, professorship or curacy. A society librarian may be elected to the post from the membership. Universities and schools have a history of employing academics' wives as librarians, as an educated but cheap source of labour.

The profession is by no means modern. Librarians were appointed to each of the major libraries in Assyria, and their status was high; not surprising given the value of the written word at that time. Their title was *nisu-duppisatri* ("man of the written tablets"); the profession is said to date back to a Babylonian called Amil-anu around 1700 BC, who was a

librarian in Ur,<sup>2</sup> while the chief librarian in Sennacherib's time was Nabu-zuqub-gina.<sup>3</sup>



## Cataloguer

Library materials must be recorded on the catalogue and allocated a shelf-mark before they can be added to the library. In modern libraries using standardized classification schemes, staff can often import classification records from other sources who have already classified the item. However, bespoke classification schemes require every book to be classified in-house, while unusual items may not appear on any existing catalogues. A cataloguer is responsible for reviewing and understanding the book's nature, and allocating it a shelf-mark that will place it near books on similar topics for ease of browsing. They create catalogue records and cross-references to help researchers interested in those topics. They also record various information about the book for the library's own use, such as accession date, components of a

<sup>2</sup> Bushnell, p. 9.

<sup>3</sup> Thompson, p. 12.

multi-part item (such as a book with a CD) and condition.

## Library Assistant

In a typical modern library, readers will mostly interact with library assistants (sometimes 'library technicians', 'information assistants'), not librarians. Library assistants are responsible for most of the day-to-day operations of the library, such as answering queries, lending and returns ('circulation'), troubleshooting equipment, maintaining records, processing new stock, and basic maintenance such as replacing labels and protective covers. In some libraries, library assistants also catalogue items, make basic repairs to damaged books, order items from other libraries, collect items from non-public areas ('closed stacks') and give inductions to new readers.

## Shelver

Shelvers are staff employed to assist with time-consuming tasks that need relatively little training. As the name suggests, their primary role is to keep the library shelves in good order. Shelvers place books back in their correct positions after they've been returned to the library or left on a desk, and reorganize any that have been mixed up. They help with bulk moving of stock during changes to the library's layout or when books are weeded from the collection. Other tasks may include replacing worn labels, tallying visitors, and helping readers locate a specific item. Pay is low and responsibilities relatively light, at least officially. Shelvers are usually part-time or casual workers; in academic libraries students are often employed.

## Invigilator

An invigilator is employed to monitor a library or a section, particularly outside core hours

when few staff are present. They answer basic enquiries, lend and return stock, deter theft and can respond to emergencies. Pay is generally low and responsibilities relatively light (at least officially).

## Divided Loyalties

Libraries share traits with both charitable and educational organizations, and this includes the attitudes of the staff and broader membership. It's relatively common for members to have a strong commitment to the ideals and purposes of these organizations, and perhaps to their colleagues, while having a negative attitude towards the people in charge and what the organization *actually* does. This can be represented with two figures divided by a slash, each noting the areas where it applies. For example, a neglected public library might have Loyalty 5 (management)/16 (other). This divided loyalty can be exploited to bypass policies and administration by appealing to members' ideals.

In a similar way, members of some organizations may be proud of their own position and loyal to one another, but have little interest in the overall aims of the organization. This might be a good way of representing, say, a well-intentioned City Guard whose actual officers are cynical about lofty ideals of justice. These officers value their positions (and perhaps their work, if we're generous), are loyal to fellow officers, and will prioritize both over the City Guard's overall goals of upholding justice and the rule of law.

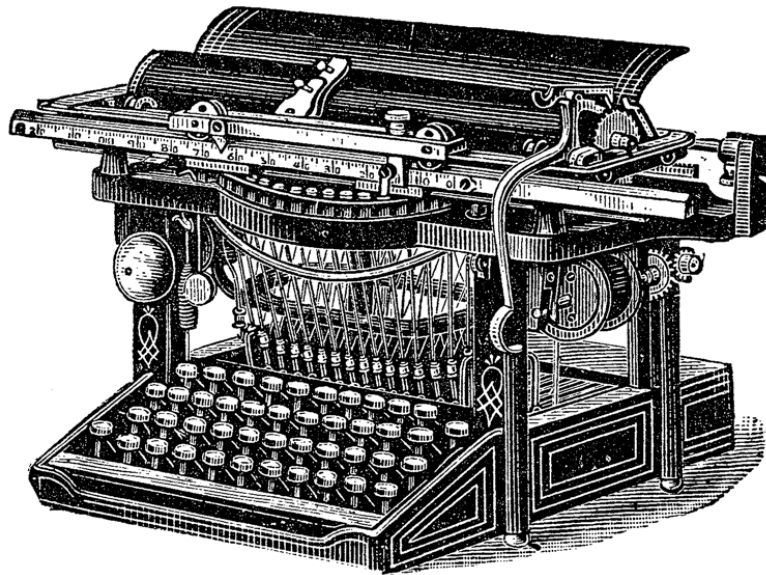
In a third case, members are devoted to their organization and its aims, but see one another more as rivals than as friends (a supervillain team is a classic example). Again, these divided loyalties can be exploited to foil the organization's goals.

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Thompson, J. W. (1940). *Ancient Libraries*. Hamden, CT.: Archon Books.



## GURPS Community Contacts

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SJ Games GURPS page: <http://www.sjgames.com/gurps/>

SJ Games GURPS forum: <http://forums.sjgames.com/forumdisplay.php?f=13>

GURPSDay blog index: <https://gamingballistic.com/gurpsday/>

GURPSNet-L mailing list: <mailto:gurpsnet-l%2Bsubscribe@sjgames.com>

RPG.NET GURPS: <https://forum.rpg.net/index.php?tags/gurps/>

Stack Exchange GURPS: <https://rpg.stackexchange.com/questions/tagged/gurps>



# All the Designer's Notes All at Once

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Sean Punch

When my friends at *The Path of Cunning* hinted that I hadn't written a "Designer's Notes" article for anything since *GURPS Power-Ups 9: Alternate Attributes*, I figured I might be able to come up with a couple of *GURPS* supplements to write about in this issue. In the end, "a couple" proved to be 18!

I could write individual "Designer's Notes" articles for many years to come, but I'm a believer in writing these things before I forget what my thinking was. I'm also in the midst of moving house (and recovering from a destructive ice storm, while still fatigued due to "long COVID" ... it isn't just *GURPS* supplements that come in droves), meaning I'm behind on work and have little free time. With those considerations in mind, I've opted to keep my notes brief enough for one article yet hopefully insightful enough not to come across as a skill.

Alphabetically ...

## GURPS Action 5: Dictionary of Danger

*Instigation.* One of the most common questions I get as *GURPS*'s repository of rules wisdom is, "What does [awful thing] do in game terms?" Nowhere is it more important to have an answer than in the action genre, whose villains and heroes are tangled, dangled, strangled, and mangled by menacing scenery with frightful regularity. Directors of action films know that "all fists and bullets, all the time" gets boring, which is the kiss of death. So, I set out to answer the question for as many awful things as possible.

*Inspiration.* I decided to write one good-sized section per letter of the alphabet, to force myself

to dig deep for hazards. Fire, electricity, toxins, explosions, being run over, falls from great heights (often onto pointy things), etc. were low-hanging fruit. Rules for dangerous tools and machinery of all kinds, using "harmless" items to cause harm, mad science, and doomsday plots surprised me even as I wrote them.

*Implementation.* Many answers were lurking in *GURPS* supplements in forms unsuited to action games, so my main labor consisted of doing the kind of deep system research and rules simplification that I did for *GURPS Action 2: Exploits*. Other dangers had eluded definition for three decades and four editions of *GURPS*, so I also invented new Bad Stuff consistent with the old. The results are useful even outside of action stories, as long as you value simplicity – they aren't so much *cinematic* as *low-resolution*.

## GURPS Action 6: Tricked-Out Rides

*Instigation.* It's difficult to have action stories without car chases – so difficult that to do so, you might want a supplement on telling alternative action stories (like *GURPS Action 8: Twists*, below). Many *GURPS* players feel that they need *GURPS Vehicles* for this, but to me, a complex design system that generates a wall of stats is overkill for a fast-moving genre. My goal was to provide the vehicles without the fuss.

*Inspiration.* My insight came from another SJ Games product: *Car Wars*. That game became popular despite restricting players to a single-digit number of body types. It was about modifying and filling the shell, not designing it from scratch. Having played it far too much, I vowed to bring its elegance to *GURPS*.

*Implementation.* As ever with **GURPS Action** supplements, much of the work was already done but not in a suitably simple form. So, I pored over specific makes and models of vehicles in the **GURPS** library to date and came up with generic stats lines that at least approximated all vehicles of a given type. I added rules for modifying individual stats to get more specific, without worrying (much) about the logic of *how*. Finally, I selected dozens of classic accessories to install in vehicles and simplified them for action stories. This isn't **Vehicles**, but it's more than customizable enough for most campaigns that need a steady stream of cars, SUVs, pickup trucks, and vans on demand.

## GURPS Action 8: Twists

*Instigation.* As I said for **GURPS Action 5: Dictionary of Danger**, too much sameness gets boring – and boredom is more lethal to an action story than any explosion or car chase. You have to mix things up! Sometimes, that just takes a “tacticool” gun, a flashy vehicle, or a heavily foreshadowed gory demise (“The fence is pointy. Who will end up impaled?”). Other times, it means subverting the *genre itself*, and I wanted to give some tips.

*Inspiration.* My spark was the original source material. Superficially, the action genre has “real world” villains taken down by cops, soldiers, vigilantes and other “real world” heroes using cool tech – especially weapons and vehicles – and facing no serious social consequences for breaking the rules as long as the ends justify the means. Except, of course, you have films like *Predator*, where the bad guy is an alien, the showdown sees a mud-covered hero using primitive traps and weapons, and there are several messages about political and military ethics.

*Implementation.* I did my usual **GURPS Action** thing and brought existing rules to the genre. I

streamlined social mechanics – particularly Rank, Status, and Wealth – for action stories and gave them a genre-specific spin. I went through the **GURPS** oeuvre supplement by supplement and proposed ways to mix titles like **GURPS Ultra-Tech**, **GURPS Horror**, and even **GURPS Magic** into **Action**'s adventure model. And I simplified rules for survival and low-tech ingenuity, **GURPS Action 2: Exploits**-style.



## GURPS Action 9: The City

*Instigation.* Much as action stories need car chases, most have at least some scenes set in cities or other settlements (if not, get **GURPS Action 8: Twists**). This *can* be nothing but “fluffy” scenery. However, in a genre where the scenery affects the chases – not to mention the shootouts and hazards (get **GURPS Action 5: Dictionary of Danger**, too!) – it needs rules at least as “crunchy” as those for vehicles, weapons, and industrial car crushers. I aimed to provide these.

*Inspiration.* The obvious starting place was the **GURPS** supplement about “crunch” for cities: **GURPS City Stats**. I decided to go through it systematically and force myself to make each statistic matter to action stories – even if it seemed very far from what **GURPS Action** is normally about. This was *addictively* inspiring.

*Implementation.* My work consisted of taking a city stat; figuring out how it could plausibly or

entertainingly affect *Action* rules like BAD, Chase Rolls, and the myriad specific feats in *GURPS Action 2: Exploits*; and coming up with a bridge between the two that didn't turn the urban jungle into an administrative nightmare worthy of the city manager's office. I ended up having to do more research than is usual for *Action*, to provide accurate political terminology and real-world figures (e.g., literacy rates, skyscraper heights, the population of the world's biggest city, and even the effectiveness of nuclear weapons). The results are useful for a lot more than action stories.

## GURPS Boardroom and Curia: The Sospital Group

*Instigation.* A GM must roleplay and answer players' questions about "actors" in the game world. For NPCs, this is easy: Rough out a character sheet and play the part. For *groups*, this is trickier. *GURPS Boardroom and Curia* (like *GURPS City Stats*) helps the GM define social entities – here, organizations – with game stats. However, it involves design, which is too much work when you need something *now*. I decided to provide an interesting ready-made organization.

*Inspiration.* As an avid fan of medical dramas, I felt that a modern medical organization would be cool – especially since heroes often need patching up! *GURPS* already had examples of corporations and charities, so I didn't want to go *that* route. I decided that a secret, conspiratorial, even criminal group would be a fun twist on the humanitarian.

*Implementation.* Stats were easy; I followed the recipe in *Boardroom and Curia*, and ensured compatibility with *GURPS Action 1: Heroes* and *GURPS Social Engineering: Pulling Rank*, for PCs who work for or call on the group. Backstory was trickier, and the origin of many headaches – I'm a game designer, not a

novelist or scriptwriter (or doctor!). To fit the Sospital Group into the real world, I did much digging to get events, dates, salaries, and *laws* right, and to get a sense of plausible organization size and assets. Consequently, this supplement is useful in any modern-day campaign; the underlying premise is odd but not implausible, even for gritty realism.

## GURPS Dungeon Fantasy 20: Slayers

*Instigation.* I don't recall it being a thing in the 1970s or 1980s (I might have been clueless!), but somewhere along the line – *Hunter: The Reckoning* (1999)? – it became *de rigueur* for RPGs with monsters to feature specialized *slayers* of monsters. Not generalist heroes who'd kill monsters anyway, but experts optimized in defeating particular types of evil. I wanted this for *GURPS Dungeon Fantasy*.

*Inspiration.* *Dungeon Fantasy* already had the holy warrior, who specialized in slaying evil creatures and had a particular hatred for one class of them. However, the holy warrior was also a leader *and* heavy fighter like the knight, *and* a junior cleric. I felt a need to zoom in on the "slaying" part of the job description, and had a flash while doing so: reinvent key spells for this task (Banish, Final Rest, Remove Curse, etc.) as exotic *skills*, to let slayers escape the "cleric lite" role. I was also inspired to write rules for supernatural monster flaws, special anti-monster weaponry, and demonic talismans – all with wider applicability.

*Implementation.* This wasn't my first barbecue. I knew exactly how to create templates with enough cool abilities to carve out a niche yet enough general combat, stealth, and survival capacity to ensure the delver pulls their own weight when not slaying demons, mages, or undead. The hard part? Compiling the chapter of slayer gear – there proved to be a staggering

amount of applicable *stuff* in the *Dungeon Fantasy* series!

## GURPS Dungeon Fantasy 23: Twists

*Instigation.* Unlike *GURPS Action 8: Twists*, this project was *not* driven by a desire to prevent boredom. True hack ‘n’ slash fans find it fun to ascend a never-ending spiral of power and wealth! My objective was to restore elements of fantasy that RPGs had lost over the years: the window-dressing of feudalism and the “everything but the kitchen sink” attitude toward genre, particularly horror and sci-fi.

*Inspiration.* As with the other *Twists*, the original source material gave me everything. Titles, followers, and strongholds went back to *D&D* and preceded it, as they were part and parcel of the medieval societies that provided the swords, armor, and heraldic monsters that fantasy games coopted. Horror was always there, too – most famously in modules like *The Temple of Elemental Evil*, *Tomb of Horrors*, and of course *Ravenloft*. Other modules (left nameless to prevent spoilers, even after 40+ years) had spaceships and ray guns – and *Gamma World* was just sci-fi *D&D*.

*Implementation.* To put a quasi-medieval social twist on *Dungeon Fantasy*, I modified the Rank and Status rules to get titles; linked Allies to these; and invented quick-and-dirty guidelines for strongholds. Introducing horror was an exercise in researching the *Dungeon Fantasy* series to compile lists of foes and items, and all of *GURPS* for sinister takes on magic. The sci-fi

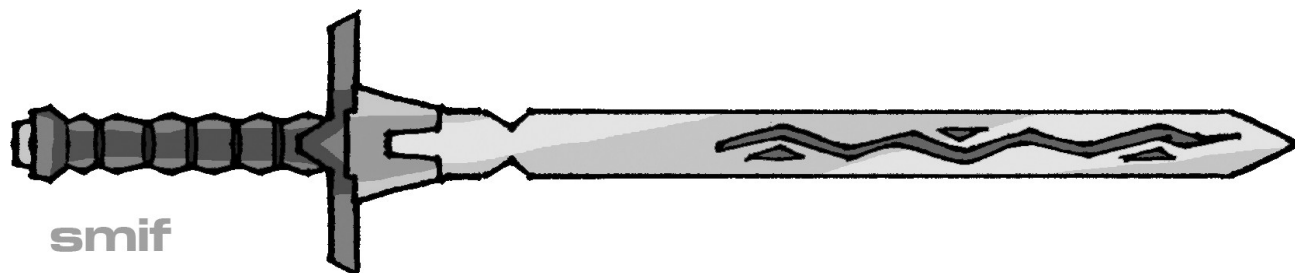
tie-in required me to explain how to keep tech from taking over through mandatory traits and cash costs, and by enforcing rarity and player vs. character knowledge.

## GURPS Dungeon Fantasy Career Guide

*Instigation.* By 2020, *GURPS Dungeon Fantasy* had been around for 13 years and become sprawling. Much of the new content was in the realm of character templates: A series that started with 11 professions had, through almost 40 supplements and a decade of *Pyramid* magazine, nearly *quintupled* that number. Moreover, many professions had inspired additional content – lenses, power-ups, gear, etc. – in *Pyramid*. It was time to index it all before it became unusable.

*Inspiration.* Indexes are often necessary but rarely inspired or inspiring. This one was no different; I was driven by obligation, not inspiration. I had no choice but to think very hard about *everything* people might want – templates, lenses, abilities, allies, equipment, etc. – and where it might be hiding. Creativity was limited to coming up with easily understood ideas of type (Cunning, Mystical, Warrior) and environment (Dungeon, Town, Wilderness), to make choosing a profession easier.

*Implementation.* This proved to be far more work than writing the same number of pages of original content. I had to comb through dozens of supplements and ‘zine issues to find not only all the professions but also every last fiddly bit that might be relevant to one of them, and



compile the many page references. Then I had to *double-check* the references, which was migraine-inducing. Since I did it, you don't have to. If you're running an "anything goes" *Dungeon Fantasy* campaign, *Career Guide* is sure to save your sanity.

## GURPS Dungeon Fantasy Encounters 2: The Room

*Instigation.* Relative to most RPGs, *GURPS* has a paucity of ready-to-use encounters, adventures, settings, and campaigns. Matt Riggsby – author of four *GURPS Dungeon Fantasy Adventure* volumes, one *Dungeon Fantasy Encounters* item, and one *Dungeon Fantasy Setting* – has worked hard to remedy that for *Dungeon Fantasy*. It was my turn!

*Inspiration.* Ready-made content is hard to integrate into an ongoing campaign. Refer to places in any but the vaguest way and you risk a terrible or impossible fit. Make it too large and it's difficult to explain why it isn't on maps – or why "informed" delvers like bards haven't heard of it. I wanted to give loving attention to the smallest, most generic unit of hack 'n' slash geography: the dungeon room. Yes, the idea came in equal parts from the movie *Cube* and the higher-dimensional spaces I'd studied as a physicist.

*Implementation.* Describing the basic room was easy. Adding random descriptions was *fun* – it took me back to my youth, when we'd generate *entire dungeons* procedurally through dice rolls. The devil was in the details: To make a gimmick room hard to notice and avoid easily, I had to carefully define the behavior of its doors and their thresholds, provide responses to likely player questions and actions (magical scrying, mining, splitting up, etc.), and give the GM advice on using the encounter interestingly their campaign. The results aren't hermetic but cover

all of the obvious pitfalls without being too heavy-handed.

## GURPS Dungeon Fantasy Encounters 3: The Carnival of Madness

*Instigation.* My motivation for *GURPS Dungeon Fantasy Encounters 2: The Room* held here, too: Alleviate the dearth of ready-made content for *GURPS Dungeon Fantasy* with an encounter that's portable between campaigns.

*Inspiration.* This one sprung directly from an encounter in one of my campaigns: *The Dawn of Magic* (which inspired *Dungeon Fantasy* in general). That campaign had elements of urban and epic fantasy, political drama, horror, and even romance to round out its dungeon and hex crawls. At one point I wanted to make a trek through settled lands interesting without monsters or bandits. At first I figured I'd have a "kid falls down a well" kind of scenario in a village, or an encounter with a merchant caravan selling rarities. Then I had a nightmare about clowns and knew the circus had come to town (that was also the origin of my "The Carnie" article in *Pyramid #3/114: Mind Over Magic*).

*Implementation.* This was pure fun! I let my imagination go wild coming up with stuff you'd find at a traveling fair: games, entertainment, food, circus animals, . . . and did I mention *clowns*? It wasn't difficult to scale everything up to dungeon-delver ability levels to provide serious challenges, tough fights, and worthwhile rewards without a dungeon. I had to establish ground rules to prevent *excessive* cheating, both at carnival games and on the meta-game level, but this was easy compared to *The Room*.

## GURPS Dungeon Fantasy Monsters 5: Demons

*Instigation.* Hack ‘n’ slash always needs more monsters, making this a safe bet. We had many generic monsters, some mythic ones, and guides to slimes and dragons. What next? I picked demons because they suit any dungeon with magic or evil (so, *every* dungeon) and don’t require elaborate fantasy ecosystems for survival – and no delver is likely to have a problem with destroying them.

*Inspiration.* I’d written *GURPS Dungeon Fantasy 20: Slayers*, with its demon-slayer, in February 2019. I’d written *GURPS Dungeon Fantasy 23: Twists*, with its *Demons and Darkness* advice, in April 2021. I figured both needed actual demons – and whatever cross-references and publication dates suggest, I wrote *Demons* concurrently with *Twists*. At first I considered a ready-to-use bestiary, but my fondness for old-school dice-rolling and the “build a bear” approach in *GURPS Dungeon Fantasy Monsters 4: Dragons* (and to some extent *GURPS Dungeon Fantasy Monsters 2: Icky Goo*) ended up guiding my hand.

*Implementation.* If I’d heard of a demonic ability or seen a demon in another game, I made sure I had it covered. As I said for *GURPS Dungeon Fantasy Encounters 2: The Room*, I’m from the era of dice-driven procedural generation, which was for monsters as well as dungeons, so I included lots of that. The only challenge was matching the folkloric and the mythic to *GURPS* stats. The result is slanted toward *Dungeon Fantasy*, though it’d also be useful for *GURPS Monster Hunters* or high-violence *GURPS Horror*.

## GURPS Dungeon Fantasy Treasures 4: Mixed Blessings

*Instigation.* Hack ‘n’ slash always needs more treasures, too. *GURPS Dungeon Fantasy Treasures 1: Glittering Prizes* covered mundane valuables; *Treasures 2: Epic Treasures*, overpowered magic items; and *Treasures 3: Artifacts of Felltower*, yet more fancy stuff. These followed the potent goodies of *Dungeon Fantasy 6: 40 Artifacts* and the kitchen sink that was *Dungeon Fantasy 8: Treasure Tables* (both would be *Treasures* volumes if written today). Reviewing those, I felt that a classic fantasy trope – loot with clever downsides – was missing and thus needed adding.

*Inspiration.* I didn’t want a collection of outright cursed treasures. While those are also a classic fantasy bit, they seemed to me like a better fit to a catalog of tricks and traps. So, I challenged myself to come up with unambiguously *useful* artifacts that weren’t unambiguously *positive*. This fueled my creativity far more than an order to create purely beneficial or harmful items!

*Implementation.* Magic-item creation outside the constraints of an enchantment system is easy, because you can define all effects by fiat without worrying about specific spells. Coming up with *game-balanced* artifacts is harder. I went with “major powers” – excessive DR, massive damage or healing, physical transformations, undetectability, etc. – and then invented downsides that suited either those upsides or the object’s kind (blanket, hood, shield, whatever) in a whimsical way. Behind the scenes, I made sure that power item values were consistent with the prices of the underlying physical goods suggested by *Treasure Tables*.



## GURPS Magic: The Least of Spells

*Instigation.* The **GURPS Magic** system dates to 1986. It was created for a specific setting (Yrth) and filled a fraction of a book (**GURPS Fantasy, First Edition**). Later efforts to flesh it out weren't always balanced, due less to effects than to point costs: Spells as skills could cost 1 point apiece, making them far cheaper than comparable advantages. I decided to offer spells whose power was in line with their costs, for gamers who wanted to adapt the system for "cantrips."

*Inspiration.* What ignited the creative process was answering a rules question: We have IQ/H and IQ/VH spells, but why nothing easier? I figured perks would upstage IQ/E spells, so I went with IQ/A. Ideas for such trivial magic



came from reviewing basic spells in **Magic** and imagining what's logically a step less impressive, dreaming up tricks archmages would teach the apprentices they exploit as cheap labor, and considering minor real-world technology that magic would replace in fantasy, perks from **GURPS Power-Ups 2: Perks**, and mundane skills. I was further inspired to offer rules covering who can cast these spells and how, with a related Talent: Hedge Magician.

*Implementation.* Inventing spells was easy! Everything was by definition IQ/A and without prerequisites. Most of the inspirational ideas suggested clearly defined effects. I needed to assign duration, cost, and time to cast – but at this power level, I could safely lean on "a second, a minute, or an hour," "1-2 FP," and "1-2 seconds," respectively.

## GURPS Magical Styles: Horror Magic

*Instigation.* As I mentioned for **GURPS Magic: The Least of Spells**, the **GURPS Magic** system dates to 1986. It reemerged in 1987 as the basis of creepy sorcery in **GURPS Horror, First Edition**. It was merely adequate there – optimized for fantasy, it didn't always feel right. Consequently, magic systems better suited to horror soon followed. My mission was to use the tools in **GURPS Thaumatology: Magical Styles** to adapt **Magic** to the purpose, too.

*Inspiration.* My muse was the depiction of magic in horror literature and cinema, of which I'm a fan. Sorcerers in horror fall into a few groups: Cults that hide behind secret rites and obscure symbols, recruit the easily brainwashed, conduct sinister rituals involving sacrifices, and menace society or even all of creation; unhinged loners who research forbidden lore in a quest to "Show them all!"; and eccentric occultists who follow ethnic traditions involving fortune-telling, potions, and poppets. Each suggested a style.

*Implementation.* Designing magical styles takes *work*. I reviewed every spell in *Magic* and every Magic Perk in *Magical Styles* – in depth, to make sure that no effect badly broke horror genre conventions. Each style used a different model: spells with prerequisites in tiers by social Rank for cultists, spells with no prerequisites but progressively higher levels of Magery for power-hungry loners, and spells with idiosyncratic alternative prerequisites for idiosyncratic folk magicians. As with *GURPS Dungeon Fantasy Career Guide*, since I did it, you don't have to.

## GURPS Template Toolkit 1: Characters

*Instigation.* Character templates first appeared as optional character-creation shortcuts – a bookkeeping measure in *GURPS Black Ops* (1997), a 6-page system in *GURPS Wizards* (1998), and finally 5 pages for GMs and 3 pages for players in the *GURPS Basic Set, Fourth Edition*. Later *GURPS* supplements exploited more advanced tricks that lived only in the minds of their authors. Some techniques were structural or organizational, but others were quite profound: designing templates in sets, using these to define settings, and even treating them as character-class systems that rely on hidden traits. I set out to show folks at home how to do this.

*Inspiration.* “Peak character template” is without doubt attained in such genre series as *GURPS Action*, *GURPS Dungeon Fantasy*, and *GURPS Monster Hunters*. Reviewing these – and having written dozens of templates! – provided all the fuel I needed.

*Implementation.* My work consisted of putting my thought processes into words. It's one thing to paste in a template from a previous project, erase the contents, and use my experience to design something new. It's another to explain *how to do that*. As I wrote, I realized that I went

into each project with an implicit picture of all the roles that suited the genre or setting, used categories I'd never spelled out, selected traits according to a decision tree found only in my head, and optimized everything without realizing it. I also fell back on some cheap tricks. Now everybody can do that.

## GURPS Template Toolkit 3: Starship Crew

*Instigation.* Gamers have opined that the *GURPS Template Toolkit* series should stick to general “how to” guides. There's no better teaching tool than *examples*, though. Sending people to *GURPS Action*, *GURPS Dungeon Fantasy*, or *GURPS Monster Hunters* would be disingenuous – those *inspired GURPS Template Toolkit 1: Characters*, but I wanted to illustrate its *use*. I elected to do so with a classic sci-fi subgenre that didn't enjoy a series: the adventures of the crew of a faster-than-light spacecraft.

*Inspiration.* Ideas came from all the starship-based fiction to which I'd been exposed since childhood. Real-world ship and aircraft staffing have led to consistency here: There's a captain or commander, and usually some button-and-knob-twiddlers (my “helmsman” and “operations officer”). Aboard bigger craft with more personnel, safe bets are an engineer for the vessel's health, a medical officer for the crew's, and mission specialists: loadmasters for freighters, science officers for exploration vessels, stewards for passenger liners, tactical officers for warships. Huge spacecraft have them all – and often enough people to recommend a security officer. These pigeonholes cover everybody in a typical novel, film, or TV series.

*Implementation.* Template design was easy. I followed the recipe in *Template Toolkit 1*, with *GURPS Space* and *GURPS Spaceships* open so that I didn't forget anyone. By being generic

about technologies and “everyman” traits – and offering lenses and customizations for smaller, bigger, and cinematic crews – the result was a quick-start guide suited to any starship saga.

## How to Be a GURPS GM: Combat Encounters

*Instigation.* **GURPS** isn’t complicated, but it *is* unusually comprehensive, with endless supplements filled with options yet few user-friendly examples of how to use it. While no supplement did more to demystify **GURPS** than *How to Be a GURPS GM*, it couldn’t cover everything in a finite page count. Among the most frequent questions I get is, “How do you set up a fair fight?” This was my answer.

*Inspiration.* My source of ideas was long experience as a GM: at the time of writing, 35 years of **GURPS** (36, if you count *Man to Man*) and 42 years overall. I’d run hundreds of battles – possibly *thousands* – involving combatants using everything from fists and rocks to ray guns. I’d learned many lessons, notably that in combat, numerical ratings often lie and players find interesting scene-setting, stakes, and surprises as fun and memorable as enemies.

*Implementation.* As with **GURPS Template Toolkit 1: Characters**, my work consisted of translating experience into words. A few false starts revealed the path: Warn people not to get hung up on stats, itemize reasons why stats can’t provide the full picture, propose a fuzzier alternative that recognizes that stats still do matter, frame everything in the context of what comes before and *after* the action, and offer tricks to the GM for adjusting and – if need be – *cheating* to get fun outcomes. Hopefully it’ll

let people run rewarding battles without decades of practice!

## How to Be a GURPS GM: Managing Expectations

*Instigation.* **GURPS** tries to be all things to all people. It tackles every style of play – from gritty simulationism to free-form storytelling – across every genre. Players enjoy unparalleled leeway during character creation. The GM is left to decide what to permit then and in play. Such is the price of “generic” and “universal.” *How to Be a GURPS GM* tackled this but often focused on specifics. My objective was to zoom out and get philosophical.

*Inspiration.* This time I drew on my experience not as a gamer but as the lead developer of **GURPS** for the previous 26 years. I’d written, edited, or contributed to hundreds of supplements; contributed to *Pyramid* for a decade; created **GURPS Fourth Edition** with David Pulver; and designed the **Dungeon Fantasy Roleplaying Game**. And I’d noticed patterns. My biggest brainwave was to treat each insight as its own essay, to enable readers to absorb the philosophy of **GURPS** in bite-sized pieces.

*Implementation.* Again I found myself trying to put abstract ideas into writing (I always seem to put myself in that position!). Fortunately, like the original *How to Be a GURPS GM*, this supplement had my many words on the SJ Games forums to draw upon. Thus, this proved to be an exercise less in composition than in compiling my own posts into a coherent form. I took my rambling and structured it, often with lists or bullet points, into concise advice. I think it worked.

# A Question of Atmosphere

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Roger Bell\_West

## Introduction

The “Hazards” section of the *GURPS Basic Set* lists a variety of atmospheric pressures, but largely conflates pressure and oxygen content. This article is an attempt to separate them and go into a bit more physiological detail.

It turns out that what mostly affects metabolic processes is the partial pressure of oxygen – that is, the percentage of oxygen in the atmosphere multiplied by its pressure. (On Earth, oxygen makes up about 21% of the air, so the partial pressure of oxygen at sea level is 0.21 atm.) As long as that is maintained at something like a normal level, it doesn't much matter whether you're in a thin oxygen-rich atmosphere or a thick oxygen-poor one.

Note that on Earth each 10m (33 feet) of seawater increases pressure by roughly 1 atm. Divide this distance by local gravity and fluid density if diving in other environments; in the methane seas of Titan, it would be 1 atm per 170m (560 feet).

Most diving on Earth starts at sea level, because that's where the sea is, but some is in mountain lakes, and on other planets the surface air pressure will be different (Titan, again, has a surface pressure of 1.45 atm). These rules can deal with that.

## Atmospheric Pressure

There are two ways of dealing with a change in atmospheric pressure: keep it out, leaving your body in a normal environment inside a protective suit, or adapt to it. A human body is mostly water, which is relatively incompressible:

if the pressure inside a body is the same as outside, *mostly* this doesn't change things very much...<sup>1</sup> These rules assume that you are not wearing protective equipment unless otherwise stated. They replace “Atmospheric Pressure” (pp. B429-430) and “Pressure” (p. B435) except as noted.

*Trace* (up to 0.01 atm): treat as Vacuum (see p. B437).

*Very Thin* (up to 0.5 atm): vision rolls are at -2 without eye protection (including Nictitating Membrane), and other moist surfaces tend to dry out quickly too: add 1 to all quoted FP costs for battles, hiking, overexertion and running/swimming (p. B426) if not wearing protective gear. This additional FP loss is from dehydration, and may be recovered with access to ample water supplies. The Sealed trait prevents all these penalties.

*Thin* (up to 0.8 atm): Vision rolls are at -1 without eye protection. Sealed prevents this penalty.

Denser atmospheres have no direct effect (but see notes below on specific gases). A planetary atmosphere above 1.2 atm is likely also to be quite hot.

(30+ atm): high-pressure nervous syndrome causes pain and nausea (p. B428). Rapid pressurisation (more than 1 atm per 3 minutes) can bring this on at 15 atm. Pressure Support 2 prevents this to 100 atm.

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1 This is why you should never dive with a cold. Trapped air inside the sinuses is compressed by water (and air) outside, and the differential can crack bone. And sometimes your nose can get blocked *after* you've pressurised...

## Partial Pressures of Oxygen

Oxygen is necessary for life, but too much of it (hyperoxia) can be just as deadly as too little (hypoxia).

*Very Scarce* (up to 0.1 atm): if you are relying on atmospheric oxygen, you suffocate (p. B436); Doesn't Breathe prevents this.

*Scarce* (up to 0.17 atm): treat as Thin atmosphere (p. B429) for purposes of FP loss and altitude sickness.

*Slight Excess* (0.3+ atm): there is little effect on physiology except for a sense of well-being; reduce FP costs for exertion by 1, but not below 1. However, fires are started more easily: treat items as one flammability category higher than normal (p. B433). Items that pass beyond Super-Flammable can be accidentally ignited by static electricity unless precautions are taken. On a planetary scale, local ecosystems will have evolved to withstand frequent fires.



*Excess* (0.5+ atm): oxygen toxicity affects the lungs. Make an HT roll every hour and during any exertion that requires the expenditure of FP, starting at +4 (-1 per 0.5 atm of oxygen above 0.5) and dropping by one point per hour; if a roll is failed, take 1d toxic damage and suffer -2 to DX from coughing fits for a minute or two. Treat items as two flammability categories higher than normal, three at 1+ atm.

*High Excess* (1.6+ atm): oxygen toxicity also affects the central nervous system. Make an HT roll every ten minutes: failure indicates a seizure (p. B429) and 1d toxic damage. Treat items as four flammability categories higher than normal.

## Other Gases

Other gases are also toxic in sufficient quantity.

*Nitrogen* (0.79 atm at sea level on Earth): one hazard is decompression sickness, or “The Bends”: see p. B435. When starting from a pressure other than 1 atm, use the ratio of dive pressure to local surface pressure: if you dive in a mountain lake 8,000 feet up, you’ll reach twice the surface pressure (0.74 atm) at a mere 7m (24 feet) below the surface.

Nitrogen can also produce an insidious intoxication, nitrogen narcosis: treat each full 1 atm of nitrogen as one drink per hour (pp. B439-440). You may not substitute Carousing for HT; you may buy a Nitrogen Tolerance perk or Nitrogen Intolerance quirk, which work just like the corresponding Alcohol Tolerance/Intolerance traits. If you remain at a given partial pressure, you stay at the same state of intoxication and don’t need to make repeated HT rolls. Having Pressure Support at any level renders you immune to all these effects.

*Carbon Dioxide* (0.01 atm at sea level on Earth): toxic from 0.07 atm, requiring an HT roll every minute (-1 per additional 0.01 atm) to avoid 1d toxic damage.

## Equipment

It is technically much simpler to adjust the amount of oxygen in your breathing mixture than to maintain a different pressure from your environment. Not counting the weight belt, a SCUBA rig isn’t heavy enough to sink a human body, while even a modern “hard” glass-reinforced-plastic atmospheric diving suit weighs around 700 lbs.

However, at sufficient pressure, the fine-tuning of gas needed to steer between hypoxia and hyperoxia, and the extended times needed for decompression (*The Bends*, p. B435), make the hard suit the more effective option.

A theoretical option, plausible at TL9, is the use of a fluid breathing medium, an incompressible liquid such as a fluorocarbon which can have oxygen dissolved in it. This allows other gases to be removed, and only the correct amount of oxygen to be supplied, whatever the ambient pressure. The main real-world problem with this system is that while an external system can supercharge the liquid with oxygen, the human lung can only push a little carbon dioxide back out again; the lungs need to move about as much volume as in normal breathing, but of a fluid more than a thousand times as dense as air. It seems likely that any working system will also involve mechanical ventilation – or perhaps a CO<sub>2</sub> scrubber plumbed directly into the diver's blood supply.

All the diving gear in *High-Tech*, both SCUBA and hard-hat, is of the sort that keeps the diver at the same pressure as their surroundings. Modern rules of thumb allow air diving to about 100 feet (4 atm, nitrogen narcosis being the limiting factor), and it's been done to 200 feet (7 atm) by particularly healthy and lucky divers; below that, increasingly sophisticated gas mixtures are used, decreasing oxygen and replacing nitrogen with helium or even hydrogen. This is generally known as “technical diving”, and the mixing is done beforehand: a deep diver may carry two or three separate pre-mixed gas tanks for use at different depths. The ambient-pressure open-sea diving record stands at 1,752 feet (54 atm).

*Reducing Respirator*: reduces the partial pressure of oxygen in inhaled air, usually via a chemical scrubber. Duration is 4 hours at TL7, 8 hours at TL8; 5 lbs.; cost \$2,000. (This is not something

that exists in the real world; there's very little need for humans to work in oxygen overpressure, and when they do they can just wear conventional breathing apparatus.)

*Atmospheric diving suit*: effectively a miniature human-shaped submarine made of aluminium or glass-reinforced plastic, the ADS allows diving deeper than any soft suit, at least 3,000 feet (91 atm). Joints are designed to maintain a constant internal volume, though the manipulators are still basic clamps (Bad Grip 4). Air is recycled through two 25-hour carbon dioxide scrubbers (of which one is normally kept as an emergency reserve). TL7: DR 100, 1,100 lbs. TL8: DR 40, 700 lbs, \$250,000.

## Skills

Scuba skill is used for ambient-pressure free diving (i.e. without a supply of air from the surface). Environment Suit (Diving Suit) is used for surface-supplied ambient-pressure dives, and for all hard suits whether surface-supplied or not; hard suits are a separate familiarity from ambient-pressure suits.

Every excursion into a region of different pressure from the one you're living in is normally planned: roll the appropriate skill to make sure there's enough air available, account for decompression stops, and so on, at -2 or more for a technical dive. Consequences for failure range from unnecessary expense and shorter working time to gas toxicity and decompression sickness.

This planning roll benefits from equipment quality (both dive tables and, from TL8, dive computers): even +TL/2 for best possible equipment (see p. B345) is not out of reach, though this will mean not only good construction quality but a significant amount of custom-fitting and physiological modelling for the individual user.

## GURPS Renaissance Venice: Merchants of Venice: Designer's Notes

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Matt Riggsby

This book started with an error. When I pitched *GURPS Renaissance Venice: Spies of Venice*, Steven Marsh mentioned that he'd initially misread the subtitle as "spices of Venice," which he admitted would have been on-brand for me. My reaction to that was "OK, game on," and I started to think about what kind of book a prospective "Spices of Venice" would be. I had, after all, already informally committed to a second *Renaissance Venice* book so that *Spies of Venice* wouldn't be out there by its lonesome.



What I arrived at is that it could be a book about Venice's shipping and mercantile institutions and practices. Venice was mostly a mercantile power, and at the very least some understanding of how those practices and institutions worked and what merchants of the period bought and sold can provide important background for Venetian adventures, and indeed adventures in the region as a whole. I pitched the book under the "Spices of Venice" title which was ultimately rejected as being potentially confusing, as I expected, but the book itself got a green light.

Of course, there were other changes along the way. One of the other early ones was trimming entries in the outline on shipping in light of the at-the-time upcoming *GURPS Vehicles: War Galleys*, which I learned about only when I pitched my own book. That saved me the trouble of coming up with stats for galleys. Playtests and peer review didn't lead to profound changes in existing content, but it did lead to a bunch of new sections, notably the event table and the trading cheat sheet. The playtesters wanted more play aids and things they could use at the table alongside the background cultural information and historical narrative, and I was happy to provide them.

While this book pulled together information from a broad range of sources, there are two papers which I feel form the core of the kind of quantitative information certain kinds of gamers really want:

Ashtor, E. "Spice Prices in the Near East in the 15th Century," *Journal of the Royal Asiatic*

*Society of Great Britain and Ireland, No. 1* (1976).

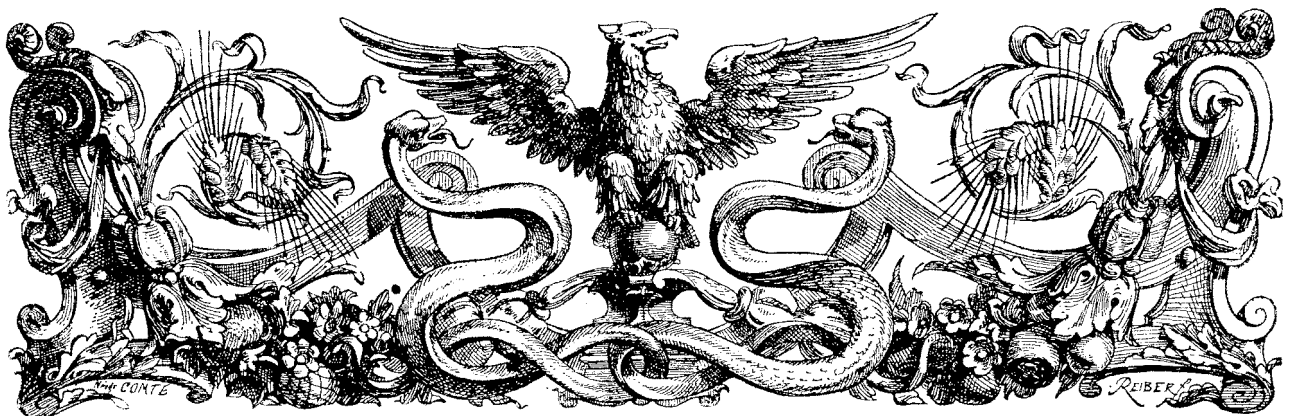
Lane, Frederic C. "Pepper Prices Before Da Gama," *The Journal of Economic History* 28, No. 4 (1968).

These papers between them provide the raw data on which the spice price tables in p. 12-13 are based. There was some work involved in winnowing several prices for a number of years down to one representative price and the ever-present difficulty involved in converting real-world currencies into the GURPS \$ (I converted via nominal values in silver currency, though that ignored inflation rates through the 15th century), but this is as close as one is going to get to historically accurate prices in a tabletop role playing game.

I considered but ultimately resisted trying to build generic guidelines for low-tech trade, a sort of *GURPS Traveller: Far Trader* for TL4. Instead, it became clear that I needed to lean into the specific rather than the generic. Broad rules are good for broad books, but *Merchants of Venice* was about a particular time and place and was a work suited to all the local color and details, with immediate portability to other settings a very distant concern. Rather than the kind of free and open trade arrangements implied by *Far Trader*, trade around the Renaissance Mediterranean was embedded in its own distinct social context characterized by a lot of social barriers and local regulations making

commerce far less efficient. Privilege and social standing was just as important as controlling costs and gathering market information. And more to the point, it provided a lot of opportunities for role playing adventures. Trade wasn't just getting to market fastest with the best goods; it was also getting some high-born wastrel to vouch for you and bribing your way past a notoriously corrupt port master with very specific tastes. It's all very particular to its place and time, but it's all of a piece with the rest of the social and political context laid out in the other *Hot Spots* Renaissance works.

Nevertheless, the concepts are portable even if the numbers and exact details are not. The organization of trade convoys as an act of state is largely unique to Venice, but other parts of the process can be ported to other campaigns: engaging brokers and translators in foreign ports with the additional twist that translators in low-tech settings are rare and often have dubious loyalties, coping with imperfect market information and states of supply and demand which have changed since the last time news was available, dealing with customs, options for bribery and circumventing restrictions, and so on. While the exact modifiers presented in *Merchants of Venice* are surely not applicable to all campaigns (let alone the price lists which are very specific to their time and place), the underlying ideas are ones which GMs and players can use to make mercantile activity as an opportunity for role playing, not just juggling numbers to make a profit.







## Ingvar Mattsson

Clearly the Decan for the College of Cheese should be Babybel.

Mr Carnegie as a character was not, technically, designed to pass on in the first scenario, just in “one of the first,” but the temptation seemed to have caused our GM to have the algae ropes do their thing in the first session though. But, yes, the character was definitely created with the intent of being permanently taken out of action very early, and my memories say that Mr Nordmann was pretty much ready to go before the first session was played.

In a response in issue #3’s letter column, Roger writes:

On the other one wonders how much it would take to get professional-level video producers interested.

I suspect that in these times, simply recording a play session (suitably agreed before-hand), with maybe 2-3 hours worth of play is a good starting point. I don’t know to what extent the snazzy play sessions I have seen are pre-scripted or not (they feel relatively unscripted, but that may just

be a sign of being extremely scripted), but having some material to start from would most probably make it easier to produce an edited result later. It may also be an idea to see if there’s a few people that would be amenable to live-streaming a gaming session. And, for *GURPS* especially, it may also be really good having well-experienced players designing a character and explaining why the build looks like it does.

## David L Pulver

I read and enjoyed your article on Immediacy and Narrative in *Path of Cunning 3*, especially the importance of connection between character and setting; I find such insights into how other people run their campaigns very useful as a game designer. (As an aside, I’ve played one Amber game, but I don’t recall ever doing something as weird as 3 PCs in one body ...)

I’ve noticed the issue of temporal flow is sometimes crucial to the sense of narrative. My own campaigns tend to take an old school approach of assuming there is no real beginning or end to events; player characters are living in an ongoing world without any sort of scene structure or downtime. This is not to deny some

structure, in the sense of missions or explorations of particular places, or significant events like weddings; just that they were not differentiated in game mechanical terms, especially once I was awarding experience at the end of each play session.

*John: The Amber game wasn't really three PCs in one body, but three players jointly controlling a single character. The way of doing this that emerged had the players running separate facets of a single personality. They were playing, approximately, the id, the ego and the superego.*

*John: I'm with you on story being events within an ongoing world, rather than the world being*

*constructed especially for the story, but I don't think of that as being old school. It's more a question of sustaining a sense of reality in the game, rather than assuming the fictional world works like a TV series.*

## We Also Heard From

DMW Carol, David Cantrell, Onno Meyer, Sean Punch, David L. Pulver, Dan Smith, and the commenters on the Steve Jackson Games forums.

*Thanks to Bill Burns, Michael Cule, and Amanda "Dr Bob" Kear for help with distribution and publicity.*

## Layout Gremlins

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Douglas Cole, John Dallman and Jean Sexton

<b>ST:</b> 0	<b>HP:</b> 4	<b>Speed:</b> 5.25
<b>DX:</b> 11	<b>Will:</b> 8	<b>Move:</b> 5
<b>IQ:</b> 12	<b>Per:</b> 16	
<b>HT:</b> 10	<b>FP:</b> 6	<b>SM:</b> -6
<b>Dodge:</b> 5	<b>Parry:</b> N/A	<b>DR:</b> None

**Traits:** Bad Temper, Compulsive Behaviour (mess up document files), Danger Sense, Hard to Kill 4, Netrunning 1 (*Psionic Powers*, p. 31).

**Skills:** Artist (Computer Graphics)-10, Computer Operation/TL8-14, Electronics Repair (Computers)-11, Netrunning-15, Psychology (Human)-12, Stealth-16, Writing-11.

**Class:** Younger Thing.

**Notes:** Layout Gremlins appeared when traditional gremlins (*Weird War II*, p. 117) got bored with messing with computers in the mid-1980s, and realised that there was far more fun in spoiling the things that humans were trying to *create* with computers.

Nowadays, being a skilled layout gremlin is a traditional trade for the more patient gremlin. The new generation haven't yet realised that introducing misspellings on Twitter makes no real difference, but the psychology behind the Internet of (younger) Things was inspired.

# Modern Coilguns

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Roger Bell\_West

Water, fire, air and dirt  
Fucking magnets, how do they  
work?  
— Insane Clown Posse, “Miracles”

They may not have much obvious use: the most serious of them is a 20-lb weapon that has less muzzle energy than a .22 pistol. But coilguns are now being built and sold, and some enterprising PC may find a use for them.

Magnetic accelerator weapons in general are covered in *GURPS Ultra-Tech*, pp. 141-143. These aren't like those; they throw heavy ammunition quite slowly, and without spin-stabilisation the shot quickly tumbles in flight.

All these weapons operate in basically the same manner: a lithium-polymer battery charges a series of capacitors. The top round is mechanically stripped from the magazine and loaded into the barrel; the capacitors rapidly discharge into magnetic coils wrapped around the non-ferrous barrel, which fire in timed sequence to pull the round down the weapon at increasing speed.

Projectiles are inert steel, and at these low muzzle energies can often be reused if they haven't hit hard targets. (An exact barrel fit is not required.) For practice and familiarisation, shot power can be stepped down, which may also allow faster firing.

## Operation

These are not designed as soldier-proof weapons; most of the parts are 3d-printed, some models have external wires, they're not waterproof, and overall they all have HT 9 and DR 2 rather than the usual 10 and 4.

The EMG-01B and GR-1 have replaceable batteries, but they don't have quick connectors: two Ready manoeuvres to dismount a battery, two more to connect a new one, and several seconds while the on-board computer restarts (five for the EMG-01B, four for the GR-1). The EMG-02 uses commercial batteries which can be changed like magazines, though there's still a startup time.

Most of these weapons can overheat after sustained fire. For EMG-01, e-Shotgun and GR-1, after five shots, the weapon should be allowed to cool for 30 seconds; until this is done, make an HT roll to avoid a misfire for each further shot.

## Weapons

ArcFlash EMG-01B (2018-): The first coilgun sold fires 0.25” diameter 0.75” long steel dowel with 4.7J muzzle energy. Its 6S 1Ah LiPo battery weighs 0.4lb (not included in weapon weight) and powers it for 200 shots.

e-Shotgun (2022-): This compact weapon fires aerodynamic steel discs of about 0.6” diameter. Its battery powers about 600 shots at up to 16J, but is non-replaceable and must be recharged *in situ*. It has an unusual double magazine which holds 25 shots in each of two separate stacks; it must be removed, rotated and reinserted to switch from one to the other.

ArcFlash GR-1 “Anvil” (2022-): This massive weapon fires 0.5” diameter steel dowel in lengths of 1-2” (it needs to be adjusted for each different ammunition length). Its 6S 3.3Ah LiPo battery weighs 1.7lb (not included in weapon weight) and powers 40 shots at 100J, the maximum muzzle energy.

To operate the GR-1 first insert and connect the battery (each action is a Ready manoeuvre), then turn on the weapon (Ready, and 4 seconds while the onboard computer starts up). During this wait you can also insert the magazine (Ready). Changing magazines works as with any other magazine-fed firearm.

Charging for a full-power shot takes 3 seconds (done by holding the trigger half-back): the integral targeting laser blinks while the weapon is charging and turns to a solid beam when it is ready to fire. (*High-Tech* pp.156-157, but with no ability to adjust the laser this is not a useful sighting aid.)

Discharge is quiet at about 90 dB(A), but produces a moderate magnetic pulse; the manufacturer suggests that pacemaker users should stay 50 feet away. Any Electrical devices nearby must make an HT+2 roll for each shot, +1 per yard distant, or malfunction temporarily; on a critical failure they shut down and need repair/replacement.

The GR-1 also includes a low-power flashlight.

ArcFlash EMG-02 (2023-): a development of the EMG-01B with elements from the GR-1, using a commercial Li-Ion cordless tool battery (e.g. a 10Ah 60V unit for \$90 and 2 lb, which

provides 300 full-power shots) rather than the more temperamental LiPo.

This weapon fires 0.3125" or 0.25" diameter by 1" length steel dowel at 250fps with a maximum muzzle energy of 20J. Startup time including an initial capacitor charge is 11 seconds; the weapon also offers a 3-round burst mode and fully-automatic fire.

## Gauss Weapons and the Law

These weapons are often not regarded as firearms, either because they do not use gunpowder or, where laws have been written more generally, because the muzzle energy is so low. Arcflash will not supply its weapons to addresses in Delaware, Illinois, New Jersey, Rhode Island, or the District of Columbia, or to certain counties and cities in California, Connecticut, New York, Pennsylvania and Washington.

In the UK such a weapon may perhaps be owned with a full firearms certificate; in Canada, the EMG-01B is too low-power to count as a firearm, while the GR-1 and EMG-02 could legally be possessed by the holder of a firearms licence (unless lawmakers choose to regard it as "military-style").

### Guns (SMG)

TL Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Cost	LC
8 EMG-01B	1d-3 cr	0	3/8	4.8/0.2	5	18	9	-5	\$800	4
8 e-Shotgun	1d-2 cr	0	6/12	7/2	3×5/10	25×2	9	-5	\$1,350	4
8 EMG-02	1d-2 cr	0	8/50	9.7/0.9	3 or 8!	15	10	-5	\$1,600	4

### Guns (Rifle)

TL Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Cost	LC
8 GR-1 Anvil	1d cr	0	10/100	20/0.9	1/3	10	13	-7	\$2,500	4

# GURPS Steampunk: The Broken Clockwork World: Designer's Notes

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Phil Masters

As I'm a roleplaying games writer rather than a fiction author, I don't get the traditional "Where do you find your ideas?" question, but if I did, the answer would vary by project. In the case of *The Broken Clockwork World*, it's a combination of circumstances, commercial interest, and most interestingly, visual images.

Steve Jackson Games wanted a bunch of 5-6,000 word short works for a Kickstarter project, and one of the requirements was to use readily available artwork – the specific options I chose being the work of an artist named Tithi Luadthong, available on the Shutterstock Web site. Actually, I wanted to write something that I could link to my then-fairly-recent work on the 4th edition *GURPS Steampunk* line, and the permitted images were a little short of specifically steampunk-relevant works; however, Luadthong had done some things I liked and could use, some of which reminded me, in a rather obvious way, of the old metaphor of pre-20th-century science describing a "clockwork universe", which seemed doubly relevant here.

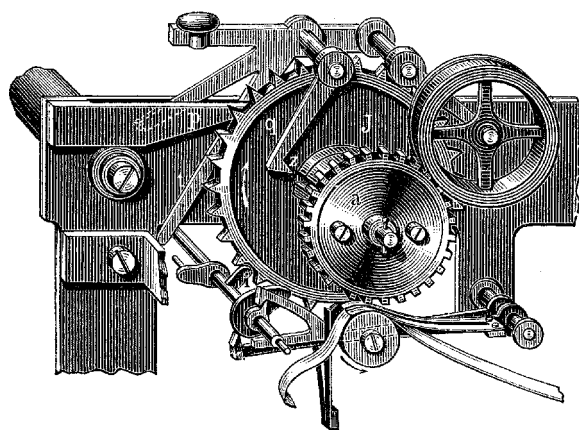
*What if the clockwork broke?*

Steampunk doesn't have to be just another variation on the themes of *The Difference Engine*, and steampunk fantasy doesn't have to be just Tolkien in top hats or Victorian elves. I outlined a world of cogwheels, mundane and cosmic, and then inflicted a cosmic disaster on it. Attempting to describe this whole world in 5,000 words might have been overly ambitious, but ironically I could reduce the load by doubling up on worlds, tying the project to another *GURPS* book; Bill Stoddard's *GURPS*

*Fantasy: Portal Realms*. My fantastical steampunk setting transformed into a mystery on the other side of some classic fantasy portals, and then the whole thing could also be tied up to a couple of other extant *GURPS* works.

(Like I said, commercial considerations are never entirely absent when a project is taking shape.)

With half my setting being Our World But With Portals and the other half being a fragmented mystery, I could hit and run to that tight word count, suitably amplified by that pleasingly lurid artwork. I'm actually quite pleased with the results; I don't know if or how people are using it, but as a small embellishment to the *GURPS* line, I think it's effective enough.



# Generalists in Action

Paul Blackwell

## Introduction

The generalist, able to turn their hand to almost any area of competence, is a well-established concept in fiction and gaming. *Buddies and Loners* (*Pyramid* #3/53) looks at super-competent all-rounders in *GURPS Action*, with its 350 point Ultimate Action Hero template and lenses aimed at the solo character or duo. Alternatively, the generalist can be seen as a well-defined team role in its own right, plugging the gaps in a team's capabilities while remaining at the same level as other individual members and without overshadowing them. The template here is aimed at such team players as well as lower-powered solo adventurers.

The template is designed at the 250 point level, as is standard in *GURPS Action*. The details are inspired by *GURPS Action 1: Heroes* and *GURPS Action 4: Specialists*, but neither is needed to use it.

## Action Generalist

250 points

A specialized generalist, with useful defaults in a wide range of skills, at the levels 13, 12, 11 and 10 for Easy, Average, Hard and Very Hard skills respectively. Those covered include all of the 'Suitable Skills' from *GURPS Action 1: Heroes*, pp. 20-21 except Jumping and some of the unarmed combat skills, which are available as Background skills.

**Attributes:** ST 11 [10]; DX 14 [80]; IQ 14 [80]; HT 14 [40].

**Secondary Characteristics:** Damage 1d-2/1d; BL 24 lbs.; HP 11 [0]; Will 14 [0]; Per 14 [0];

FP 11 [-9]; Basic Speed 7.00 [0]; Basic Move 7 [0].

**Advantages:** Dilettante (Action) [5]†; Jack of All Trades 3 [30]; and Luck [15]. • A further 25 points chosen from among lens advantages‡, ST +1 or +2 [10/level], HP +1 to +3 [2/level], FP +1 to +6 [3/level], Ambidexterity [5], Background Knowledge (Any) [1/perk]\$, Charisma [5/level], Combat Reflexes [15], Contact Group [varies], Cultural Adaptability [10], Danger Sense [15], Daredevil [15], Eidetic Memory [5], Fearlessness [2/level], Fit [5], Gizmos 1-3 [5/gizmo], Hard to Kill [2/level], Intuition [15], Rapid Healing [5], Sensitive [5], Serendipity 1 [15], Wild Talent 1 [20], or replace Luck [15] with Extraordinary Luck [30] for 15 points.

**Disadvantages:** -20 points chosen from among Code of Honor ("Stay bought") [-5], Compulsive Behavior (Learning skills or new challenges) [-5\*], Curious [-5\*], Delusion (I am an expert in everything) [-5 or -10], Duty (Agency, mob, service or similar; 9, 12 or 15 or less) [-5, -10, or -15] or Duty (Agency, mob, service or similar; Extremely Hazardous; 9, 12 or 15 or less) [-10, -15, or -20], Fanaticism (Employer, nation or service) [-15], Greed [-15\*], Honesty [-10\*], Intolerance (Rival nation, narrow specialists or other large group) [-5], Overconfidence [-5\*], Secret (Past crimes) [varies], Sense of Duty (Team) [-5] or (Nation) [-10], or Social Stigma (Criminal Record) [-5]. • A further -20 points chosen from the previous list or Basic Speed -1 [-20] or Basic Move -1 [-5], Bad Temper [-10\*], Bully [-10\*], Callous [-5], Chummy [-5] or Gregarious [-10], Impulsiveness [-10\*], Insomniac [-10 or -15], Jealousy [-10], Loner [-5\*], No Sense of Humor

[-10], On the Edge [-15\*], Selfish [-5\*], Stubbornness [-5], or Workaholic [-5].

**Primary Skills:** Guns (Pistol) (E) DX [1]-14 and Stealth (A) DX-1 [1]-13.

**Secondary Skills:** *Either* Brawling (E) DX+1 [2]-15 or Karate (H) DX-1 [2]-13. • *Either* Judo (H) DX-1 [2]-13 or Wrestling (A) DX [2]-14.

**Background Skills:** Computer Operation (E) IQ [1]-14 and Driving (Automobile, Heavy Wheeled, or Motorcycle) (A) DX-1 [1]-13. • 6 points on any combination of Guns (Any other specialty) or Jumping, both (E) DX [1]-14; Boxing, Driving (Any other specialty) or Sumo Wrestling, all (A) DX-1 [1]-13; Research, Soldier, Speed-Reading or Streetwise, all (A) IQ-1 [1]-13; Law (Police) (H) IQ-2 [1]-12; adding optional secondary skills, increasing any existing skills, or adding skills from any one lens‡ or any other suitable skills.

\* Multiplied for self-control number; see p. B120.



† Dilettante is from *The Path of Cunning*, issue 2, p. 15.

‡ This template does not take a standard Action 20 point lens. Instead, use the **Skills** list from one of the standard lenses to suggest Background Skills, and use the corresponding **Social Traits** list to broaden the range of optional advantages. If **GURPS Action 1: Heroes** is not available, just spend some points on any traits appropriate to the character's current or former occupation or way of life, such as the Law (Police), Soldier and Streetwise skills for law enforcement, military and criminal backgrounds respectively.

§ Background Knowledge is from **GURPS Power-Ups 2: Perks**, p. 16. If that is unavailable, then instead take one or more Dilettante perks, each giving the usual default for *four* specialties of Area Knowledge.

## Customization notes

As noted in the initial description, the template gives many defaults at useful levels, because of the combination of high attributes, Jack of All Trades, and the Dilettante advantage. These cover all skills that have attribute-based defaults (provided they make sense in the setting and are permitted by the GM) and all those that make up Dilettante (Action). Jumping and the unarmed combat skills are not included, as using them at default does not make sense, but all can be selected as Secondary or Background skills.

A wide range of roles can be filled even before optional background skills are chosen. If self-sufficiency is the priority, background skill points can be spent to boost skills that are widely useful (e.g. First Aid-14 for one point, whereas the default is 13) or where higher skill levels are particularly worthwhile (e.g. Climbing or any combat skills). It is always worth considering increasing points spent on a chosen

unarmed combat skill, for the extra options or bonuses. On the other hand, it is possible to give extra emphasis to filling a particular technical niche: spending four points gives any Hard skill at 14, for example.

As it stands, the template includes all of the positive traits from the Basic Action Template in *GURPS Action 4: Specialists*; to meet the standards set in Lean and Mean (*Specialists*, p. 7) simply include +1FP and Fit in the optional advantages selected.

## Variants

Because of its high DX and HT, the template gives high values for Basic Speed and Basic

Move. It would not be unreasonable to Basic Speed -1 [-20] or Basic Move -1 [-5] for be taken without counting against the normal disadvantage limit, potentially giving a further 5 or 20 points to be spent on optional advantages.

Some of the optional advantages could be replaced by a some or all of a power-up from *GURPS Action 4: Specialists* that does not have pre-requisites: Extra Life, Just That Good, Special Agent, Survivor. For a generalist with a particular emphasis, replace up to 25 points of optional advantages with some or all of a skill set from *Specialists* instead.

## Failing the Bechdel Test

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Carol and Jaine

“Look, don’t whinge about the lack of ideal men. Design one!”

“OK, hum ... Strength, average, don't like muscle-macho. Dexterity, graceful, 12. Want him good with his hands. IQ ... 9, don’t like them too bright.”

“Health?”

“Oo, plenty of that, 15.”

“Handsome, no more – don’t want him getting too carried away with his own looks. Tall and bendy. Very Wealthy.”

“What are these Advantages? ... no, Absolute Timing doesn’t do that. ... aha, Flexible. Immunity to Disease sounds good.”

“So does Rapid Healing.”

“Yup, but there’s more stuff in the Disadvantages. Low Pain Threshold.”

“Good, don’t want to have to work too hard.”

“Combat Paralysis?”

“Nah, don’t want him to be a liability. Compulsive Behaviour, in love with you, though.”

“Gullibility? No, not a good idea, he wouldn’t stay Wealthy. Weak Will, sounds good.”

“Skills?”

“Oh ... Erotic Art. Finance. Housekeeping. Does he need any more?”



## GURPS Furrries: Designer's Notes

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William H. Stoddard

Writing a furrries supplement for *GURPS* was a long-standing goal of mine. I no longer have my first sketches of outlines, but I started thinking about the subject a good part of a decade ago. The project took a long detour in 2018, when my thoughts on template creation rules for furrries led to a discussion with *GURPS* line editor Sean Punch on what became *GURPS Template Toolkit 2: Races*. After that supplement came out, I came back to my original inspiration, which took the form of a book without general template design rules – but lots and lots of specific templates.

In fact, I came up with more templates than made it into the final published version! My main focus was on classic “funny animal” races: roughly human-sized and human-shaped, based on vertebrate species, and portrayed sympathetically as heroes of their personal stories. But I put in some more exotic possibilities, trying to explore the margins of the genre. The playtesters recommended removing a few of them, whether to make room for popular furry types (some of them also exotic, such as the shark-based *samebito!*) or simply because they didn't seem well suited as potential player characters. Now, though, I can reprint them.

The Wolf-Man was meant to represent the Hollywood portrayal of a human being cursed with lycanthropy; I removed it, but retained the more benign Lupine template. The Ceta and Pixie explored the extremes of body size, large (SM +2) and tiny (SM -7); the Ceta was also confined to the oceans, and the Pixie's “animal” aspect was insectile rather than vertebrate, unlike any of the other races in the book. (I toyed with the idea of a different invertebrate-based “furry,” a snail-based centauroid, but didn't take it up seriously.) The Faun fell under the heading of *Furry Superior*, having powers

with the Nature modifier, but its inability to speak and problems with technology and urban settings limited its potential as a player character. However, I had fun designing all of them, and I hope readers of *GURPS Furrries* will find them interesting.



### Wolf-Man

3 points

Biologically realistic. A human partially transformed into a wolf (*Canis lupus*), perhaps by a curse or Infectious Attack – or the reverse! This template can serve as the basis for an Alternate Form, if you're furry only part of the time.

The basic template doesn't assume any mental changes, other than lower IQ, as more of the brain is devoted to perception and movement. Inability to speak is the result of changes in the anatomy of the vocal tract. However, you're not regarded as a person, but as a frightening

monster without rights, even if you're completely innocent.

**Attribute Modifiers:** DX+2 [40]; IQ-4 [-80].

**Secondary Characteristic Modifiers:** Will+4 [20]; Per+6 [30].

**Advantages:** Claws (Blunt) [3]; Combat Reflexes [15]; Damage Resistance 2 (Can't Wear Armor, -40%; Flexible, -20%) [4]; Discriminatory Smell [15]; Night Vision 3 [3]; Parabolic Hearing 1 [4]; Sharp Teeth [1]; Temperature Tolerance 2 (Colder) [2]; Ultrahearing [5].

**Perks:** Fur [1]; Penetrating Voice [1].

**Disadvantages:** Bad Grip 1 [-5]; Cannot Speak [-15]; Dead Broke [-25]; Social Stigma (Monster) [-15]; Unnatural Features 1 (Lupine) [-1].

**Features:** Born Biter 1; Digitigrade; Tail.

**Customization Notes:** A wolf-man who actually is a savage beast will have Bestial. For more extreme behavior, add one or more of Bad Temper, Berserk, Bloodlust – or in extreme cases, Odious Racial Habit (Eats Sapient) [-15].

## Ceta

275 points

A marine analog of a centaur, with a humanoid torso growing out of a whalelike body – in this case, one modeled on the beluga (*Delphinapterus leucas*), though the body isn't as large. You're most at home in arctic waters and well adapted to cold. You're social and playful and have an excellent singing voice; much of your culture is transmitted orally as bardic lore. You have the option of taking Rapier Wit as an advantage, for use in song duels. Unlike actual whales, you lack sonar, being dependent on human vocal organs.

**Attribute Modifiers:** ST+30 (Size, -20%) [240].

**Secondary Characteristic Modifiers:** SM +2; HP-15 [-30]; Basic Move+6 [30].

**Advantages:** Damage Resistance 4 (Flexible, -20%; Partial, Lower, -10%) [14]; Doesn't Breathe (Oxygen Storage, 25× duration, -50%) [10]; Speak Underwater [5]; Striker (Tail; Crushing; Cannot Parry, -40%; Clumsy, -1 to hit, -20%) [2]; Temperature Tolerance 15 (Colder) [15]; Voice [10].

**Perk:** Penetrating Voice [1]; Racial Gifts (Rapier Wit) [1].

**Disadvantages:** No Legs (Aquatic; Can't armor fins/flukes) [-5]; Restricted Diet (Fresh meat) [-10]; Weak Arms (2; 1/2 ST) [-5].

**Quirks:** Congenial [-1]; Distinctive Feature (White skin) [-1]; Playful [-1].

**Features:** Tail.



## Pixie

17 points

You look like the “fairies” of a lot of children’s stories: humanoid, with two pairs of gauzy wings like those of a lacewing (*Chrysopa oculata*) growing out of your back as your main “animal” feature. You’re tiny, standing less than 5” tall, and (as Lemuel Gulliver observed with the Lilliputians) your diminutive size conceals minor imperfections, making you attractive. You’re incapable of striking meaningful blows, but you can lift 3 ounces, which is more than your own weight, making you effective at grappling. You can see and handle tiny objects beyond normal human limits. You need very little food or drink; one meal a day is normally enough.



Temperamentally, you’re proud and sensitive to slights. However, you have a short attention span, making it hard for you to hold a grudge.

**Attribute Modifiers:** ST-10 [-100]; DX+2 [40].

**Secondary Characteristic Modifiers:** SM -7; HP+1 [2]; Basic Speed+0.50 [10].

**Advantages:** Attractive [4]; Flight (Winged, -25%) [30]; High Manual Dexterity 4 [20]; Lifting ST 1 [3]; Microscopic Vision 1 [5]; Reduced Consumption 2 [4].

**Perks:** Sanitized Metabolism [1].

**Quirks:** Distractible [-1]; Proud [-1].

**Features:** Fixed ST; Four-Winged.

## Faun

195 points

Your form is that of the chimerical goat/men of Greek mythology, based on the wild goat (*Capra aegagrus*). Your “goat” parts are small horns that can be used in a head butt; large, movable ears; and hirsute legs that end in hooves. You’re a little smaller than human beings, but physically attractive, alert, and well coordinated.

You lack the ability to speak, but you can use sign language (if one exists), or gesture, and you have a talent for music (mostly instrumental, but you can sing wordlessly) and dance. You act mainly on momentary impulses, and are particularly susceptible to romantic ones – including impulses toward humans and other nonfaun races, as part of an overall unconcern with species differences. However, you’re naturally shy and hesitant to reveal yourself directly. This may be modified if you’ve had alcohol, to which you’re unusually susceptible. You’re herbivorous and avoid killing in fights, but you’ll use deadly force if your life is threatened.

Beyond these biological traits, you’re deeply attuned to the natural world and gain powers from it: enhanced vitality, emotional communion, and quick and graceful movement.

All of these abilities depend on your environment: -1 to skill rolls in a rural area that's not wilderness (such as a cleared field), -3 in a city, -5 in a polluted environment, and -10 in a toxic wasteland! This also affects your mood: You're Playful at penalty 0, neutral at -1 to -4, and Serious at -5 or worse. In addition, carrying, wearing, or riding in a technological artifact subjects you to a penalty of half the TL of the most advanced item you have, rounded up – or of the *full* TL for an implant or prosthetic. If a trait doesn't involve a skill roll, reduce its effect 10% for each -1 from either source (for example, with a 10% or 20% penalty, Charisma 5 is reduced to Charisma 4). A reduction of 100% or a penalty of -10 completely suppresses your powers.

Because of this, you avoid wearing anything but skins or wreaths, or using forged metal weapons, and you stay out of cities. Simply coming into a polluted environment, completely naked and unequipped, would lower your effective DX to 14, your effective HT to 10, your Basic Speed to 6, your Striking ST to +1, and your Charisma to 2, and would subject you to -5 penalties to use your other abilities.

**Attribute Modifiers:** ST-1 [-10]; DX+2 [40]; IQ-2 [-40]; HT-2 [-20].

**Secondary Characteristic Modifiers:** Will+2 [10]; Per+4 [20].

**Advantages:** Attractive [4]; Damage Resistance 1 (Flexible, -20%; Partial, Lower, -10%) [4]; Hooves [3]; Musical Ability 2 [10]; Parabolic Hearing 1 [4]; Striker (Crushing; Limited Arc, -40%) [3].

**Perks:** Fur [1].

**Disadvantages:** Cannot Speak [-15]; Lecherousness (15) [-7]; Pacifism (Cannot Harm Innocents) [-10]; Restricted Diet (Plants) [-10]; Shyness (Mild) [-5].

**Quirks:** Alcohol Intolerance [-1]; Broad-Minded [-1]; Distractible [-1]; External Mood Influence (Vital Energy: Playful vs. Serious) [-1].

**Racially Learned Techniques:** Kicking (A) DX [2].

**Communicative Powers:** Animal Empathy (Nature, -20%) [4]; Charisma 5 (Nature, -20%) [20]; Empathy (Nature, -20%) [12]; Oracle (Nature, -20%) [12].

**Movement Powers:** Catfall (Nature, -20%) [8]; DX+4 (Nature, -20%) [64]; Silence 5 (Nature, -20%) [20]; Striking ST 2 (Nature, -20%) [8]; Super Jump 2 (Nature, -20%) [16]; Terrain Adaptation (Active, +300%; Nature, -20%) [19].

**Vital Powers:** HT+4 (Nature, -20%) [32].

**Customization Notes:** Fauns are able to learn the skill of Musical Influence (pp. B210-211). Fauns who have gone on adventures can gain one or more levels of various power Talents; see **GURPS Powers** for the effects of such talents. It's common for fauns to have Sense of Duty (Nature); this doesn't prevent their killing individual living beings, but requires them to preserve the quality of the habitat – this is typically worth -10 points for protecting their particular homeland, but can be -15 points if it applies to the entire natural world.

# The Armoury: Reich-5

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Roger Bell\_West

## Introduction

This is an extrapolation, with guidance from the modern history of firearms, of the Reich-5 weaponry described in the *Basic Set* and *Infinite Worlds*, plus *Alternate Earths 1* for GURPS 3e.

## Ammunition

The venerable 9×19mm Parabellum still sees use in military pistols: newer technologies are available, but a service pistol is more a symbol of authority than a combat weapon, and ammunition weight is rarely a consideration.

This is very slowly being replaced by the ERMA 6×30mm *Hülselose* (Caseless), developed for SMGs and armoured-vehicle crew weapons, but also compatible with large pistols. (German successes in the Second World War have cast a long shadow, and large calibre is still considered an important characteristic of ammunition.)

Reich-5 has used five distinct 7.92mm rifle rounds, of which four may be encountered in the present day. Before the timeline's divergence, it adopted 7.92×57mm Mauser in 1903 (see *GURPS High-Tech* p. 111 for the Mauser Gew98), and descendants of this have remained in use as a machine-gun round; the 7.92×33mm *Kurz* appeared on schedule in 1942 for the StG 44 (*High-Tech* p. 115).

That *Kurz* round was replaced in the 1960s by the heavier 7.92×43mm *Magdeburg* (named for the city where it was developed), aiming for better penetration against new types of body armour, and this remained in use with second-line and foreign units into the 1990s in the

StG 65; it's still occasionally seen today in surplus hunting weapons.

This round was effective, but heavy, and in the 1980s Mauser developed the 7.92×43mm *Magdeburg-Polymer* (MgP), combining a shorter bullet with modernised propellant in a polymer case. Although total muzzle energy is about the same, this is a somewhat lighter round that requires a higher chamber pressure; it *can* be fired from older weapons, but this often leads to malfunctions, and this ammunition is clearly labelled with a red stripe (which was promptly used as a signifier for "power" in consumer goods of all sorts). *MgP* became the standard rifle cartridge of the 1990s, most notably in the StG 89. By 2010 it's still seen in foreign forces.

Finally, the dawn of the 21<sup>st</sup> century saw caseless technology becoming militarily useful, and 7.92×57mm *Hülselose* became the standard first-line rifle round.

The 13×95mm round, used in anti-materiel rifles and heavy machine guns, is a descendant of the 13×64mmB round used in the WWII-era MG131 for aircraft. It omits the electric priming of the aerial gun, and is optimised for magazines, rather than belt feeding.

Reich-5 Germany feels no need to obey the Hague Convention of 1899, which prohibited the use of expanding bullets in war, although they regard possession or use of such weapons by the Resistance as an additional crime. Expanding or armour-piercing bullets (*High-Tech*, pp. 166-67) are routinely used in all the calibres listed above.

## Ammunition cost and weight

Round	WPS	CPS
9×19P	0.026	\$0.3
6mm Hüls.	0.01	\$0.4
7.92 Mg	0.048	\$0.65
7.92 MgP	0.048	\$0.75
7.92 Hüls.	0.032	\$2.90
13×95	0.27	\$4.30
42×48 GW	0.6	\$6.50

## Weapons

Luger P01 *Kriegspistole*, 9×19P: “Luger” is a brand name; modern Lugers are mechanically similar to the Walther P38, although the styling deliberately recalls the classic. This model is named for the 50<sup>th</sup> anniversary (in 2001) of the victory over the USA that marked the beginning of the *Weltreich*.

Walther ASPA, 7.65×17mmSR (.32 ACP): a modern semi-automatic target pistol, modified with an integral suppressor (-3 to Hearing) and a permanent slide-lock (additional -1). Used by Nazi Party, Gestapo and SS units for stealthy killing.

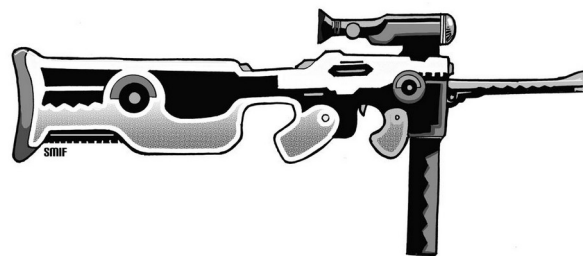
ERMA P09, 6mm Hüls: while not popular with the more hidebound elements of the officer corps, the energetic P09 is gaining favour among those who have reason to fire their weapons in the line of duty.

Mauser StG 65, 7.92mm Mg: a gas-operated long-stroke piston tilting-bolt selective-fire rifle rarely seen now, except converted to semi-automatic as a hunting weapon (RoF 3), and perhaps illicitly converted back by the Resistance.

Mauser StG 89, 7.92mm MgP: a clear derivative of the StG 65, redesigned to be lighter and run higher-pressure ammunition. This was the first rifle to be modified for vacuum operation by élite Luftwaffe space infantry.

Mauser StG 03, 7.92mm Hüls.: a gas-operated, rotary breech, caseless, fully automatic weapon. This weapon can fire high-cyclic controlled bursts (*High-Tech* p. 83) at RoF 6# (one or two three-round bursts in a single attack). It is not yet used in space, due to problems with outgassing from the caseless propellant. (For statistics, see *GURPS Infinite Worlds* p. 200.)

ERMA MP09, 6mm Hüls: designed as a portable self-defence weapon for artillery and vehicle crews, It has the Reich-5 version of space-age styling, which is significantly different from Homeline’s. The standard round is armour-piercing; the weapon is also commonly used by SS units suppressing unarmoured “troublemakers” with hollow-point ammunition (3d+1(0.5) pi damage).



Rheinmetall-Borsig AMG88, 13×95mm: An anti-materiel rifle, used against hard point targets such as lightly armoured vehicles. It is normally fitted with an Enhanced Targeting Scope (*Ultra-Tech* p. 149).

Rheinmetall MG91, 7.92mm MgP: the final evolution of Werner Gruner’s MG42 design, this light machine-gun is now being relegated to second-line forces.

Mauser MG04, 7.92mm Hüls.: designed for ammunition compatibility with the StG 03, but with little in the way of parts commonality. This LMG has an interchangeable barrel and can be fed from belts or StG 03 magazines. When well-maintained, it works very well; but to the StG 03’s demanding maintenance schedule it

adds cookoff problems when firing continuously.

Rheinmetall MG88, 13×95mm: the standard heavy machine gun across the Wehrmacht, it's fired from a tripod or a vehicle mount and fed from 50-round belts. It's expected to be replaced soon by a caseless HMG.

GW05, 42mm: this under-barrel grenade launcher is designed specifically to fit the StG 03 and can't be readily used with other weapons. It's a cumbersome single-shot breech-loader, and adds -1 to the Bulk of the weapon to which it's attached. The stat line lists a solid projectile, but normal loads are impact-fused HE (8d cr ex [2d]) or HEC (2d(2) pi++, linked 8d cr ex), backed up with smoke and signal flare. Shaped charge rounds (6d×4(10) cr inc, linked 8d cr ex [3d]) are not in common use on Reich-5 itself, where a Panzerfaust will get the job done better, but Raven Division favours them for a lightweight punch against well-armoured individual opponents such as gargoyles or dragons.

Panzerfaust 99: the standard anti-armour weapon is now a Mach 5 guided missile with a range of over five miles. The stat line lists a solid projectile, but the standard warhead is a shaped charge doing 6d×10(10) cr inc with linked 8d×2 cr ex [5d]. The launcher/guidance system is reusable, but normally a soldier would pick up a new loaded launcher rather than reload in the field.

## Accessories

All modern (TL9) weapons are equipped with a laser sight (+1 to hit out to ½D range), a diagnostic computer (+1 to fix damage or malfunctions), and a recognition grip or transponder ring. Reich-5 forces on their home world use implanted transponders; that's not

desirable for off-world agents whose bodies might be left behind, so Raven Division uses recognition grips set up for everyone in an off-world deployment.

## Vehicles

Spähpanzer: a 4×4 light multifuel reconnaissance APC, essentially a heavily-armoured truck, crewed by driver and gunner, that carries four troops (with side and rear firing ports). The turret normally mounts a remote-control MG88. This vehicle is not amphibious but can ford 3' water, or with preparation snorkel to 8'.

TPz Wolf: the main line APC of Reich-5's forces is an 8×8 multifuel vehicle, fully amphibious (Water Move 3) and equipped with a pair of MG88s and a missile launcher or mortar.

## Organisation

An independent four-man fireteam has two StG 03 riflemen, one with StG 03 plus grenade launcher, and one MG04 or AMG88 gunner. Normally the Heer doesn't split units to this small a level, but Raven Division operations often require it.

A ten-man squad has a leader, an MG04 gunner, a Panzerfaust gunner, an assistant (with pistol) who acts as a loader for either weapon, and six more riflemen with StG 03 of whom two have grenade launchers. Everyone carries spare ammunition for MG or Panzerfaust. A squad typically rides in a TPz Wolf.

The next step up is the rifle platoon: four squads as above, a platoon headquarters of four men (ideally in a headquarters-variant Wolf with extra communications gear), and a light mortar squad of three (or perhaps an anti-materiel sniper team) in a Wolf of its own.

## Tables

### Guns (Pistol)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
9	ASPA	1d+2 pi-	1	110/1,200	1.5/0.2	1	7+1(3)	7	-1	2	\$500	2	
9	P09	3d(2) pi-	2	180/1,800	1.6/0.273		20+1(3)	8	-2	2	\$800	3	[a]

[a] Accessory rail (*High-Tech* p. 161).

### Guns (SMG)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC
9	MP09	3d+1(2) pi-	4	180/1,900	6.7/0.68	15	50+1(5)	8†	-3	2	\$1,750	2

### Guns (Rifle)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
7	StG 65	6d pi	1	1,000/4,000	10/1.7	12	30+1(3)	10	-4	2	\$300	1	[a]
8	StG 89	6d pi	3	1,000/4,500	7/1.7×2	12	30/30+1(3)	9	-4	2	\$750	1	[a][b]
8	AMG88	6d×2 pi+	6+3	1,800/8,000	29/3	3	10+1(3)	12B†	-6	3	\$8,000	2	

[a] Accessory rail (*High-Tech* p. 161).

[b] Integral targeting laser (*High-Tech* p. 157).

### Guns (Grenade Launcher)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC
9	GW05	2d pi++	3	80/450	2/0.6	1	1(3)	10	-	1	+\$300	1

### Guns (LMG)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC
8	MG91	7d pi	5	1,000/4,000	25/3.2	13	50(5)	11B†	-6	2	\$6,200	1
9	MG04	7d+1 pi	4	1,900/5,800	25.7/1.520		40+1(3)	11B†	-5	2	\$6,000	1

### Gunner (Machine Gun)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC
8	MG88	6d×2 pi+	6	1,900/8,500	80/15	12!	50(5)	20M	-8	2	\$25,000	1

### Artillery (Guided Missile)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC
9	Panzerfaust 99	6d×30 pi++	3	2,000/10,000	35/25	1	1(20)	11B†	-8	1	\$10,000	1

### Driving (Heavy Wheeled)

TL	Vehicle	ST/HP	Hnd/SR	HT	Move	LWt.	Load	SM	Occ.	DR	Range	Cost	Loc.
9	Spähpanzer	110	-1/4	10f	1/33	11.020	56	+4	2+4	40	434	\$173,000	g4Wt
9	Tpz Wolf	124	-1/4	10f	1/32	22	9	+5	2+10	200	500	\$240,000	8WT



## GURPS Vehicles: War Galleys: Designers' Notes

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Carolyn Stein and Stephen K. Stein

We've written for Pyramid and the GURPS PDF challenges, but *GURPS Vehicles: War Galleys* was our first stand-alone GURPS book. It drew on Steve's teaching and writing experience as a naval historian, particularly his book *The Sea in World History: Exploration, Travel, and Trade* (2017), and Carolyn's nautical fiction writing.

"Biremes and Triremes" had long been on SJG's wishlist. It looked perfect for us. We dashed off a proposal, which they quickly accepted. Our conception of the project, though, expanded steadily as we worked on it, realizing that the differences between biremes and triremes were not as fascinating as the development of oared galleys in general. Eventually, we decided to cover the entire history of oared warships in what became *GURPS Vehicles: War Galleys*.

As we looked through Steve's many books on ships to get an idea of structure and the art of ship-building, we realized that most of the books we were referencing were too Eurocentric. With Steve's broad knowledge of naval history we didn't have to limit ourselves in this way. We expanded our coverage beyond Europe to East Asia, a region whose maritime history is too often neglected.

We set out to build on the discussions of rowed warships in the *Basic Set*, *Low Tech*, and its three supplements to produce a detailed, historically grounded book on rowed warships. To our mind, GURPS remains the best system for role playing in historical settings and the contemporary world. Apart from *Low Tech* and its supplements, we were influenced by Phil Masters' *GURPS Vehicles: Transports of Fantasy* and *GURPS Vehicles: Steampunk Conveyances*, and Nicholas Lovell's *GURPS*

*Supporting Cast: Age of Sail Pirate Crew*.

After all, galleys need crews, and we wanted our book to be as close as possible to one-stop shopping, offering, ships, crews, and equipment lists so GMs could prep quickly and get right to playing.

Keeping the book to a reasonable page count, though, meant we could only offer deck plans, crew rosters, and detailed discussion for two ships. Our original idea was to highlight a Greek trireme and Byzantine dromon as our featured warships, maintaining our focus on the classical world and the early middle ages.

We soon decided, though, to expand the project both chronologically and geographically. We would cover galleys through the 1571 Battle of Lepanto, one of history's greatest fleet engagements. So, instead of the Byzantine dromon, we offered a Venetian trade galley, a ship more likely to feature in RPG adventures than dromons, which rarely strayed far from home waters. Triremes were similarly the ubiquitous warships of their era, found across the Mediterranean.

In addition to these two highlighted ships and their crews, we worked to provide an overview and GURPS stats for several dozen other ships, which required a fair amount of research. Ancient sources all agree triremes were faster and more maneuverable than both earlier and later galleys of larger sizes. So, we developed stats for other ancient galleys around that reference.

We relied heavily on Lionel Casson's books on ancient seafaring, as well as *The Athenian Trireme*, by Morison, Coates, and Rankov (2000) for the ancient world, the galley volume from Conway's excellent, multi-volume *History*

*of the Ship* (1993-2001), and the works of John F. Guilmartin, one of Steve's professors, for the cannon-armed galleys of the Renaissance, particularly Guilmartin's *Gunpowder and Galleys* (1975), which has yet to be surpassed.

The characteristics of some historic galleys are relatively well-documented, such as Venetian trade galleys. For others we have modern reconstructions, including the trireme *Olympias*, documented by Morison, Coates, and Rankov, a Korean turtle ship, and the Spanish galley *Real*, which fought at Lepanto. Other ships, though, involved a fair amount of conjecture, particularly the enormous galleys constructed by Egypt's Ptolemaic rulers. There was also lots of number crunching to generate appropriate GURPS stats.

We hashed out a number of ideas and details during play testing.

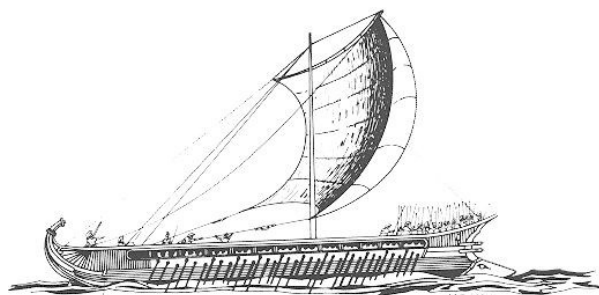
Oddly, one of the most prolonged discussions was over NPC stats. We based our original crew stats on the NPCs in the *Age of Sail Pirate Crew*, which were decidedly above average. Steve's own experience teaching strategy for the U.S. Naval War College is that mid-grade naval officers are far from average, but we acquiesced to the very vocal majority of our play testers who expressed concern about stat inflation among GURPS NPCs and wanted average sailors.

Ramming rules developed substantially during play testing. We were originally reluctant to add too much to the system in *Low Tech*, but the play testers and GURPS line editor Sean Punch encouraged us to flesh out rules for ramming. So, we developed a hit location table specific to galleys and examined several options to expand and improve upon the existing ramming rules. A few play testers argued for a detailed, multi-round combat system and lots of chrome, both in the combat system itself (multiple rounds of maneuvering and ranged fire before ramming)

and in damage infliction and repair. The majority, though, favored a quick, simple system with a few opposed die rolls to settle ramming combat.

Money proved another sticking point. Role players expect fixed costs for items, whether a broadsword or a war galley, but ancient economies lacked the fixed prices and generally low inflation of modern economies. Prices fluctuated wildly. We also have relatively few data points for computing ancient costs outside of everyday items like bread and wine. We have rough estimates for what it cost to build a trireme and can estimate the costs of similar-sized warships, but can again only guess at the costs of the enormous galleys built by Egypt's Ptolemaic rulers. The same is true of the performance characteristics of these ships, which better resembled floating siege engines than sleek warships.

The point that caught us most by surprise was the technological determinism of some play testers. Technology does not have agency. The stirrup did not spawn the Middle Ages, despite a popular book from the 1950s claiming otherwise. For roughly half a century now, historians who study science and technology have emphasized that technology is socially constructed. Technology necessarily reflects human needs, values, and societies. People adopt, reject, or improve technologies based on a host of social as well as practical factors. TL2 galleys differ from TL3 and TL4 galleys as much because the societies that built them were different as they do for the development of specific new technologies, such as frame-first construction at TL 3 and cannon at TL 4.

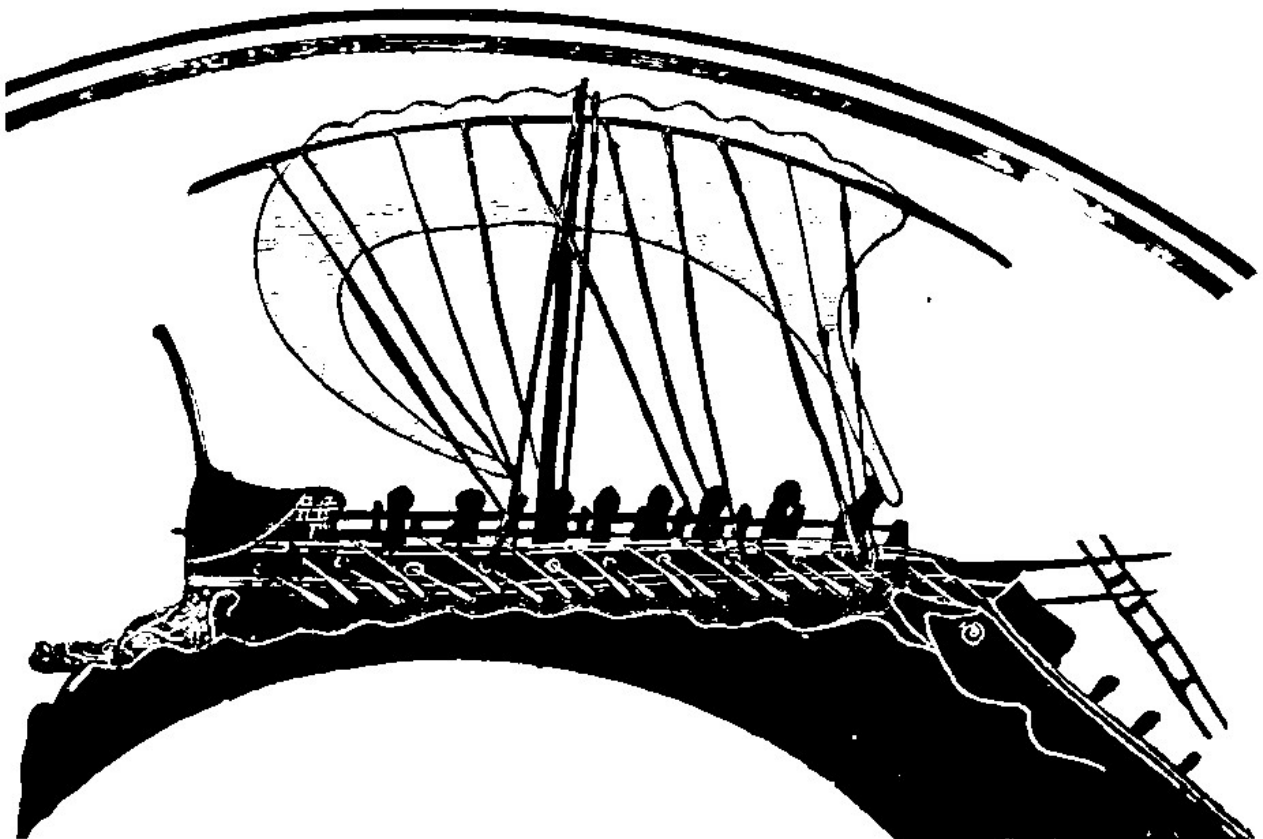


Ramming did not decline as a naval tactic in late antiquity because of any technological change. The frame-first nailed wooden hulls of TL3 and TL4 galleys were not significantly stronger than the shell-first mortise and tenon hulls of Greek and Phoenician TL2 triremes. In fact, one can argue the flexibility of older, mortise and tenon hulls made them more resistant to ramming (and grounding and other physical shocks). Nor was there anything wrong with the technology of rams themselves. Cast bronze rams bolted to a wooden framework at a galley's bow remained perfectly serviceable weapons.

Rather, ramming declined as a naval tactic because it requires well-trained crews to ram with maximum effectiveness while suffering minimal damage to one's own ship. Athens and a few of its contemporaries maintained full-time, professional navies. Apart from Byzantium in its heyday, no Medieval European or East

Asian power managed to do that. Specialized warships often languished in drydock, and navies were improvised for war. So, naval tactics reverted to the simplicity of boarding enemy ships rather than ramming them. Rams disappeared from galleys, which improved their seaworthiness. Korea, of course, is famous for its turtle ships, but only a handful were in service at any time. The majority of Korea's navy was improvised for war and relied on traditional boarding tactics.

Economic factors also played a role in changing ship construction and naval tactics. Mortise and tenon shell-first construction requires more skilled labor than frame-first construction. Capturing an enemy ship relatively intact as opposed to smashing a hole in it and capsizing it is more profitable. Large naval battles were a rarity in the medieval era. Naval warfare was mostly a matter of piracy as rival states and



various independent actors preyed on one another's commerce, such as the centuries-long trade wars between Genoa and Venice. Even in the classical world, pirates did not arm their galleys with rams. Odds are the average group of loot-minded player characters wouldn't want rams on their galley either.

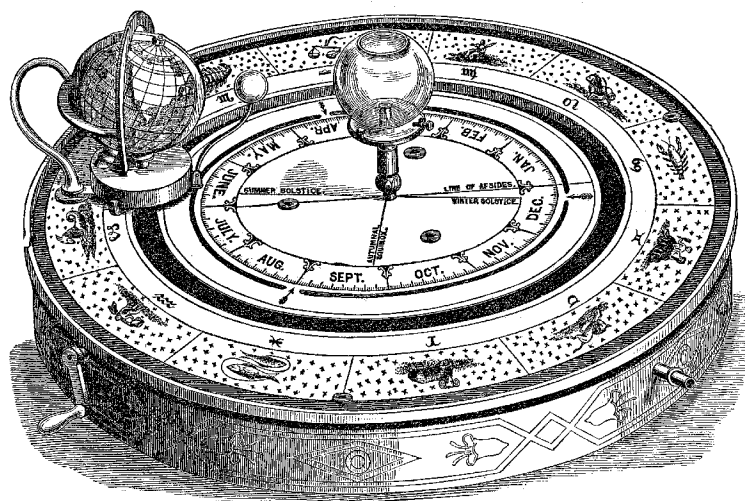
The emergence of full-rigged sailing ships in the late 15th century did not immediately displace oared galleys, which remained in service into the early 19th century — 250 years after the Battle of Lepanto, often presented as the galley's swan song. Lots of old technologies hang around for decades or even centuries despite being "obsolete." A great book on the topic is David Edgerton's *The Shock of the Old* (2006). A "better" technology does not automatically displace an older, "inferior" one. It needs to solve specific problems. New technologies are also not automatically more expensive. Biremes displaced penteconters and other large, single tiered galleys because they were both more seaworthy and cheaper to build. They required less wood. Frame-first construction reduced the costs of galley construction because it required less skilled labor.

It's impossible to fit everything anyone could want in a single book, and we had to cut a few things, such as additional deck plans. We would

really have liked to include deck plans and more details on the Korean *Geobukseon* (Turtle Ship), Carolyn's favorite oared ship and the most unique ships of the era. We might pick that up for a later project. We'd hoped to have a discussion of the different national/cultural differences of ships. How did Athenian, Egyptian, and Phoenician triremes differ? What factors made Athenian triremes the best ships of their type?

National differences were even more pronounced in the Renaissance. Ottoman galleys emphasized carrying capacity to move that empire's huge armies. Spanish and French galleys favored heavy armament and packed their bows with cannon. Like the Athenians, the Venetians were said to build the best ships of their era. Their galleys emphasized seaworthiness and speed, which allowed Venice to maintain its scattered imperial possessions and trading outposts and reinforce them quickly during emergencies.

All told, we're very happy with how the book turned out. It offers players an unparalleled look at historical galleys, which they can incorporate into their campaigns. We look forward to writing another GURPS book and have several ideas in the works.



# Infinite Cabal part 4

## Conclusions

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John Dallman

By this point in the campaign, the characters weren't behaving like normal people. They were extremely confident in themselves and their interest in ordinary people and conventional behaviour was definitely withering. They weren't being "evil" on a regular basis, nor carelessly destructive, but they were preoccupied with large-scale issues and fundamental questions.

They were willing to go to great lengths to learn or understand something: Antoine learned Danish purely to prepare for a conversation with Kierkegaard about linguistic philosophy. I have not attempted to summarise all of their activities.

## Decanic General Relativity

Emmy Noether had been working for some time on Newton and Einstein's 36-dimensional version of general relativity based on the decans. Using that, she had mostly deduced Infinity's theory from the coordinate system they'd shared at the Savoy Conference (see issue #3), and was quite sure that the two-quantum limit on projector/conveyor transport was not fundamental, but due to a limitation of the theory. The characters had decided not to share that information with Infinity or Centrum, for now, which proved wise.

The thing that was causing difficulty was a proper representation of the decans themselves. Each has a reasonably well-defined concept, which is expressed in many ways, but trying to build mathematical descriptions of those concepts was proving difficult. Emmy's impression was that the concepts seemed more like those of human languages than those of

mathematics. Newton knew where to find out whether that was the case.

## The Pearl-Bright Ocean

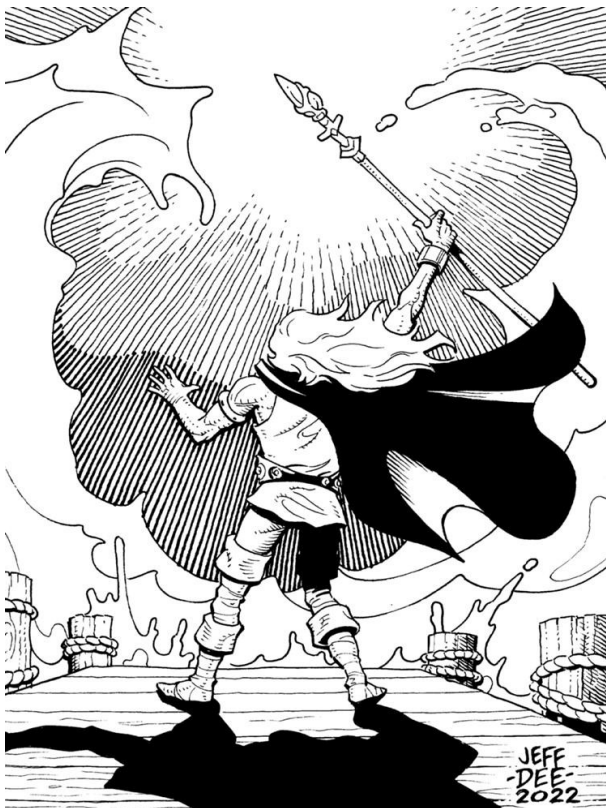
*GURPS Cabal* tells us this ocean separates Yetzirah, the Astral Plane, from Briah, the Iconic Plane. Briah contains the realms of the Aethyrs, rulers of the decans. Newton was of the opinion that Na'oth, the decan of communication, language, imagery, symbolism, and teaching was where the question of representation of the decans could be answered. Grand Masters aren't scared of going to the top.

This left me with the question of how to portray Briah, and allow the characters to travel through it. There are various hints in *Cabal*, and Bill Stoddard had run a campaign there that I had heard a bit about. But these sources didn't paint a common picture, and I needed the characters to venture into highly iconic parts of the plane.

The solution was another level of indirection, dividing Briah into 36 (from the number of decans) levels, with the lowest being quite Earthlike, and the highest resembling a chart of the decans the size of a large island, with sea surrounding it. Newton had been there, when working towards his Grand Mastership, and was able to describe the place in outline. Notably, travel by sea was far easier than by land.

## Words of Power, Decanic Symbols

The party sailed part-way round the Pearl-Bright Ocean, having many adventures, and encountering other Cabalists, a few gods, and various other beings.



They discovered that the spells of *GURPS Magic* are immaterial and invisible spirits, resident in the territory of the decan corresponding to their college, and that becoming acquainted with them is the same thing as knowing the spell. Many forgotten spells still live there, and the relationship between the birth of new spells and magicians inventing them is less than clear. One spell that Nell had created came free from her aura when they landed in its home decan.

Reaching the realm of Naôth, they encountered the great libraries near its shoreline, made friends with Lend Language and met a philosopher who believed that “perfected communication” was a category error, because many ideas arose from misunderstandings and their rationalisation. Reaching Lend Language’s home village, they asked his relative Gift of Tongues to teach Carnot the language of the names of the decans. He found that the entire language was beyond him, but picking a single

decan left him knowing (and paying for) its Word of Power (*Thaumatology*, pp. 178-9).

That immediately suggested having Gift of Letters do the same thing, leading to the re-discovery of decanic symbols, also known as glyphs. These are complex two-dimensional symbols, which give a +2 decanic bonus to magic of the same decan, additive with all other bonuses. They can be drawn or inscribed with an appropriate Artist roll. Learning a symbol costs [2]. This price was deliberately set low, to give Cabalists who knew of them an unfair advantage, and to tempt the characters to learn the full set.

At this point, the characters noticed that Lady Mehabel, the Aethyr of Naôth, had been present for some time. She was watching with interest, as they taught themselves the knowledge they had intended to petition her for. After some conversation, they returned to Newton-X, pausing to read textbooks in the libraries about Infinity’s and Centrum’s parachronic theories. Decanic symbols proved to be new to Newton, the other members of the Royal Society, and their ambassador from the wider Cabal. Newton granted the characters another level of Cabal Rank immediately.

The glyphs could be learned using the ordinary Gift of Letters spell, once you knew this was possible, and appeared to be what Emmy Noether needed for the mathematics of decanic general relativity.

## The lower ocean

Since that task still looked as if it would take some time, the characters began to explore the lowest level of Briah and the Pearl-Bright Ocean. They reached it via a large and magical coracle they had acquired some time before, which could travel in q, r and  $\Phi$ , with a lot of paddling. The lowest level proved to be much

like a mythic version of the Mediterranean Sea, which they entered in the north-eastern Aegean, near Troy. Once they'd got the idea of the place, which is TL3, but well-developed for that, they took passage for Crete.



They successfully traversed the Labyrinth<sup>1</sup> of Knossos, once they realised that it had the form of the symbol of Kumeatêl. King Minos was interested to learn that glyphs had been rediscovered, and they told him of their travels. He could not divine the nature of Janos' sword, but could tell that it had been sent to recruit someone powerful. They learned the Minoan language, a creole of Mycenaean Greek with something related to Etruscan, some new spells, the philosophy of mazes, and the art of becoming a legend.

They took a ship to Syracuse, where Archimedes picked up the idea of calculus unnervingly quickly, then on to Carthage, and via some zombie pirates, to Gibraltar.

## Atlantis, plural

Minos had told them there was an Atlantis beyond the Pillars of Hercules (and a Færie, somewhere up the river Rhône) and they wanted

<sup>1</sup> Every long-running campaign has to have a dungeon *eventually*.

to see that. They learned along the way that there was Atlantis Major, and Atlantis Minor, both claiming to be the original. Major was mid-Atlantic, approximately where the Azores are, Minor southward, approximately at the location of the Canary Islands. They initially planned to visit both, but Minor fell out of the plans, and they never did go there.

They learned at Gibraltar that sacrifices to Poseidon would be required and started gathering fine wines, expensive oils, and Tyrian purple. They were carrying enough gold, in Janos' backpack, to sacrifice a bar as gold dust. All of this would go into the harbour at their arrival. A white bull was brought to be fought at a temple, once they were ashore.

On the voyage, they were visited by dolphins with a message from Poseidon: "Please be careful, as Atlantis is somewhat fragile." Iconic Atlantis is spectacular, as if painted by Roger Dean. They made a very impressive entrance, were accepted as persons of quality, and invited to the Royal garden party the next day.

They made a good impression there, and realised that the inhabitants were *aware* that their reality was based on a myth. The attention paid to that myth, in the larger universe, sustained the place. The characters' origin in a material world, and their message from Poseidon, marked their importance, and meant the numerous political factions stopped trying to make use of them, out of fear of the consequences. An important element of these factions are the various noble houses described in the original legend of Atlantis, and those existed in all the versions the characters visited.

The King proved to be an amiable fellow whose main interests were riding and surfing. Nell made friends with the King's sister, who seemed to do the thinking for the royal family, and at a private meeting, told her of the party's

adventures. She was interested in the plausibility of a continent sinking (it depends on the world) and very interested in the world of Orichalcum (*Infinite Worlds*, pp. 139-40).

Meanwhile. Commander Hodgson had been preparing a work of scientific art in response to a challenge from the sister, and the others had been meeting priests and other social worthies, intercepting attempts to spy on them with magic, and holding a rather Dionysian party. Someone who claimed to be the leader of a hidden organisation of secular magicians claimed that visible use of magic was about to cause major problems with the temples. The party declined his offer of protection via joining his organisation.

## The Temples of the Olympians

Instead, they decided to visit the principal temples to introduce themselves and make appropriate sacrifices. The Atlanteans worshipped the classical Greek deities, although the order of precedence was unusual, with Poseidon heading the pantheon, and Athena the least of the Twelve Olympians, almost an outcast.

After establishing themselves as honourable outsiders, much to the annoyance of the “leader of magicians,” and spending a while getting used to the society, they returned home by using Astral Speed (*Path of Cunning #3*, p. 16) to reach Great Britain, then cutting to Newton-X.

## Orichalcum

Infinity had also been interested in the party visiting Orichalcum, because they were very interested in the metal. Orichalcum is a material world, and a TL1-2 myth parallel, less ostentatiously mythic than the Pearl-Bright Ocean. Nonetheless, it is infested with

interfering gods. Its date, according to the stars, is 9550 BCE.

They travelled by conveyor, since there was still no way to translate between Infinity’s coordinate system and any magical means of targeting worlds. Arriving in southern Spain, they walked to Gibraltar, and were able to get a ship to Atlantis. Their crew were quite relaxed about the storm that blew up, explaining that it indicated the right time to make sacrifices to Poseidon.

Hephaestus turning up in a bronze whale-shaped submarine was unexpected, however. He warned Carnot, who had been wanting to analyse orichalcum metal and discover its uses in enchantment, that it was all his and he would not stand for it being stolen. Hermes, who’d simply shown up on the ship, suggested that Hephaestus was leaping to conclusions and the situation was far more interesting. They argued for a while without destroying anything, rather to the characters’ surprise. Poseidon manifested as the storm, claimed authority, and ruled that they should see what was said to the gods’ children in Atlantis. After the ship’s captain had been calmed down, the voyage continued.

This Atlantis was not so scenic as the iconic version, with marshy shores, and volcanic mountains inland. Arriving at the capital, Poseidonis, they were taken to a guest-house and interviewed by a group of priests. Other-worlders had clearly visited before, although they’d tended to die while being questioned; trade in orichalcum was not permitted, it all being the king’s property. There had been prophecies of Atlantis sinking, and many other things that had not occurred. The party would be permitted to receive visitors, view the city under escort, petition to enter temples, and to trade, except in orichalcum.



## Poseidonis

They proceeded to do this, meeting the intellectuals of the city and learning thereby that there was currently political tension with Athens. The order of precedence of the temples was similar to Iconic Atlantis, with Poseidon top and Athena bottom, although there were variations in the middle. Since they wanted to improve Hephaestus' opinion of them, they planned to show his temple practical devices based on classical machines, such as the screw-press.

The Commander had a stealthy nocturnal visit from an Amazon, who was hoping to collaborate on a way to get some orichalcum out of Atlantis, but did not have a practical scheme. The characters were behaving like adults, rather than typical PCs, and did *not* start planning thefts, although they were careful not to upset the Amazons.

They visited the temples of Poseidonis, making varying impressions, but getting some useful suggestions from the priests of Hermes: rather than trading, Iconic Atlantis might be provided with some orichalcum via diplomacy, and the way to gain favour with Hephaestus would be to improve the mood of his wife, Aphrodite.

Meanwhile, Carnot worked on devices for the temple of Hephaestus, and the Commander had been on board the flagship during a naval exercise. This was a rehearsal for defending the capital from an attack by one of the noble houses. He discussed defending an island with them, that being the basic task of both the Atlantean and Royal navies.

## An infestation of gods

Antoine, Janos and Nell decided to look at this Atlantis from the Astral plane, and discovered several things of interest:

- A vast wave, poised to sweep over Poseidonis, and probably much of the island.
- The mountains of Atlantis were more obvious than on the material plane, and smoking.
- The royal palace, which was decorated with orichalcum, looked as if it was plated with gold on the Astral.
- The twelve Olympians were visible, standing over their temples, with several of them taking a definite interest in the characters.

It seemed wise to visit the Olympians, in order of precedence. Aphrodite felt in need of a new brooch, others made different suggestions, and Athena asked a riddle: where else should they visit the temples of gods? She was also willing to answer some questions on the nature of deities; the characters had noticed that she knew them when they first arrived at her temple in material Poseidonis. She explained that she had shared consciousness across many worlds, but explaining how that worked was difficult in human languages. Heracles, on the other hand is a different individual in each world that she knows of.

Before returning to the material, they carefully relayed Aphrodite's desire to Hephaestus, suggesting they could bring him the Cullinan I diamond to use. He was quite interested in that idea, so they fetched it – from the British Crown Jewels of Enigma, which Janos had stolen years earlier on the grounds they'd likely be useful. En-route, they found that the Dionysus of Iconic Atlantis had been following them, in search of interesting new drinks; they left him in Enigma's London.

After reporting to the Royal Society, they returned to Orichalcum Atlantis with gifts for the King and Queen to be presented at an audience. Carnot had given the screw-press to the

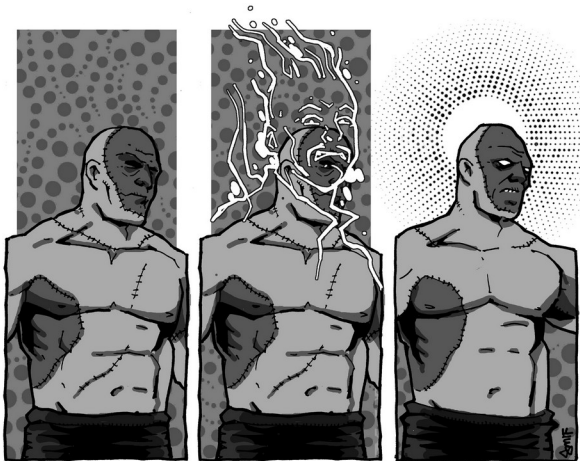
temple of Hephaestus and was working on a still for the temple of Dionysus.

Their audience with the King, part of a formal session where petitions were taken, went well, and the King was willing to receive an emissary from Iconic Atlantis. The next stage was for the governments to select their ambassadors and the characters to create a gateway.

## The ambassadors

Both Atlantean governments were interested in establishing relations, so things went fairly smoothly until the day came for the ambassadors to travel through the gate, in opposite directions. It then became obvious that residents of Iconic Atlantis could not live in the material world. The ambassador only lost a hand, and it was swiftly regenerated for him. Material beings, as the party already knew, could live in Briah for at least weeks, but the reverse had not been tested.

After some research at the Royal Society and with Sapienza, the Cabal's ambassador, they happened on the Path/Book ritual Embody (*Thaumatology*, p. 112). A body of bronze was constructed, and the party proceeded to engrave it with a variety of relevant decanic symbols.



*As GM, I was amused that they had not thought of the problem, and impressed by the thoroughness*

*with which they dealt with it. The symbols each gave a bonus, which meant that the margin of success of the ritual was huge. After moving into the body, the Iconic ambassador's mind expanded greatly, creating a being well beyond the normal capabilities of humanity. Keith Laumer's novel Retief's Ransom has a scene where a transcendent being is assembled from independently living body parts; that was my inspiration in playing the ambassador.*

Once the ambassador had been introduced the characters left Atlantis for a Beethoven concert in Vienna, meeting some other Cabalists there. They checked on Emmy Noether in New Renaissance, and found that a demon had possessed her ovaries, apparently when she learned the symbol of Akton, and she was quite ill. She'd been taking on extra disadvantages to pay for learning the symbols, and it had caught up with her.

Newton had been quite worried about her, but being very unfamiliar with "women's medicine" had preferred to hope for Nell and the party to return. The demon was exorcised, and Emmy began to recover. While this was happening, the characters studied the effects of learning a large number of symbols, by experimenting on themselves. Various concepts about balancing the elements and the decans emerged, but the subject seems to be quite complicated.

Emmy had read about her life in conventional history, and wished to have her ovaries removed. They accompanied her to Homeline, since that has excellent conventional medicine, and discovered that she had developed Mana Enhancer, with a radius of several yards, making magic possible on this no-mana world. After arranging for the surgery, Emmy took a holiday on Homeline, planning to avoid mathematics.

The characters returned to Orichalcum, where the ambassador was finding himself embarrassed

by the King's attempts to appoint him as an advisor, in spite of the conflict of interest. He had been given an orichalcum ring, which had stabilised his relationship to his body, and negotiations for a loan of more to Iconic Atlantis were approaching completion. He wanted to return home for consultations, and wanted the characters on hand in case of problems.

The only obvious problem was that once the ambassador was back in his own body in Iconic Atlantis, his mind started to decline towards his original self. After returning to Orichalcum, he regained his new mind. He completed the negotiations for a loan of orichalcum to Iconic, while the characters visited the temples again. The loan took the form of a circlet for the iconic king, which seemed to change its magical nature as it was dedicated at a royal ceremony in Poseidonis, and altered Iconic Atlantis towards stability as the king donned it.

*At this point in time, "orichalcum" was a significant plot point in both Infinite Cabal and Irresponsible & Right. Roger and I never consulted on its properties, but there were definite similarities. Infinite Cabal's orichalcum was a magical meta-material that could take on almost any property or ability, when willed to do so by someone who knew how. That "froze" the properties of the piece. Hephaestus had invented it, and had changed the world to turn some copper ores into orichalcum ores.*

## Mount Olympus

The ambassador pointed out that a plausible next stage in visiting the Twelve Olympians would be to go to their homes, on Mount Olympus. Of course, the characters set off the next day, and reached the foot of the mountain in an hour via Astral Speed.

The Temple of Zeus there explained that climbing the mountain was a test for heroes, guided them in sacrifices, took their names for the bards to sing, and was startled by the mountaineering gear they fetched from a different Greece.

The climb for heroes is rather longer than the mundane mountain, and involves a very gradual transition from the material to the astral. They met centaurs, the [Horae](#), cyclopes, the chimera, harpies and lastly [Ouroboros](#), wrapped around the peak. They treated them all politely where possible, although some required violence. Bill Stoddard's write-ups of Greek mythological creatures in *GURPS Fantasy* were quite helpful.

Beyond Ouroboros, there was a near-vertical climb to a balcony, where minor Greek heroes kept a lookout, and welcomed successful climbers. The top of the mountain was entirely in the Astral, and looked like an idealised small town, with no walls, but many green spaces and temples. Everyone's auras were visible to mundane senses, ensuring that their significance was clear.

Athena welcomed them, although she was a little disappointed it had taken them so long to solve her riddle. She informed Janos that his soul was elsewhere, linked to his sword, and asked them to visit her after their visits to the temples of the Twelve.

They made those visits, being used to the procedure by now, although Hermes was disconcerted to be presented with Antoine's reconciliation of existentialism with Hermetic philosophy, Artemis would only see Nell, and nobody remembered their visit to Dionysus clearly. As heroes of the first degree, each was entitled to ask one Olympian for a boon. Carnot asked Hephaestus for orichalcum, and received an ingot; Janos asked the same god the location of his soul, which was deferred pending the

construction of instruments. Nell asked Athena for the prerequisites to universal knowledge, and learned about limited omniscience. Athena knows a great many things that she has learned in the “normal” way, for an extremely intelligent being with a perfect memory, present in many places simultaneously. Her key power as a deity is that she knows everything that she needs to, in time to make use of it. Gods, in the plural, have *limited* absolute powers. Antoine was granted a talent for communication by Apollo, and the Commander asked Demeter if he could visit Morpheus, whom she looked after. “He has been asleep for centuries. I would waken him if ten of the Twelve asked me to, but I will not for this. I can give you a draft that will let you visit his dreams.”

The Commander wanted to gain the ability to awaken psionic potential in others, for which Athena had referred him to Morpheus. Owing to a misunderstanding, he took the draft as soon as they had visited all of the Twelve, and was asleep through some of what follows.

## The Demiurge

Athena had first become interested in the characters because they knew decanic symbols; this was visible to her in their auras. She explained that the first person to discover them, in a pre-dynastic Egypt, had learned them all and found himself elevated to a unique supernatural position, with influence over the whole universe. “Demiurge” was a reasonable term for him; he wasn’t quite what Plato described, but the essence was similar.

To maintain his power, he had found ways to separate gods from men in most worlds; Orichalcum was an exception, because the pantheons had managed to unite against him. He had founded the Cabal as a means of keeping track of magicians. He seemed to pay less attention to the worlds in recent centuries,

and to behave more erratically. It seemed possible that his mind was unequal to the challenges of his position.

Athena thought it likely that if anyone else was to learn all of the symbols, they would *become* the demiurge, taking the place of the old one, although what would happen to the old one was not clear. Learning that Emmy was working on learning all the symbols, for scientific reasons, she advised that Emmy be brought to Olympus immediately, for her own safety, and because Athena wished to talk to her.

*My portrayal of Athena was influenced by Steven Brust’s goddess Verra, although Athena is less capricious. The idea of the demiurge grew from a conversation with DMWCarol about the obvious gap at the top of the Cabal, suitable for a single individual. It also references an obscure James Branch Cabell book, Beyond Life, about writing, and how a writer is a demiurge to his creations.*

To enable Emmy to be fetched quickly, the characters were shown Hermes’ backdoor into Olympus, after swearing not to abuse the knowledge. They cut from there to New Renaissance, where they found spirits on the Astral who claimed to be the Olympians, and humoured them. They reached London via Astral Speed, and took the gate to Newton-X, to consult Hilary. Emmy had gone to Homeline Tuscany, rather than her announced Hawaii, to try to avoid surveillance, and Infinity had let her believe that she’d succeeded. They cut to Homeline, then to the Astral, and speedily to Florence.

Emmy was at her hotel, and tried to tell them about something interesting she’d discovered, but was hustled through the gate to Olympus. Hillary had come with them, that seeming preferable to explaining to her superiors, with almost no information, *why* she’d let these maniacs zoom around Homeline Europe using

lots of magic. Once at Hermes' arrival chamber, which is fortified against unfriendly visitors, and seeing the characters talking to gods as near-equals, she surrendered to culture shock, accepting a glass of wine and sitting down in a corner to gibber.

Emmy had found a book on Egyptian hieroglyphics, and noticed that some of them had definite resemblances to decanic symbols. She took the news about the demiurge fairly calmly, and was interested to know what Athena intended to do about him, and her.

Athena and Hermes called Hera, Aphrodite, Demeter and Artemis to confer with them and Emmy. The planning continued for several days, with the addition of Eris. The characters were asked to stay on Olympus, so that no leaks could happen.

Meanwhile, Hillary had released a lot of accumulated stress at the temples of Aphrodite and Dionysus, then gone to work in the bakery at the temple of Demeter. The Commander had awoken from his visit to Morpheus with a new ability to awaken psionic powers in others.

## Changing the root password

After a lot of careful use of Athena's limited omniscience, helped by questioning and debate with the other planners, it had become clear what to do. The previous demiurge would be ejected from that status when Emmy learned her last symbol<sup>2</sup>, and would appear as she lost her physical form.

He would probably be surprised by the change, and unlikely to be happy about it. It wasn't clear what powers he would retain, other than being an extremely powerful and (at least partly)

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2 Of the three she did not know when she arrived on Olympus, Marderô, the decan of revolutions, was selected to be last, and to trigger the change.

insane magician. After considerable moral agonising, it was concluded that killing him as fast as possible was the only practical course of action.

Hephaestus made a large magical framework, on which Athena and Hermes did enchantments to confine magic, and to manipulate the rate of time. Janos and Ares would attack the demiurge hand-to-hand, while Apollo and Artemis would use archery, and the Commander his TK bullets. Aphrodite promised that she could distract *any* male, should he appear facing her. Hera would command him by other means, and Athena and Hermes would improvise with magic as the fight developed. Carnot built a bombard. Nell cast the final Gift of Letters on Emmy, whose last physical words were "Oh! *Now* I see ..."

The fight was brief, with the gods and characters operating under several levels of Altered Time Rate. The demiurge's body died quickly, and his apparent spirit shortly afterwards. His actual spirit did a good job of concealing itself, but was spotted and slain by Antoine and Ares. Hades consumed his head and heart. That seemed to be all, and the time rate was allowed to return to normal while everyone recovered.

Two new scrolls had appeared in the temple of Athena, written by Emmy. One was confirmation that she had made the transition and was growing into her powers. The second was a summary of the decanic Theory of Everything.

Zeus declared the characters heroes of the third degree, entitling each of them to two further boons from the Olympians. There would be a festival in three days time. First, however, the characters returned to Newton-X, taking Hilary with them.

Newton had received a copy of the theory and congratulated them on their promotions to

Masters of the Cabal. Dividing the Royal Society into chapters, each headed by a Master, seemed the best form of organisation for the future.

Infinity and Centrum had also received copies of the theory. Conferring with them, they were starting to accept it, and were willing to be cautious over releasing it, since the end of the two-quantum limit would be disruptive. The characters checked the astral pools of the leading-edge worlds, and found that their alignment had become somewhat more regular.

They returned to Olympus, and collected their assorted boons. After that, they recovered Janos' soul from the Cathedral of Saint Lazarus in Abydos, Urth (*Banestorm Abydos*) and the campaign ended.

They received one last message from Emmy:

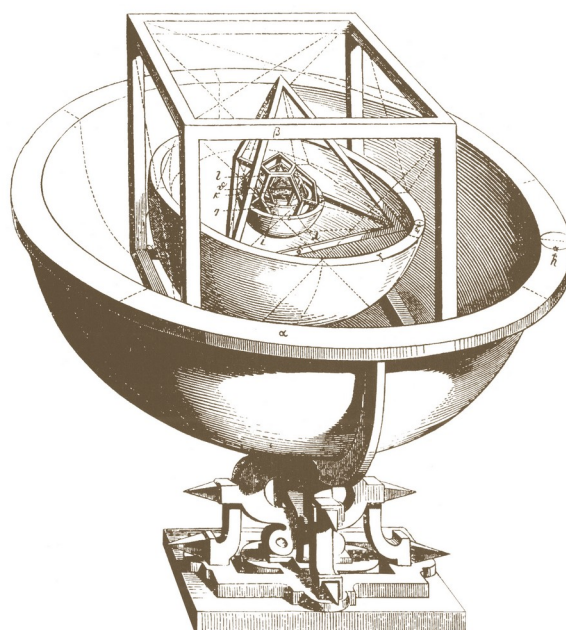
*Dear Isaac, Nell, Janos, Eugene, Antoine and Nicolas,*

*I expect this to be my last message to you, but I could be wrong.*

*I have spent considerable time examining the history of the universe and the works of the first demiurge, and the explanation for some of the strangeness of nature is straightforward. The previous demiurge, born in a time when humans had very limited understanding of nature, had been overwhelmed by human developments, and was making things up, without a plan. I speculate that he may have felt plagued by scientific investigations, and sought to turn humanity to other interests.*

*It is, however, possible to reconcile the laws of nature, within the Decanic Theory of Everything, and I have managed to do this. The laws that will be discovered in time do not contradict existing observations, and God has indicated his approval of them. A clue: start by extending quantum mechanics to a background-independent form.*

*Thank you for selecting me for this work, and for helping me with it. You have the favour of the demiurge.*



## GURPS Infinite Worlds: The Osiris Worlds: Designer's Notes

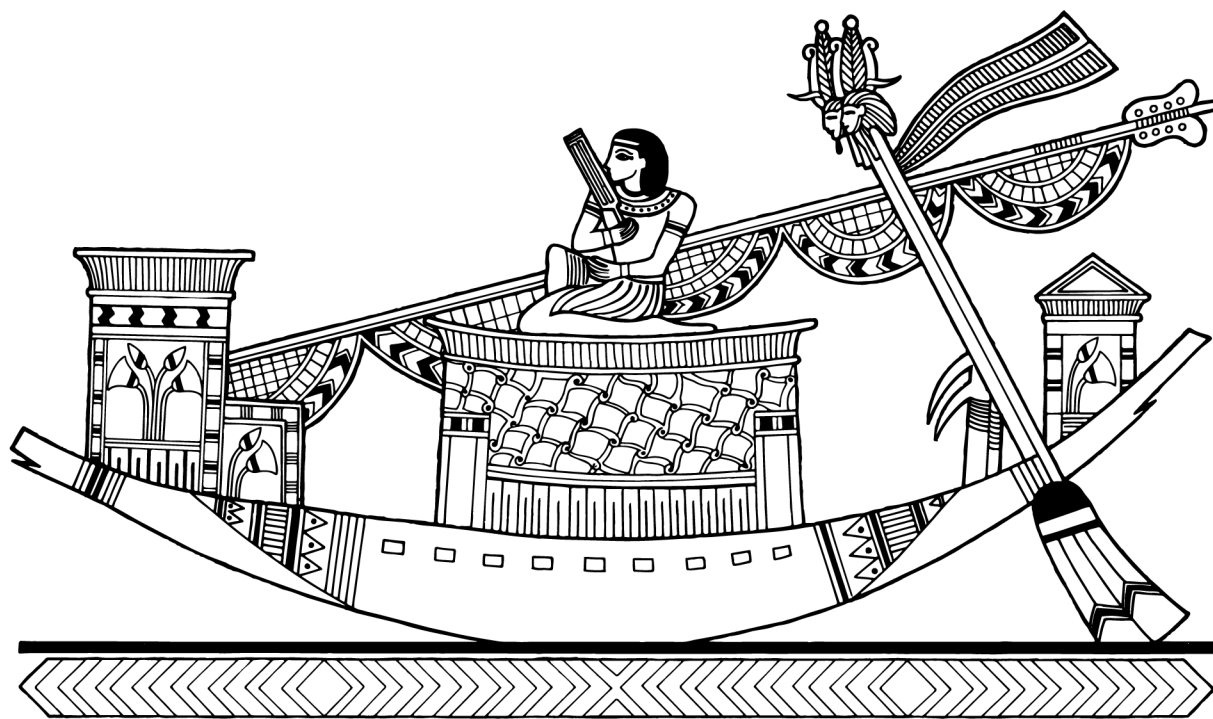
Phil Masters

When SJGames asked me to contribute to a second *GURPS* mini-supplement Kickstarter project (see also *The Broken Clockwork World*, above), my thinking turned towards doing a world or set of worlds for the *Infinite Worlds* milieu. This kind of thing needs some kind of theme, and one obvious idea was settings focussed on some historical period or civilisation that hadn't been covered much before.

Ancient Egypt jumped out as a fairly obvious possibility. Now, to be honest, Egyptology is not really one of my strong suits, but I knew a bit and could research more – especially as the handsome third edition supplement *GURPS Egypt* was sitting on my bookshelf (and the company does like little promotional tie-ins). Anyway, two of the worlds I came up with were more about wacky pop culture concepts of the subject than detailed history, and the third was another attempt to link things to my own *GURPS Steampunk* work.

Which is not to say that those treating *Infinite Worlds* as an excuse to get into possible alternate histories can't have fun with Egypt too, of course. The book includes the somewhat customary "Other . . . Worlds" box-out, and my half-dozen thumbnail suggestions there have, I like to think, their own charm, from Osiris-2's sub-Howardian shadowy fantasy to Osiris-5's management headaches. Most are semi-serious alternate timelines, though. Egypt provides one of the first places where we can attempt somewhat detailed descriptions of how history might have gone differently.

Top it all off with some more flashy digital royalty-free rented art – fantasy artists can always do something with Pyramids and pharaohs – and you get another viable mini-supplement. I think it works.



# The XM42

## A Modern Flamethrower

Roger Bell\_West

“The lesson of the ages has been taught again,” the priest said quietly. “No other weapon purges evil from the earth and rids men from their bondage to the powers of darkness. Only the simple elementals can avail against the elemental foe—faith in the Power of God and in the cleansing power of fire.”

— Nevil Shute, *Most Secret*

For most people the XM42 is an expensive toy, a bigger and better water pistol, solidly built and intended to throw burning liquid around one’s property for gardening or one’s own amusement. Monster Hunters know better.

Flamethrowers in general are covered in *GURPS High-Tech*, pp. 178-179.

There have been three models of XM42: the original with HT 9 (2015-2017), the updated XM42 Lite, and the heavier-duty XM42-M (both 2017- and with HT 10). Each of them uses the same basic design: a fuel tank, a pump driven by a rechargeable lithium-polymer battery, and a constantly-burning blowtorch hung next to the nozzle to ensure the fuel ignites.

### Options

A larger integral fuel tank for the M model adds 2.5 lb to the loaded weight, and raises Shots to 60×1s.

A \$400 backpack conversion, available for Lite and M models, subtracts 2.5 lb from weapon weight, but adds a permanently-attached 3-gallon backpack weighing 6.8 lb empty and 25 lb full, raising Shots to 210×1s.





## Fuel

Ideally, the XM42 burns a mixture of  $\frac{2}{3}$  diesel and  $\frac{1}{3}$  petrol (gasoline); pure diesel burns for longer and slightly hotter than petrol, but won't ignite at atmospheric pressure. With this mix, fuel will burn on the target for 2d×3 seconds (1d×3 outside  $\frac{1}{2}$ D range). The XM42 will also work with petrol or reasonably pure ethanol, but these won't burn for as long; use ×2 instead of ×3. The pump probably won't work with thickened napalm.

## Operation

This is not designed as a soldier-proof device; overall it has DR 3 rather than the usual 4 for weapons. Three Ready manoeuvres are needed to ready the device from a cold start: raise the weapon to firing position (Fast Draw can remove this), turn on the blowtorch and wait for gas to flow, and ignite the blowtorch with the built-in piezo-electric igniter. Turning on the main power switch, also required, is a free action for a user familiar with the weapon, but otherwise takes another Ready.

A standard 0.5 lb gas cylinder provides about half an hour of blowtorch burn time. The standard battery powers the pump for 300s of firing.

The various fuel tanks are removable, but are not intended to be swapped quickly or while full; the recommended reloading procedure is to refill the weapon from another container of fuel.

## Flamethrowers and the Law

In most parts of the USA, flamethrowers are unregulated, probably because they're not as readily available or as convenient as firearms. California requires a special licence for flamethrowers with a range over 10 feet (models sold there are permanently fitted with a restrictor nozzle, Range 3/3), and Maryland bans them completely.

Outside the USA things tend to be more restrictive. The UK also has a complete ban; in Canada, weapons laws define a weapon as something that discharges a projectile, so flamethrowers are technically legal without a licence, but local police are unlikely be familiar with this rule.

Liquid Projector (Sprayer)

TL	Weapon	Damage	Range	Weight	RoF	Shots	ST	Bulk	Cost	LC
8	XM42	2d burn	3/8	7.5	Jet	20×1s	9	-4	\$700	4
8	XM42 Lite	2d burn	3/9	8.5	Jet	24×1s	9	-4	\$700	4
8	XM42-M	2d burn	4/10	11	Jet	28×1s	9	-4	\$850	4

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