HEROglyphs, Vol. 1

Steven S. Long

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A Collection Of The *HEROglyphs* Columns From
The First 25 Issues Of *Digital Hero*

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SPECIAL THANKS

Special thanks to everyone who's made *Digital Hero* a success: the subscribers, Hero fans who've suggested ideas for *HEROglyphs* columns or other articles, the authors and artists who've contributed to the magazine, and most importantly to editor Dave Mattingly, who does a superb job bringing it all together every month.

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HEROGLYPHS 1

PLANS, SO MANY PLANS...

Welcome to the first of what will hopefully be many installments of *HEROglyphs*, a forum in which I can pontificate about the *HERO System* rules, discuss rules alternatives and options, and otherwise analyze the heck out of our favorite RPG system.

Before I proceed, I should give credit for the name of the column to my good friends Tim Binford and Andy Mathews. They thought of it first, I gleefully stole it for my own fiendish purposes.

Anyhow, back to business. The intent behind this column is to delve into *HERO System* rules issues that are too big or too complex for easy discussion on the message boards or in e-mail. At least, that's the idea. Of course, if I get desperate, I may resort to talking about almost any rules issue, no matter how simple, to fill up page space every month. But it shouldn't come to that for a long while, at least. Take a look below for just a few of the ideas I plan to write about.

My hope is that this column will spark some discussion of these issues on the message boards, once I've drawn the topics out into the open and gotten the ball rolling, and that those discussions will, in turn, spark further ideas for columns. With luck, it becomes a self-perpetuating cycle. On the other hand, with Unluck, it could become a big mess. The potential danger here is that I might start a lot of pointless arguing and flame-wars in our little virtual world (and some of those flames might even be directed at me, perish forbid!). But, like every other online community, we tend to get our fair share of such brou-ha-has anyway, so I'm willing to risk a few more in the interest of starting some genuinely cool and useful conversations.

Send Me Your Poor, Your Tired, Your Questions About Frameworks...

Since I want *HEROglyphs* to be of some actual use to you folks out there, feel free to send me questions and ideas for the column at *SteveL@HeroGames.com*. Because the column's supposed to address large, complex topics, try to pick issues that I can sink my teeth into. If it's a question I can answer in a sentence or two, post it on the message boards and I (and/or others) will get back to you pretty quickly.

To save you a little trouble, here's a list of a few of the subjects I plan to write about in the coming months (in no particular order):

- A Fine Grain (the *HERO System*'s granularity [or lack thereof], and what to do about it)
- Zap! (creating a "magical missile" in the *HERO System*)
- The Casual Approach ("Casual" Characteristics other than STR)
- Now I've Gotcha! (customizing Entangles to prevent escape)
- The Need For SPD (optional changes or replacements for the SPD Chart)
- And I'll Form The Head! (creating "combintion" characters in the *HERO System*)
- Portmanteau Powers (a discussion of Powers that combine one or more abilities)
- A Minor Adjustment (dealing with some issues about Adjustment Powers)

Some of my ideas for columns are pretty simple and easy to address — a page or two of writing ought to cover it. But some, like "A Fine Grain," will require multiple columns to discuss in full. Long or short, hopefully each one will have something of use for you. So stay tuned, Hero fans! There's plenty of interesting discussion in store.

Author's Note: *And so we see how little I'm worth as a prognosticator. After 25 issues, I still haven't gotten to some of those columns. Some, like "And I'll Form The Head!", got worked into books and so didn't need to become columns. Some I just haven't gotten to yet — I write about whatever happens to appeal to me at the time, and some of those ideas just haven't fully grabbed my attention yet. And some I've just lost interest in, or decided weren't really very good ideas for columns after all.*

This collection of columns is generally unaltered from what was published in Digital Hero*, even in the case of material that eventually got printed in books (like the expanded work-ups for Extra-Dimensional Movement and Trigger). Here and there, where a fan pointed out something I could do better, I've made some changes, and I've altered the page numbers to refer to the* HERO System 5ᵗʰ Edition, Revised *rulebook, but for the most part what you see here is just what the* Digital Hero *readers saw. Enjoy!*

HEROGLYPHS 2

ZAP!

CREATING A MAGIC MISSILE USING THE *HERO SYSTEM* RULES

In this month's column, I'm going to tackle a *Fantasy Hero* power construct that's often discussed on mailing lists and message boards — a "magical missile" spell that never misses its target. (Any relationship to a power or spell featured in another company's roleplaying game is, of course, purely coincidental.)

As conceived, this spell has the following characteristics:

1.   It creates a bolt of magical energy that can hurt any living being (or quasi-living beings, like golems or the undead). The only defenses against it are certain specific spells or enchanted items.

2.   The bolts never miss their target. However, total cover blocks them; they cannot turn corners or weave around obstacles.

3.   The greater the spellcaster's level of power, the more of these bolts he can throw at once (up to a maximum of 5). Each bolt, by itself, causes a relatively minor wound, but a volley of them can make for a pretty powerful attack.

4.   If a spellcaster can throw more than one bolt, he can split them up among multiple targets, at his discretion. However, no two targets can be more than 2" apart.

5.   The spell has a fairly long range, and it gets longer the more powerful the spellcaster becomes. But it's not unlimited; there's an absolute upper limit of 45". The accuracy of the spell does not diminish over range.

6.   Using the spell does not tire the character out.

So, let's take these elements one at a time and see what the options are for simulating them in the *HERO System*.

First, the bolt can hurt any living being, with only a couple of possible defenses. To me, that sounds like an RKA, NND, Does BODY — pretty expensive, but then again, what's being described is a fairly powerful effect. Of course, since it can only hurt living beings ("living" in this case also including things like robots and the undead, that mimic life), being an unliving, inanimate object

also constitutes a defense — that way the character can't use the spell to destroy doors, siege engines, and the like. Since it's a magical bolt that does generalized damage and has no kinetic force, *Cannot Use Targeting* (-½) and *No Knockback* (-¼) are also appropriate.

Now, arguably, a few specific defensive spells and talismans might not necessarily qualify as a "reasonably common" defense against the NND. However, since the nature of the spell (and its counter-spell) are clearly defined, and all spellcasters know what the defense is, and the counter-spell is very cheap, this shouldn't cause a problem.

The second point is the trickiest — the bolts never miss. The *HERO System* doesn't allow for absolutes like "never misses" or "complete defense"; that's contrary to the spirit of the rules. But with the right arrangement of Advantages and abilities, we can come close enough that it doesn't really make much difference. First, we use the *Area Of Effect* (One Hex Accurate; +½) Advantage. That allows the attack to function against DCV 3 (though the target could still, for example, Dodge). With the addition of a few 2-point Combat Skill Levels, we can pretty much guarantee the attack won't miss except on the rarest of occasions.

The fact that the magical bolts can't attack through cover or around obstacles isn't necessarily unusual; most attacks can't. Ordinarily characters simply wouldn't waste the effort trying to penetrate cover unless they felt they had a good chance of doing enough damage to affect the target on the other side. But given the nature of this spell — that a target with total cover can't be successfully attacked — we can achieve the necessary effect, and cover most of the points under (5), by applying the *Line Of Sight* (+½) Advantage.

The third point is also tricky. For one thing, the *HERO System* doesn't have any specific method of tracking "character advancement" other than raw Experience Points earned. So, to determine a spellcaster's "level of power" for purposes of this spell (and perhaps others), the GM would have to establish standards. The standard could be fairly simple — "the spellcaster can project one magical bolt for every 10 Experience Points he has earned." Or it could get more complicated; for example, the GM could require a wizard to buy a *Level Of Power* Perk to represent his growth in the magical arts. For the sake of this discussion, we'll go with the first, simpler, option.

But, that difficulty aside, how do we represent the multiple magical bolts? The most obvious method is the Autofire Advantage, but that presents problems. First, it's expensive, since the *Area Of Effect* Advantage boosts the cost of Autofire.

were appropriate for the magic system used in the campaign, the character could apply the *Charges* Limitation to the spell, indicating he could only cast it a certain number of times per day.

So, here's what that leaves us with:

Magical Missile: *RKA 1 point, NND (defense is certain specific spells or talismans, or being an unliving inanimate object; +1), Does BODY (+1), Area Of Effect (One Hex Accurate; +½), Reduced Endurance (0 END; +½), Line Of Sight (maximum range of 15" + [3" per level of power]; +¼) (21 Active Points); Gestures (-¼), Incantations (-¼), Limited Rapid Fire (only one "shot" per 10 Experience Points earned, and no target can be more than 2" from another target; -¼), Cannot Use Targeting (-½), No Knock-back (-¼) (total cost: 8 points) plus +20 with Magical Missile (total cost: 40 points). Total cost: 48*

Now, 48 points is a mighty hefty cost, especially for a Heroic character — but then again, this is a pretty powerful spell (or it becomes so eventually, if it's not already). Most of it comes from the CSLs (+10 to counteract Rapid Fire modifiers, +10 to ensure an almost 100% success rate with Attack Rolls). The GM can, if he wishes, let characters buy the spell in increments, to keep the cost low. A starting spellcaster, who can only fire one Magical Missile, just needs +10 OCV (since he can't Rapid Fire at all yet). That reduces the cost to 28 points — still expensive, but much better. As he goes up in power, the character can use Experience Points to buy more CSLs with this spell.

If you want something a little more powerful, increase the RKA to ½d6, which bumps the cost of the spell up by 9 points. At that level of effect, a powerful wizard can inflict some pretty serious damage with every use of the spell.

At the GM's option, the *Gestures* and *Incantations* Limitations can be applied to the CSLs, which would reduce their cost to 27 points (and the overall spell to 35 points). Normally, of course, only 5-point CSLs can be Limited, but some GMs may wish to make an exception in this case. The GM may also wish to consider allowing characters to apply the *Requires A Skill Roll* Limitation to the spell (as written, the spell assumes a magic system where that Limitation's not required); if so, that could apply to the CSLs as well.

Fortunately, the *5th Edition* offers another option: Rapid Fire. Typically, most spells can't be Rapid Fired — it just doesn't make sense for the genre or the "feel" of magic. Either they have a Limitation preventing the character from Rapid Firing them, or the GM simply establishes this as a ground rule for the campaign. But in this case, Rapid Fire works perfectly for the effect we're looking for, so the GM should allow it. We simply have to restrict the amount of Rapid Fire shots the character can take based on his level of power. Since *Cannot Be Rapid Fired is* a -½ Limitation, a restricted form of Rapid Fire should be a -¼ or -0 Limitation. For purposes of this article, we'll use -¼. The 2-point CSLs mentioned above will be bought in sufficient quantities to overcome the OCV penalty.

Most aspects of (5) were covered above, but there's still the restricted range to deal with. We can simulate that by applying a Limitation to the *Line Of Sight* Advantage, or simply reducing it to a +¼ value. We'll use the latter approach for the sake of simplicity, but GMs desiring greater "realism" can use the more complicated approach if they prefer.

The last point, that the spell doesn't tire the caster out, indicates the need to apply the *Reduced Endurance* (0 END; +½) Advantage. Alternately, if it

HEROGLYPHS 3

THE CASUAL APPROACH

"CASUAL" CHARACTERISTICS OTHER THAN STR

Most *HERO System* gamers, particularly those who like to play "bricks" in *Champions* and other high-STR characters, are familiar with the concept of Casual STR. A character's Casual STR is equal to half his normal STR, and he can exert it as a Zero-Phase Action. That can come in mighty handy when the character wants to break out of Entangles, smash through flimsy doors without slowing down, and so forth.

The Casual STR concept works in part because STR is one of the few Characteristics likely to be bought to extremely high levels. STR 60 isn't uncommon in many games, but DEX, INT, or PRE of 60 would be cause for raised eyebrows (and perhaps GM rejection of a character). But there still may be some benefit to applying the "Casual" concept to other Characteristics — some interesting optional rules might result. Let's explore some of the possibilities.

GENERAL CONCEPTS

Several of the suggestions below mention Casual Characteristic-based Skill Rolls or Characteristic Rolls. However, since the difference between the Casual Characteristic-based DEX Roll, and the ordinary Characteristic Roll is likely to be minor (perhaps only a point or three), the GM should save this method for occasions when he deems it appropriate and dramatic.

Characters should not be allowed to apply any Combat Skill Levels or Skill Levels to rolls made with a Casual Characteristic.

CASUAL DEXTERITY

You might occasionally use a character's Casual DEX to make an Agility Skill Roll that would ordinarily take a Half Phase or Full Phase as a Zero-Phase Action.

Example: *Eagle-Eye (DEX 24, Acrobatics 14-) is trying to save a falling child while fending off the attacks of the villains who tossed her out the seventieth-story window. He wants to make an Acrobatics roll to "bounce off" a cornice so he can change the direction of his (and the child's) fall, while still leaving himself a Full Phase in which to use Swinging and then counter-attack one of the villains. He asks the GM if he can make a Casual DEX-based Acrobatics roll as a Zero-Phase Action. At DEX 12, his Acrobatics roll becomes 11-. The GM decides this is a fairly significant difference, so he'll allow it — but if Eagle-Eye fails, he must automatically make a normal Acrobatics roll as a Full Phase Action to keep from hurting the child.*

CASUAL CONSTITUTION

CON Rolls don't crop up too frequently during most games, so there's not much call for Casual CON. The GM might allow such a roll for a character to quickly shrug off the effects of poisons, diseases, and the like.

CASUAL BODY

BODY Rolls occur even less often than CON Rolls. Generally speaking, there's probably no use for Casual BODY.

CASUAL INTELLIGENCE

In appropriate situations, you could use a character's Casual INT to determine his PER Rolls for his "everyday perceptiveness." Few people walk around intently perceiving everything around them. Most events and stimuli register faintly, if at all — which is why it's so easy for a person to overlook something that turns out to be important. A Casual INT-based PER Roll could represent this. Of course, if anything crucial to the plot comes along, the GM may want to switch to ordinary PER Rolls, to keep the adventure flowing smoothly.

CASUAL EGO

This Casual Characteristic is already mentioned in the rules, on 5E 110, for use in breaking out of "Mental Paralysis" Entangles. Besides that (relatively rare) use, GMs might also allow characters targeted by continuing-effect Mental Powers to make Casual EGO-based Breakout Rolls as Zero-Phase Actions. However, since the difference between full EGO and Casual EGO is not likely to be that great for most characters, this may have the effect of weakening Mental Powers (and mentalist characters) unfairly, so you should use this method cautiously.
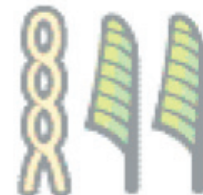
CASUAL PRESENCE

Since making a Presence Attack is an action that takes no time, Casual PRE may not be as useful as other Casual Characteristics — why bother with a Zero-Phase Action for half effect, when it takes no time to get the full effect? However, you could use a character's Casual PRE as an indicator of the level of "ambient Presence Attack" he tends to exert just by being near other people. If a character has a sufficiently high PRE, his simply stepping into a room may be enough to make people stop talking!

Example: *The Harbinger of Justice has a 50 PRE to indicate his strength of personality, impressive demeanor, and the ease with which he terrifies criminals. His Casual PRE is 25, so even when he's just around other people — not attempting to make a Presence Attack or use Interaction Skills on them — the GM could roll a 5d6 Presence Attack to gauge their reactions to him.*

CASUAL COMELINESS

If you're using COM Rolls as Complementary Skill Rolls for Seduction or other Interaction Skills, a Casual COM-based roll might indicate the "ambient" effects of a character's appearance, similar to the "ambient Presence Attack" of Casual PRE. Without his even turning on the charm, a character's good looks could help him win friends and influence people.
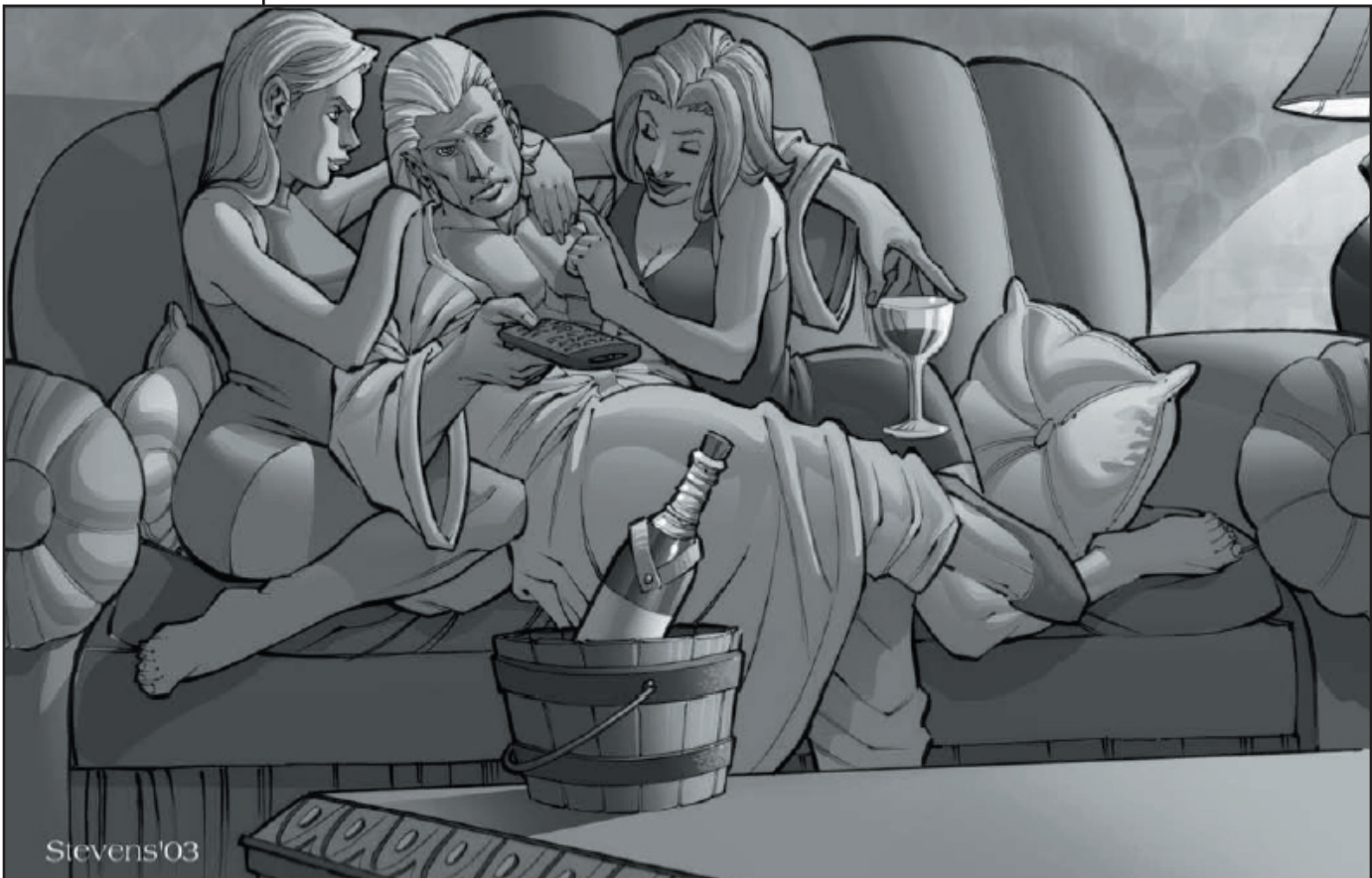
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HEROGLYPHS 4

A LUCKY BREAK

PROBABILITY ALTERATION IN THE HERO SYSTEM

In the *HERO System 5th Edition*, there are two primary ways you can create abilities reflecting a character's unusually high level of luckiness or unluckiness — the Power appropriately named *Luck* and the Disadvantage equally appropriately named *Unluck*. Both are a lot of fun (well maybe Unluck's only fun if your enemies have it…) and add a lot of flavor to the game.

These game elements suffer from a few difficulties. First, they're more reactive than proactive — they sort of abandon the character to his fate, in the hopes he'll get the right roll he needs (or bad roll he doesn't want) to be lucky/unlucky. (Of course, that's not necessarily inappropriate, given the subject matter!) Second, the result of using them, if they succeed, is somewhat vague. Unless you use some of the optional rules described on 5E 128, the elements are pretty much left up to the GM to resolve as he sees fit, which isn't always satisfying. Third, it's difficult to find ways to apply them to other characters — sometimes-awkward constructions involving *Usable By Others* and Transform (normal person to person with Unluck, a Major Transform) are required. It's also possible for characters to buy suites of powers, including Skill Levels of various sorts, and use "luckiness" as a special effect, though again that strikes many gamers as a little "clunky."

However, the power to alter probabilities — whether consciously or unconsciously — is a relatively common one in the inspirational literature. Comic book superheroes have the mutant power to "manipulate fate"; fantasy wizards can cast curses that inflict bad luck (or the gods can bless a deserving hero with good fortune all his life); daring pulp heroes seem to possess an instinctual ability to tip the odds in their favor through clever tactics or dumb luck. Although it's already possible to simulate these abilities with the existing *HERO System* rules, in the interest of ease of use it might be fun to try to come up with a better way, one with more specific rules for the effects of the ability.

As I started thinking about this, a couple of incidents occurred that sort of spurred my thought process. First, my good friend Greg Smith, well-known to most of you as a member of Hero's All-Star Artist Squadron, called me with a rules question. One of the players in his games wanted to give his character the ability to re-roll missed rolls — not every roll, necessarily, just some rolls. This is a fairly common mechanic in many roleplaying game systems, but there's no precedent for it in the *HERO System*. Greg's player had tried to achieve the same result with a rather convoluted use of Duplication, and Greg wanted to know my thoughts on the matter. I suggested that the player should instead try a Limited form of Extra-Dimensional Movement to travel back in time a millisecond or two and re-roll the missed roll. However, while better than the Duplication solution, that still didn't leave me satisfied.

Second, I had the chance to play a game of *HeroClix*, the Marvel Comics-based miniatures game from WizKids; I'm sure many of you are familiar with it. Some of the characters in HeroClix, such as the Black Panther and the Scarlet Witch, have probability-altering powers. The former has *Outwit*, which allows him to strip a power away from another figure temporarily (the special effect being "special maneuvering and tactics on the other team's part"); the latter has a *Probability Control* power through which she can grant re-rolls to her teammates, or force her opponents to make them. It occurred to me that it might be interesting to try to model similar abilities in *HERO System* terms.

So, after giving the matter some thought, here's what I came up with, just as a sort of experiment:

PROBABILITY ALTERATION

Special Power
Instant
Self Only

A character with this Special Power has the ability to alter probabilities affecting him, making it more likely he will succeed at tasks. Some examples of Probability Alteration include a mutant superhero's extraordinary super-luck, a wizard's power to alter fate with a spell, or a pulp adventurer's unending string of "lucky breaks."

Probability Alteration costs 10 Character Points. It allows a character to re-roll any one roll during a game session. (The GM may change this to "an adventure," "a scenario," "per day," or some other unit of time more acceptable to him.) A character may re-roll any roll — a Skill Roll, Characteristic Roll, PER Roll, Attack Roll, damage roll, Effect Roll, or the like — unless the GM specifically forbids the character to apply the power to a given roll for some reason. For each additional +10 Character Points, the character may re-roll one more roll during the game session. (The GM may establish restrictions on how many re-rolls a character can have per session.) Probability Alteration costs END to use.
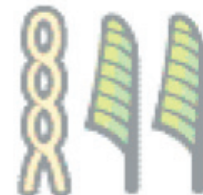
POWER EXAMPLES: PROBABILITY ALTERATION

Incredibly Lucky: A character with this power possesses a lot more luck than the average person.

Probability Alteration (5 re-rolls per game session). Total cost: 50 points.

Outwit Opponent: A character with this power has the ability, through skill, luck, and strategy, to outwit, outfox, or fool an opponent — an effect simulated by making the foe re-roll successful rolls.

Probability Alteration (3 re-rolls per game session), Usable As Attack (+1), Ranged (+½) (75 Active Points); Requires A Tactics Roll (-½). Total cost: 50 points.

Probability Manipulation: The character possesses the power to alter probability on a broad scale, helping his comrades and hindering his allies.

Probability Alteration (3 re-rolls per game session), Usable By Other (+¼), Ranged (+½) (total cost: 52 points) **and** Probability Alteration (3 re-rolls per game session), Usable As Attack (+1), Ranged (+½) (total cost: 75 points). Total cost: 127 points.

Every roll a character makes counts as a separate and distinct roll for purposes of being modified with Probability Alteration. For example:

- for a Killing Attack, the Attack Roll, BODY damage roll, and STUN Multiplier roll are all separate rolls
- if a character wants to make a Complementary Skill roll, both the roll for the Complementary Skill, and the roll for the Skill the character wants to use, are separate rolls (a character cannot use Probability Alteration to modify a Complementary Skill roll made by another character on his behalf unless his Probability Alteration is Usable On Others, but he could still modify his own roll)
- if several characters make Teamwork rolls, each roll counts as a separate roll
- if a character has to make two Required Skill Rolls to activate a single power, each counts as a separate roll

Using Probability Alteration is an action which takes no time. A character must declare that he wants to use it immediately after the roll in question is made, before the effects of that roll are applied to a character or otherwise brought into play.

A character using Probability Alteration must accept the second roll made, regardless of whether it's better or worse for him than the first roll — the fates are not always kind. However, a character who has more than one re-roll per game session may use additional re-rolls to take a third, fourth, or further try at getting the result he wants on a given roll.

ADVANTAGES

Always Favorable (+1, +2): Probability Alteration with this Advantage always favors the character using it. For a +1 Advantage, if the re-roll creates a worse result for him than the original roll, he may use the original roll instead. For a +2 Advantage, the character's re-roll must be better than the original roll; if it is not, he may keep re-rolling (without using up any addition re-rolls he's bought) until he gets a better result.

If this Advantage is applied to Probability Alteration Usable As Attack, reverse the effects: for a +1 Advantage, the target has to use the worse of the two rolls; for a +2 Advantage, the target has to keep rolling until he gets a result worse than the original roll.

Area Of Effect, Autofire: Characters cannot apply either of these Advantages to Probability Alteration; see *Usable By Others,* below, for information on affecting multiple persons with this Power.

Continuous: Characters cannot apply this Advantage to Probability Alteration.

Usable By Others: Characters often apply the *Usable By Others* Advantage to this Power to create the ability to influence the probabilities affecting other characters. If bought with Usable By Other, the character can grant a re-roll to another character if that character wants it. This does not, however,

change the overall number of re-rolls a character can make per session — every one re-roll he grants another character is one less he can make himself. Buying Probability Alteration as Usable Simultaneously is not possible, since only one character ever makes a given roll. (At the GM's option, a character might be able to apply Usable Simultaneously and affect one roll by each of several persons during the Phase in which he activates the power.) If Probability Alteration is bought Usable As Attack, it allows a character (if he succeeds with an Attack Roll, per normal for such powers) to force another character to re-roll a roll he succeeded at.

LIMITATIONS

Charges: Characters should not take this Limitation on Probability Alteration without the GM's permission. The power already defines the number of rolls a character can make in a specific time period. The GM might, however, allow a character with multiple re-rolls per game session to apply Charges to restrict how many times the character can make re-rolls during each game day, or allow Charges with Burnout.

Probability Alteration Cost: 10 Character Points for the ability to re-roll one roll per game session.

Luck And Power Modifiers

Another interesting issue related to the concept of luck, as embodied in the *Luck* Power, concerns Power Modifiers. Not all Advantages and Limitations should apply to Luck, and some apply in unusual ways.

ADVANTAGES

The following Advantages are generally inapplicable to Luck: Armor Piercing, AVLD, Autofire, BOECV, Damage Shield, Does BODY, Does Knockback, Double Knockback, Duration Advantages, Explosion, Hole In The Middle, Indirect, Invisible Special Effects, MegaScale, NND, Penetrating, Personal Immunity, Range Advantages, Ranged, Reduced Endurance, Transdimensional, and Uncontrolled.

Affects Desolidified: This Power Advantage isn't necessary for Luck. The results of a Luck roll can already affect Desolidified characters (if appropriate), and he can already grant Usable By Other Luck to a Desolidified character normally.

On a related point: a Desolidified character's Luck does not need the *Affects Physical World* Advantage to "rub off" on solid characters if he rolls four or more levels of Luck.

Area Of Effect: This Power Advantage is inapplicable to Luck. If a character wants to allow other characters to use his Luck, he should take the *Usable On Others* Advantage for the Power (see below), or buy four or more Luck dice so he can achieve enough levels of Luck for them to "cascade" down to other people.

Cumulative: At the GM's discretion, a character might be able to apply Cumulative to Luck to add the Luck dice together, instead of simply looking for sixes. Every six total points rolled equals one level of Luck. For example, ordinarily a roll of 3, 4, and 2 means no Luck effect, since the character didn't roll a 6 on any one die. With Cumulative, that roll equals one level of Luck, because the numbers add up to 6 or more. Had the dice rolled 4, 5, and 5, totalling 14, the character would have gotten two levels of Luck, since he got 12 total points' worth of effect. If the GM allows this, characters cannot increase the maximum effect they can roll on the dice by buying additional +¼ Advantages.

Delayed Effect, Time Delay, and Trigger: These Advantages might apply to lucky talismans, luck spells, potions of good fortune, and other such items.

Sticky: Ordinarily, only powers with a "physical special effect" can be made Sticky (*HERO System 5th Edition, Revised*, page 268). However, at the GM's option, a character can apply this Advantage to Luck, so that anyone who comes into contact with him in the same Phase he succeeds with a Luck roll also receives the benefit of the roll. This could cause game balance problems, so GMs should be wary of allowing it... but on the other hand, it can just easily benefit the character's enemies as his friends....

Usable On Others: Characters may apply *Usable By Other* or *Usable Simultaneously* to grant Luck to others, or create a form of Luck that affects several people at once. Luck *Usable As Attack* is possible, but since it only makes an opponent luckier, it's rarely (if ever) bought.

Variable Advantages: A character may apply this Advantage to Luck at the +¼ level to allow him to switch between any of the Advantages indicated here as being allowable for Luck.

Variable Special Effects: The outcome of a successful Luck roll can take many forms, involving many different physical objects or types of energy. Variable Special Effects is not required because of this.

LIMITATIONS

Most Limitations can apply to Luck in the normal manner. Here are notes on some special applications:

Limited Power: *The 5th Edition, Revised* provides, on page 199, two example Luck powers that both include a *Limited Power* Limitation. Typically, a Limited Power applied to Luck restricts the times or places when the character can use his Luck. For example, a Luck-charm provided by faeries might only apply as long as the character remains in the enchanted forest, or a Luck-blessing from a god might only work while the character performs a specific mission for the god.

One interesting Limited Power specific to Luck is *Karmic* (-½). This signifies a form of Luck that depends on a character's good and proper conduct. The character has to have a specific code of conduct to follow, as defined by his player and GM; typically, these codes involving having to "perform good deeds" or otherwise act in a heroic fashion. As long as the character does what he's supposed to, he has "good karma" — his Luck works in the normal fashion. If he doesn't follow his code, or if he tries to skirt around its restrictions, his Luck works less well: he may get to roll fewer Luck dice, or no dice at all, or he could even acquire some temporary Unluck!

Gamemasters should be wary about letting characters apply Limitations like *Self Only* or *Others Only* to Luck. The effects of Luck are often broad enough to benefit an entire group generally, even if a character only rolls three or fewer levels of Luck, so such Limitations often are not sufficiently restrictive to qualify as valid Limitations.

Requires A Skill Roll: As noted in the rulebook, characters can take a Luck roll as a Required Skill Roll. In this case, typically the character can make the Luck roll whenever he wants to activate the power — but a successful roll simply activates the power, it doesn't also provide any Luck effect. If the character can only make the Luck roll when the GM allows (as is normally the case with Luck), he should get an additional ½ value for the Limitation.

The main difficulty with Requires A Luck Roll is determining how to apply the Active Point penalty. For most forms of this Limitation, characters should take the "no Active Point penalty" modifier. If that's not appropriate, the player and the GM should work out a way that fits the power and special effects. Typically, the best method is to determine what the normal Active Point penalty would be (-1 per 10 Active Points), and then subtract one die of Luck for a certain increment of penalty (maybe -1 die per -1 penalty, or -3 penalty, or the like). As a default rule, subtract one die of luck for ever -2 worth of penalty. If the character only subtracts one die for every -4 worth of penalty, the Limitation is worth ¼ less value; if he subtracts one die for every -1 worth of penalty, the Limitation is worth ½ more value; if there's no Active Point penalty, the Limitation is worth ½ less value.

Side Effects: Unluck is a common Side Effect for Luck — if the character's not lucky, he's unlucky. That makes Luck a real gamble... but in some ways, that's the whole point.
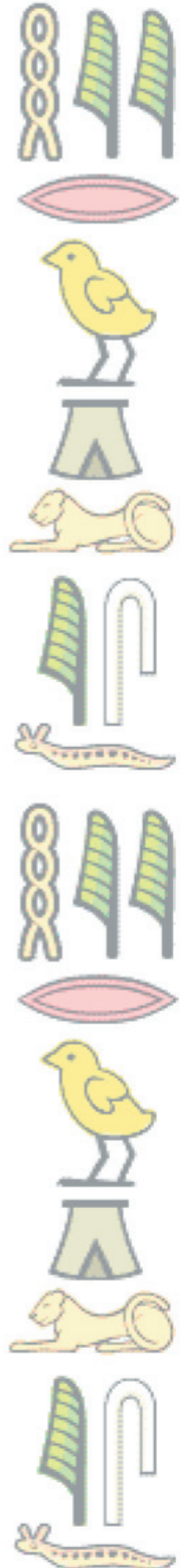
HEROGLYPHS 5

NOW I'VE GOTCHA!

CREATING HARD-TO-ESCAPE ENTANGLES

On page 167 of the *HERO System 5th Edition, Revised*, the rules note that characters might be able to escape some types of Entangles using Contortionist. This column offers some optional rules to expand upon that idea, and covers some related topics.

Breaking Out Of Entangles

Here are some expanded rules and rules clarifications regarding breaking out of Entangles.

ESCAPING WITH CONTORTIONIST

The basic *HERO System* rules assume a character *cannot* use Contortionist to escape from an Entangle. This represents Entangles like glue bombs, ice blocks, sticky webbing, and magical energy fetters — no matter how a character squirms and contorts his body, he cannot get out of such Entangles by agility alone. His only resort is to try to smash out of them using STR, a Martial Maneuver with the Exert element devoted to "escape," or an appropriate attack.

However, characters could escape other special effects for Entangle — rope, chains, handcuffs, wireguns, and the like — with Contortionist, though it might be difficult. You can represent this with a Limitation, *Escapable With Contortionist.* For a -1 Limitation, a character can escape an Entangle by making a normal Contortionist roll. This requires a Full Phase. This might represent poorly-tied ropes, weak wireguns, or the like.

For a -½ Limitation, a character can escape an Entangle by making a Contortionist roll at a -1 to -3 penalty (the GM determines the appropriate penalty, based on special effects and the circumstances). This might represent normal handcuffs (see the example in the sidebar on page 168 of the *5th Edition, Revised* rulebook), an average-quality wiregun, typical chains, or the like.

For a -¼ Limitation, a character can escape an Entangle by making a Contortionist roll at a -4 to -6 penalty (the GM determines the appropriate penalty, based on special effects and the circumstances). This might represent high-tech handcuffs, a quality wiregun, some limited or poor-quality types of glue bombs or ice blocks, tight and well-made chains, and the like.

In any case, using Contortionist to escape an Entangle normally requires a Full Phase. For ¼ more Limitation, this only requires a Half-Phase Action. For each ¼ less Limitation, the character

buying the Entangle can extend the time it normally takes to contort out of it by one step down the Time Chart (1 Turn, 1 Minute, and so forth). However, these are *average* times; the GM may modify them based on special effects, how much the character makes his roll by, the circumstances, common sense, dramatic sense, and other factors.

Characters can also escape some types of Entangles, such as chains, with Lockpicking rather than Contortionist (assuming the character can reach the lock and has an appropriate tool or power to do the job). If so, simply change the Limitation's name to *Escapable With Lockpicking*. If a character can escape an Entangle with both Lockpicking and Contortionist (as with handcuffs), simply include both Skills in the Limitation's name; the Entangle doesn't get an additional Limitation because of this.

TARGETING ENTANGLES

Page 168 of the *HERO System 5th Edition, Revised* describes how Entangles can be targeted specifically at -3 OCV if a character wants to free a victim from an Entangle without hurting him (unless the Entangle has the *Entangle And Character Both Take Damage* Advantage). This raises the question of what the Entangle's DCV is.

Like the character it traps, a typical Entangle has a DCV of 0. Of course, the Range Modifier and other applicable penalties may make it more difficult to hit. The GM can increase an Entangle's natural DCV based on special effects, the situation, common sense, dramatic sense, and similar factors.

At the GM's option, for each +5 Character Point Adder applied to an Entangle, its DCV increases by 3. Thus, for +5 points, an Entangle has DCV 3; for +15 points, it has DCV 9. The GM may, in his discretion, establish a limit on how much an Entangle's DCV may be increased.

Regardless of an Entangle's DCV, a character trapped by that Entangle always hits it automatically. He never has to make an Attack Roll to hit it, though attempting to damage it does constitute an Attack Action except where the rules note otherwise.

BYPASSING ENTANGLES

Many Entangles buy the *Takes No Damage From Attacks* Advantage so that most attacks do not affect them. A paralysis spell, which prevents a character from moving, but doesn't use any sort of physical substance that other characters could damage or break, is a perfect example of an Entangle with that Advantage.

By the same token, there are some types of attacks that should avoid Entangles, even if the Entangle normally takes damage from attacks,

because of the nature of the attack. Examples include biokinetic attacks (the ability to affect the victim's biological processes, for instance to make him suffer a heart attack or boil his blood), ripping the victim apart inside via gravity manipulation or psychokinetic power, and freezing the victim from the inside out.

At the GM's option, attacks that should affect a character without harming Entangles affecting him must take a +¼ Advantage, *Bypasses Entangles*, to reflect this. Attacks with the *Bypasses Entangles* Advantage damage the target without causing any damage to any Entangle affecting him.

CASUAL STRENGTH AND RELATED MATTERS

Since Casual STR is a Zero-Phase Action, a character trapped in an Entangle may try it each Phase. If he breaks out, he still has a Full Phase left to act. If he fails, he can still use his Action to try to break free with his full STR, per the standard rules.

A character with an Attack Power that causes BODY damage that he remains able to use (such as an innate Energy Blast) can use it to try to break out instead. He may make a "Casual" attack at half DCs as a Zero-Phase Action. If he breaks out, he still has a Full Phase left to act. If he fails, he can still use his Action to try to break free with his full attack, per the standard rules.

Entangled characters may not, except with the GM's permission, make multiple-Power attacks, or use Rapid Fire or Sweep, against an Entangle.

A character trapped by an Entangle immediately drops to DCV 0, even if the Entangle is so weak he can easily break out of it with his Casual STR/attack in his next Phase. If characters start to abuse this rule by attacking their enemies with measly 2d6 Entangles just to drop their DCVs to zero, allow trapped characters to make a Casual STR/attack roll to break out *immediately* when they're Entangled (as with Grab; see 5E 256); if the Casual STR/attack roll succeeds, the victim keeps his normal DCV.

See page 423 of the *HERO System 5th Edition, Revised* for rules on Actions remaining to characters who break out of Entangles.

Entangles Affecting Characteristics Other Than STR

Under the standard rules, a character breaks out of an Entangle using STR. Page 110 of the 5th Edition provides rules for creating Entangles that require EGO to break out of instead of STR. It's possible to extend the reasoning behind "Mental Paralysis" Entangles to create Entangles affecting other Primary Characteristics.

Doing this requires a Power Modifier, *Works Against [CHAR], Not STR*. This Modifier may be an Advantage or a Limitation, depending on whether, in the campaign, the average character is likely to have the affected Primary Characteristic at a lower or higher level than STR. If it's likely to be higher, *Works Against [CHAR], Not STR* is probably a Limitation; if it's likely to be lower, it's probably an Advantage. This takes into account not only Characteristic cost (expensive Characteristics are likely to be lower than STR), but the nature of the campaign and types of characters in it (in a psionics campaign, EGOs are usually higher than STRs despite being more expensive point-for-point). The value of the Modifier depends on the average relative level of the two Primary Characteristics, as indicated by the accompanying table.

Here are some guesstimates of these values for

WORKS AGAINST [CHAR] SUGGESTED VALUES

Affected Characteristic Is, On The Average...	Suggested Value
Much higher than STR	-½ or more
Slightly higher than STR	-¼
Equal to STR	-0
Slightly lower than STR	+¼
Much lower than STR	+½ or more

"average" *HERO System* campaigns, with descriptions of possible special effects. The number in front of the slash represents the value in Heroic campaigns, the number after the slash the value in Superheroic games. Many of the suggested special effects require the *Takes No Damage From Attacks* Advantage and the *Cannot Form Barriers* Limitation.

Works Against DEX, Not STR (-0 / +¼): This might represent energy bonds that can't be broken, only wiggled out of, coils that stretch so much they're unbreakable but which the character can squeeze out of, and so forth.

Works Against CON, Not STR (-0 / +¼): This might represent paralytic attacks such as some venoms and nerve strikes — it's not the strength of the character's muscles or will that governs how long he's paralyzed, but his hardiness and fitness.

Works Against BODY, Not STR (+½ / +½): This might represent attacks similar to Works Against CON. Except for COM, this is probably the least likely Characteristic for Entangles to affect.

Works Against INT, Not STR (-0 / +½): This might represent psychic attacks that put the victim in a "mental maze" he has to "escape" from before he can act, or a puzzle so absorbing a character can't do anything but try to figure it out until he somehow forces himself to look away from it.

Works Against EGO, Not STR (+¼ / +¼): This represents "Mental Paralysis," as discussed on page 169 of the rulebook.

Works Against PRE, Not STR (+¼ / +½): This might simulate the ability to inspire unwavering awe, or a terror attack leaving the victim so frightened he can't move.

Works Against COM, Not STR (+¼ / +½): This might represent beauty so breathtaking, the character can't do anything but stare at it — only concentrating on the quality of his *own* looks is enough to break him free.

A character attempting to break out of one of these "exotic Entangles" may use his "Casual" Characteristic, in exactly the same way that Casual STR works against normal Entangles. This costs END at the standard rate of 1 per 10 Active Points used (including the base 10 points the character gets "for free" in the Characteristic). An exotic Entangle functions in all ways as a standard Entangle (it reduces the victim's DCV to zero, and so forth). Depending on the special effect involved, another character who wants to "attack" the Entangle to free a trapped comrade may actually have to try actions other than attacking (such as slapping the victim's face, splashing water on him, or shouting out clues and encouragement).

HEROGLYPHS 6

WHERE NO MAN HAS GONE BEFORE

REVISING EXTRA-DIMENSIONAL MOVEMENT

Extra-Dimensional Movement (EDM) is a handy power with a wide variety of uses — everything from what the title literally refers to (journeying from one dimension to another) to esoteric powers like creating an "impenetrable barrier" around something. However, it's not quite as finely-grained or well-explained as it sometimes needs to be, leaving *HERO System* users somewhat confused about exactly what to buy and how much it costs. This column offers a rewrite and expansion of EDM for your consideration.

EXTRA-DIMENSIONAL MOVEMENT [STOP]

Movement Power
Constant
Self Only

A character with this Movement Power can travel from one dimension to another. Some examples of Extra-Dimensional Movement include wizards who can open gates to other planes, starships capable of breaching dimensional barriers, and time travel machines. Extra-Dimensional Movement costs END to use.

When buying Extra-Dimensional Movement, a character must first pay a base cost of 20 points. That allows him to travel to a single physical location in a single other dimension — for example, only to Odin's Hall in Valhalla, or only to the Infernal Gates in Hell. If a character wants to travel to more locations in that one dimension, or to more than a single dimension, he has to pay Character Points for additional modifiers to the power (see text below, and the Extra-Dimensional Movement Summary Table).

Using Extra-Dimensional Movement takes a Full Phase. It does not involve acceleration, deceleration, or a Turn Mode.

Normally, a character with Extra-Dimensional Movement can only move himself, his clothing, and his personal equipment (including any Foci). To move more weight, the character must buy an Adder (see below) for his Power.

Number Of Dimensions The Character Can Travel To

To travel to a related group of dimensions (such as the Nine Hells or the Four Elemental Planes) costs +5 Character Points. The GM determines what constitutes "a related group"; there's no specific numerical limit.

The ability to travel to any dimension costs +10 Character Points.

Regardless of how many dimensions a character can travel to, he can only travel to a single physical location in each one, and he must define the specific location in each dimension when he buys the power.

Physical Locations The Character Can Reach

As noted above, the default with Extra-Dimensional Movement is that a character can only travel to a single physical location in any dimension he can travel to, and he has to define that location when he buys the power. (Once he reaches that single location he can, of course, travel freely under his own power, unless some outside force or circumstance prevents him from doing so.) A character may expand the number of locations he can travel to with additional modifiers.

If the character can only travel to a single dimension, the ability to travel to any location in that dimension costs +5 Character Points.

If the character can travel to a related group of dimensions, the ability to travel to any location in any of those dimensions costs +10 Character Points.

If the character can travel to any dimension, the ability to travel to any location in any of those dimensions costs +15 Character Points.

If a character is limited to only traveling to physical locations in other dimensions corresponding to the physical location he occupies in the dimension he's currently in, that costs -3 points.

Generally speaking, Extra-Dimensional Movement does not give a character any enhanced movement in his home dimension; a character in New York cannot transport himself to Valhalla and then back to Tokyo. A character either returns to his home dimension in the same location from which he left it, or he only travels as far as he travelled in the alternate dimension. At the GM's option, if the character has paid the points to be able to travel to any location in any of the dimensions he can travel to, he can likewise return to any location in his home dimension.

EXTRA-DIMENSIONAL MOVEMENT SUMMARY TABLE

Cost	Effect
20	Travel to a single location in a single dimension

Number Of Dimensions Modifiers

Cost	Effect
+5	Travel to a single location in a related group of dimensions
+10	Travel to a single location in any dimension

Dimensional Location Modifiers

Cost	Effect
+5	Any physical location in a single dimension
+10	Any physical location in a related group of dimensions
+15	Any physical location in any dimension
-3	Character can only travel to the physical location in the other dimension corresponding to his physical location in the dimension he's currently in

Time Travel Modifiers

Cost	Effect
+20	Travel through time to a single moment in time
+5	Travel to a related group of discrete moments in time
+1	Travel forward or back in time by up to 1 Turn in either direction; +1 point for each additional increment on the Time Chart; if character can only travel to the past or to the future, halve this cost

Time Travel Location Modifiers

Cost	Effect
+0	No change in physical location; character remains in the physical location he occupies when he activates the power
+2	Any single physical location in the same dimension the character occupies when he uses the power, defined when the power is bought, regardless of where the character is when he activates the power
+5	A limited group of physical locations, in the same dimension the character occupies when he uses the power, in the moments in time the character can travel to
+10	Any physical location, in the same dimension the character occupies when he uses the power, in the moments in time the character can travel to
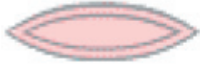
EXAMPLE EXTRA-DIMENSIONAL MOVEMENT POWERS

Cost	Travel To A Single Dimension
20	A single location
25	Any physical location

Travel To A Related Group Of Dimensions

Cost	Effect
25	A single location in each dimension
35	Any physical location in each dimension

Travel To Any Dimension

Cost	Effect
30	A single location in any dimension
45	Any physical location in any dimension

Travel In Time: Physical Location Same As Starting Location

Cost	Effect
40	Travel to a single moment in time
45	Travel to a related group of moments in time
67	Travel to any moment in time within 50 Billion Years, future or past

Travel In Time: Single Physical Location Other Than Starting Location

Cost	Effect
42	Travel to a single moment in time
47	Travel to a related group of moments in time
69	Travel to any moment in time within 50 Billion Years, future or past

Travel In Time: Limited Group Of Physical Locations

Cost	Effect
45	Travel to a single moment in time
50	Travel to a related group of moments in time
72	Travel to any moment in time within 50 Billion Years, future or past

Travel In Time: Any Physical Location

Cost	Effect
50	Travel to a single moment in time
55	Travel to a related group of moments in time
77	Travel to any moment in time within 50 Billion Years, future or past

Time Travel

"Time" counts as a single dimension for purposes of Extra-Dimensional Movement, but characters must pay +20 Character Points (in addition to the base cost of 20 Character Points for any Extra-Dimensional Movement) to travel in time. For that total base cost of 40 Character Points, the character can travel to a single moment in time, defined when the power is bought. Time travel occurs only in the physical dimension the character is in when he uses the power. For example, a character on Earth cannot time travel to Hell or Valhalla (though he could have two Extra-Dimensional Powers, one physical and one temporal, that in combination allowed him to do that).

If a character wants to travel to more than a single moment in time, he must pay more Character Points. The ability to travel to a related group of moments in time, in the past or the future, no matter how far removed in time from the present moment, costs +5 Character Points. The GM determines what constitutes a "related group"; examples typically include all instances of a particular date (*e.g.*, any July 4 in any year), or any date within a specific, limited span of time (*e.g.*, one specific day, one specific year).

Some characters may want to travel to any moment in time within a particular timeframe, such as "within my lifetime" or "within 500 years, past or future, from the present moment." To do this, they spend points to buy the range across which they may travel. For +1 Character Point, the character may travel forward or backward in time by up to 1 Turn (12 seconds). Thus, if he were in Segment 6 of Turn 2 of a combat, he could travel to any Segment up to Segment 6 of Turn 3 (but no further into the future), or to any Segment back to Segment 6 of Turn 1 (but no further into the past). For each additional +1 point, he may expand his range of travel by one step down the Time Chart (see the accompanying Expanded Time Chart). Thus, to travel to any point in time within 50 Billion Years in the future or 50 Billion Years in the past costs +27 Character Points (for a total cost of 67 points for the power). If the character can only travel one direction in time (backward to the past, or forward to the future), halve this cost.

Regardless of how many moments in time a character can travel to, he can only time travel to a single physical location in the dimension he's in when he uses the power. By default, this location is defined as the location he's in when he activates the Power — if he starts in Chicago in 2002, he can travel back to 1636 or forward to 3312, but he'll still be in Chicago (or whatever it used to be/will become — which may prove hazardous for him!). For +2 Character Points, he may define his time travel as always taking him to the same location, no matter where he is when he uses Extra-Dimensional Movement — he always time travels to London, no matter where he is when he activates the Power. For +5 Character Points, he can go to

TIME CHART (EXPANDED)

Time Period/Duration

1 Segment
1 Phase
1 Turn (Post-Segment 12)
1 Minute
5 Minutes
20 Minutes
1 Hour
6 Hours
1 Day
1 Week
1 Month
1 Season (3 months)
1 Year
5 Years
25 Years
1 Century
5 Centuries
2,500 Years
10,000 Years
50,000 Years
250,000 Years
1 Million Years
5 Million Years
25 Million Years
100 Million Years
500 Million Years
2.5 Billion Years
10 Billion Years
50 Billion Years

a related group of physical locations in the same dimension (say, any place in England). For +10 Character Points, he can go to any physical location in the same dimension. However, characters cannot use this as a cheap form of worldwide Teleportation (*e.g.*, "I'll travel to two seconds from now in Tokyo!") — they must engage in what the GM considers legitimate time travel.

Extra-Dimensional Movement is a "stop sign" power, and time travel doubly so. The time travel method outlined above is not intended as a combat ability, or a way for a character to go back and "re-do" the actions of the past few Segments or Turns just because they didn't turn out the way the character wanted. If a character wants to have time-manipulation powers that work in combat, he should buy those as specific Powers with a "time manipulation" effect. (See Captain Chronos in *Conquerors, Killers, And Crooks* for some examples of this.) Gamemasters should carefully monitor all uses of EDM in general, and time travel in particular, to prevent abuse or loss of game balance; as always, the GM should forbid any use of a power he considers improper or harmful to the game.

MEETING YOUR-SELF IN THE PAST

These rules do not offer or suggest any particular theory as to how time travel works, what effects characters traveling to the past can have on their present (or future), or any of the many other thorny issues related to the subject. Each GM must determine for himself how time travel works in his game. There are plenty of books and science fiction stories about the subject for readers interested in doing some research.

SUGGESTED DIMENSIONS

Here's a list of some of the dimensions characters can visit with Extra-Dimensional Movement:

Astral Plane

Ethereal Plane

Hell (or hells, depending upon conception and cosmology)

Heaven or heavens (ditto)

The Elemental Planes (air, earth, fire, water, other)

The Dreamscape (the world of dreams and nightmares)

Alternate Earths/timelines

POWER EXAMPLES: EXTRA-DIMEN-SIONAL MOVEMENT

Cyberspace: Extra-Dimensional Movement (any location in cyberspace, but limited to the location corresponding to the computer where you jack in), Reduced Endurance (0 END; +½) (33 Active Points); OIF (dataport; -½), Meat Body (character's body remains in the real world, but cannot move, perceive, or act, and damage to either the virtual form [in cyberspace] or the real body [in the real world] can hurt or kill the character; -1). Total cost: 13 points.

Enter The Microverse!: Extra-Dimensional Movement (any location in the Microverse, but limited to the location corresponding to the character's location in the normal-sized world). Total cost: 22 points.

Invocation Of The Gate To Hell: Extra-Dimensional Movement (one location in Hell), Area Of Effect (One Hex; +½), Continuous (+1), Reduced Endurance (0 END; +½) (60 Active Points); OAF Fragile (obsidian mirror; -1¼), Gate (-½), Gestures (-¼), Incantations (-¼), Requires A Magic Roll (-½). Total cost: 16 points.

Time Machine: Extra-Dimensional Movement (any place within 50 Billion Years forward or backward in time) (77 Active Points); OAF Bulky (-1½). Total cost: 31 points.

Other Uses Of Extra-Dimensional Movement

Characters can create "gates" to other dimensions by applying the rules for Gates under *Teleportation* (see page 234) to Extra-Dimensional Movement.

You can also use Extra-Dimensional Movement to simulate any situation in which a character is in a different state of being, cannot interact with the "real world," or is any place which is inaccessible to others. For example, a character with Shrinking could, theoretically, buy enough Shrinking to get inside molecules (the "microverse," so to speak). However, it's easier to buy this ability as Extra-Dimensional Movement to the microverse "dimension." Other such uses include stopping time (the character "travels to the dimension" where he is the only thing in the world not frozen in time); granting wishes (the character "travels to the dimension where he has received whatever he wished for"); the "virtual dimension" of cyberspace; creating an "impenetrable ward" to protect some place or object (the place or object is in another dimension, and thus generally cannot be affected by characters in this dimension); and the like. It may be necessary for a character to purchase special Senses or other Powers for use only in the dimension(s) he travels to; if so, he can usually purchase these with a -1 (or greater) Limitation.

This Power is extremely tricky, and can be difficult to use in a campaign setting. The GM should consider regulating Extra-Dimensional Movement in some fashion; otherwise characters will use it every time they get into trouble. For example, perhaps characters have to buy it in such a way as to make it unreliable unreliable — if the character misses a Skill or Activation Roll, he goes off course, to another dimension (or time). This Power is best used by the GM when it fits into his plans; otherwise it should be strictly controlled.

ADDERS

Increased Mass: For each +5 Character Points, the character can transport 2x normal human mass (100 kg) when using Extra-Dimensional Movement.

Extra-Dimensional Movement Cost: See Extra-Dimensional Movement Summary Table.
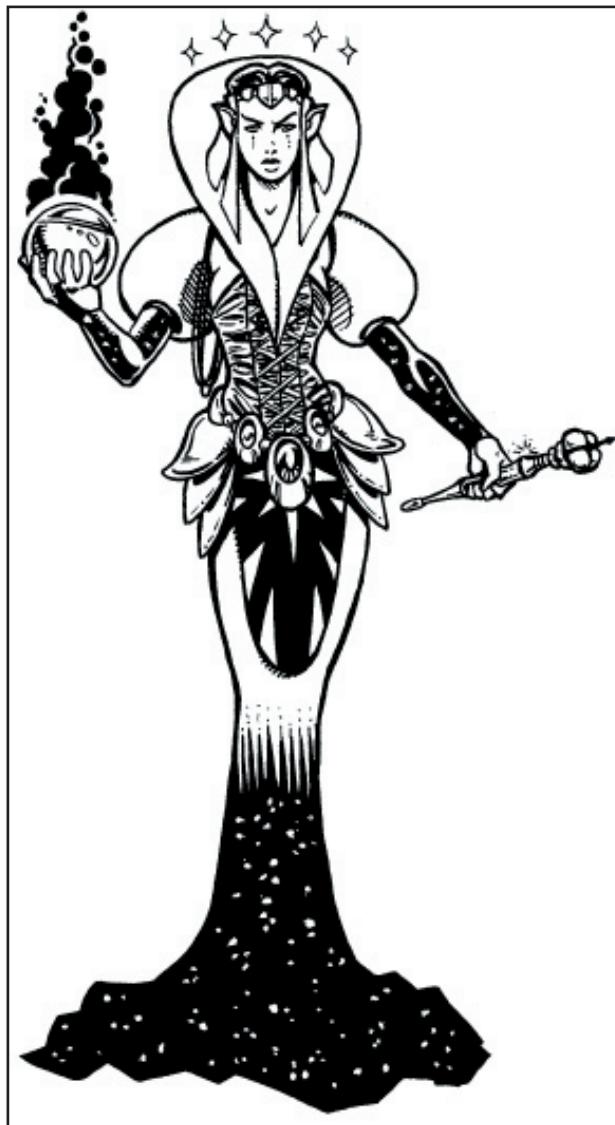
HEROGLYPHS 7

OUT OF THIN AIR

A NEW POWER FOR CREATING OBJECTS

The ability to create objects "out of thin air" is a common special effect for various powers. For example, a wizard's Spell of Sword-Summoning is an HKA, Usable By Others, and an earth-manipulating superhero's power to create walls of rock is a Limited form of Entangle. However, that sort of ability often causes problems when players want their characters to have the ability to create items that aren't easily defined in HERO System terms, or that, for all practical purposes, really don't require a rules-based definition — things like common household objects, bridges, or the like. Gamers seeking an easier way to create this sort of ability may want to consider this new optional Power, Object Creation.

OBJECT CREATION

Standard Power
Instant
No Range

A character with this Standard Power can create solid objects. Some examples of Object Creation include a wizard who can conjure useful items, a superhero who can transform air molecules into metals and other substances to create various objects, and a starship's replication device that can transmute raw materials into various finished goods. Object Creation costs END to use.

For 20 Character Points, a character can create any type of simple object, with no moving or working parts, typically made of no more than one or two substances, of no more than one square hex in size, and with a maximum of 2 DEF, 2 BODY. Examples include a coffee mug, a thin board, a shrub, a backpack, clothes, or a small wall of some relatively fragile material.

For +5 Character Points, a character can create any type of object up to and including complex objects involving moving or working parts, provided he has an appropriate Skill related to using or building such objects. Examples include a flush toilet (requires PS: Plumbing), an internal combustion engine (requires Mechanics), a mechanical lock (requires Lockpicking), or a marionette (requires PS: Puppetry). For an additional +10 Character Points, a character can create complex objects without having any related Skill.

For +10 Character Points, a character can create any type of object up to and including extremely complex objects involving moving or working parts, provided he has an appropriate Skill related to using or building such objects. Examples

include a starship hyperdrive (requires Mechanics or PS: Operate Hyperdrive), a computer (requires Computer Programming), or an electronic lock (requires Lockpicking). For an additional +20 points, a character can create complex objects without having any related Skill.

The GM determines the complexity of a given object, and what Skill a character needs to create an object. He may even require a character to have multiple Skills, or a sufficiently high roll with a Skill, before the character can use Object Creation.

For +3 Character Points, the character may add up to +1 DEF or +1 BODY to the object. However, the object's BODY can never be more than twice its DEF, and vice-versa, without GM's permission.

For +5 Character Points, the object can be up to +1 square hex larger in a single dimension (width/length, height, or depth).

Once created, an object is permanent; it lasts until destroyed or used up. It cannot move, though a sufficiently strong character could carry it.

A character with Object Creation cannot create perfect duplicates of other objects; some flaws and differences are always readily detectable. At the GM's option, characters with an appropriate Forgery Skill can create duplicates good enough to pass as the real thing, though detailed testing or examination may still reveal them to be copies.

Restrictions On Object Creation

Object Creation has one important restriction: *characters cannot use Object Creation to create objects when doing so could reasonably be considered the special effect of some other power or ability*. This includes, generally speaking:

- any use of Object Creation that could directly or indirectly cause injury or harm (Object Creation is not an Attack Power)
- any use of Object Creation to create an object for which special design rules already exist (such as Automatons, Computers, Vehicles, and Bases), because characters can easily determine a total Character Point cost for such items and "create" them as a special effect of Summon.

The key word here is "reasonably." Players and GMs should not strain the definitions of other powers and effects to make a particular use of Object Creation invalid, when Object Creation provides a simple solution that does not unbalance or otherwise negatively affect the game. For example, a starship hyperdrive was listed above as an example of an object characters could create with Object

CHANGES TO OTHER POWERS

If you choose to use the *Object Creation* Power, you should make certain changes to other Powers:

Entangle: Entangle can no longer create "walls" or barriers. That is now a function of Object Creation.

Summon: Summon remains useful for "creating" living or mobile beings, objects with defined Character Point costs (such as Vehicles), and the like. The GM may need to evaluate a particular power carefully to determine whether Object Creation or Summon is the most appropriate way to build the ability in game terms.

Transform: Transform can no longer "create objects out of thin air"; that becomes a function of Object Creation.

POWER EXAMPLES: OBJECT CREATION

Create Walls: Object Creation (simple objects of up to 6 DEF, 6 BODY and up to 2" wide and high and 6" long) (80 Active Points); Limited Type Of Objects (stone walls only; -1). Total cost: 40 points.

Replication Module: Object Creation (extremely complex objects of up to 3 DEF, 3 BODY, no Skill required) (46 Active Points); OIF Bulky (starship replication station; -1). Total cost: 23 points.

Wizard's Toolkit: Object Creation (simple objects of up to 3 DEF, 3 BODY) (26 Active Points); Gestures (-¼), Incantations (-¼), Limited Type Of Objects (small tools and household items; -½). Total cost: 13 points.

Creation. While it is certainly easy to define a hyperdrive with Flight, FTL Travel, or other such powers, it may become complicated and tricky to determine how many people (or how much mass) the engine can move, and so forth. In appropriate situations, a GM may prefer to let characters use Object Creation instead, and simply come up with the specifics of the engine himself.

Examples of things Object Creation *cannot* do include:

• create swords or other weapons (that's a special effect for various Attack Powers, Usable By Others, OAF)
• create a heavy object over a character's head so that it falls and crushes him (that's a special effect for various Attack Powers, Indirect)
• create food and drink (that's a special effect for Life Support [Diminished Eating], Usable By Others)
• create a pit full of sharp spikes (that's a special effect for a Limited form of RKA)
• create a car or a house (that's a special effect for Summon, because the HERO System has rules for establishing the Character Point cost of Vehicles and Bases)
• create items of great value, such as gemstones, jewelry, or works of art (that's a special effect for the Money Perk)
• create living beings (that's a special effect for Summon)
• create a tool or object that makes it easier to perform a particular Skill or task (that's a special effect for bonuses to a Skill Roll, OAF)

The GM may grant a character permission to violate these restrictions, on a case-by-case basis, if he feels doing so will not unbalance the game. For example, although it's not normally permissible to create items of great value, a GM might allow a character to create fabulous and exotic suits of clothes, since they're not readily converted to money and the player can have a lot of fun roleplaying his character's "Clothes Horse" power.

ADVANTAGES

Area Of Effect: Characters cannot apply this Advantage to Object Creation; the Power already has its own rules for increasing the size of created objects.

Autofire: Characters cannot apply Autofire to Object Creation.

MegaScale: With the GM's permission, characters may apply MegaScale to Object Creation, thus allowing them to create enormous objects without having to spend hundreds of points to increase the object's size through the usual method.

Ranged: Characters may apply this Advantage to Object Creation so they can create objects away from themselves. This does not void the rule that says characters cannot use Object Creation to directly or indirectly harm another character.

LIMITATIONS

Limited Type Of Objects (-¼ to -1): Object Creation with this Limitation can only create certain types of objects. If the group is Slightly Limited (any technological device, any non-technological object), the Limitation is worth -¼. If it's Limited (mechanical devices, any stone object), the Limitation is worth -½. If it's Very Limited (clocks, stone walls), the Limitation is worth -1.

Restricted Lifespan (varies): As noted in the text, items created with Object Creation are permanent; they exist until destroyed or used up. If Object Creation has this Limitation, objects created with it have a much more finite lifespan. The GM determines the object's ordinary lifespan — the time before it would collapse, crumble to dust, or otherwise become useless or worthless. For each step up the Time Chart above 1 Year by which the character restricts the object's lifespan, the power gets a -¼ Limitation (maximum of -2). For example, if a character created a stone wall with Object Creation that crumbles away to dust after 20 Minutes, that's seven steps up the Time Chart, which is worth a -1¾ Limitation. The GM may forbid characters to apply this Limitation to Object Creation if he feels it does not significantly restrict the Power.

Object Creation Cost: 20 Character Points to create any type of simple object of up to 2 DEF, 2 BODY; +5 Character Points to create complex objects for which character has an associated Skill, an additional +10 Character Points to create complex objects without having an associated Skill; +10 Points to create extremely complex objects for which character has an associated Skill, an additional +20 Character Points to create extremely complex objects without having an associated Skill; +3 Character Points per +1 DEF or +1 BODY; +5 Character Points for +1 square hex in size.

HEROGLYPHS 8

STOP! IN THE NAME OF TIME

BUILDING A "TIME STOP" POWER

A few months ago, someone on the Hero message boards posted a question asking me how to create the ability to stop time throughout the Universe "accurately and elegantly." Unable to get the idea out of my head, I sat down and spent a couple hours writing up a power that fit the questioner's carefully-defined parameters. I posted the original version to the message boards, but since then I've refined things a bit. Here's my take on the subject. I hope you have lots of Character Points to spend....

ASSUMPTIONS

To keep this exercise as simple as possible, I'm going to specify the following assumptions and preconditions:

1. The exact size of the Universe, a.k.a. "Reality," is unknown, and possibly unknowable. However, a MegaArea effect at the +10 Advantage level is big enough to encompass the entire Universe, regardless of where the character happens to be situated within the Universe.
The Time Stop power, as designed, assumes there's just one dimension. If there are multiple dimensions and a character wants to affect all of them with this power, he should apply Transdimensional to all parts of it. (Hereafter, I refer to the various parts of the Time Stop power as "sub-powers.")

2. Characters can use multiple-Power attacks in the game. A character has to activate the different time-stopping effects at once — but he doesn't always need every effect. Thus, he must be able to pick and choose the subparts he wants to use, yet use all the sub-powers he selects simultaneously. Using a multiple-Power attack is much easier than figuring out which sub-powers should Link to which other sub-powers, and possibly creating an arrangement that won't fit what some characters want to do.

3. The levels of power chosen for the various sub-powers are, by GM's fiat, sufficient to affect any being and thing in the Universe, from the lowliest microbe to the most powerful super-being or god. I've built with enough points

that I suspect well over 90% of the beings and things in the Universe would be affected anyway, but for the sake of game play and having fun just assume this monstrosity of a power can affect Tyrannon or Zeus.

4. Two hundred doublings of mass (a +50 Advantage) suffices to affect the mass of any single object in the Universe with a Usable As Attack power.

5. The sub-powers are constructed using multiple Areas Of Effect so that it's easy for a character to hit everyone in the Universe. While technically 1 in 216 people should be "missed" (since a roll of 18 always misses), the GM should just ignore such statistical nonsense in favor of good old-fashioned common sense and dramatic sense, and assume everyone gets zapped.

6. Rules clarifications: Be sure to consult the *Rules FAQ* if a power construct doesn't make sense to you. Creating the Time Stop power led to the addition of several questions-and-answers to the FAQ.

TIME STOP

Time to get chronal.

SUB-POWER 1: STOP WHERE YOU ARE!

The first aspect of Time Stop to account for is the fact that everyone and everything stops moving. This requires a two-part sub-power. The first part uses Entangle:

Stop Where You Are!: *Entangle 1d6, 1 DEF, NND (defense is time manipulation powers; +1), Takes No Damage From Attacks (+½), Area Of Effect (1" Radius; +1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), Mega-Area (1" = the entire Universe; +10), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (150 Active Points); No Range (-½). Total cost: 100 points.*

This power is, of course, a blatant violation of the rule against applying NND to Entangle. However, as noted in Captain Chronos's description on page 137 of Conquerors, Killers, And Crooks, it's all in the sake of fun. This is, after all, an intellectual experiment. So, assume for the sake of argument that the GM grants permission.
The second part of this sub-power is that people and objects frozen in time don't fall if

they're in the air — gravity is time-stopped, too. To take this into account, we apply some Flight to everyone and everything in the Universe. For the sake of this power, assume 100" Flight suffices to withstand any pull of gravity. (See Star Hero for more information on gravity and its effects.)

> **Stop Where You Are!:** *Flight 100", Area Of Effect (20" Radius; +1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe; +10), Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (12,900 Active Points); No Range (-½). Total cost: 8,600 points.*

So, due to this sub-power, when the character stops time, no one can move. Flying creatures and vehicles stay exactly where they are, and falling objects are suddenly suspended in mid-air. However, thanks to the Personal Immunity, the character can move around freely, and since the Entangle has the Takes No Damage From Attacks Advantage, he can hurt or otherwise affect the time-stopped people if he chooses. He can take against them any action he could normally take, and he pays END for those actions at the usual rate. (Even though the character is "outside time," the GM should track "phantom Phases" for purposes of END expenditure and such.)

Technically speaking, there's one thing the character can't do: move the victims around. They are, after all, Entangled in an Area Of Effect — that means moving them would involve "tearing" through part of the Entangle to reach them, and then "tearing" them out of it. Given the special effects involved, the GM could easily rule that the character can move people and objects around without paying for any additional powers. But for GMs uncomfortable with that solution, here's the ability for a character to move time-stopped people and objects from place to place:

Cost	Power
83	*Let's Rearrange Things:* Multipower, 125-point reserve, all Extra Time (-¼), Must Pass Through Intervening Space (-¼)
7u	1) *Let's Rearrange Things (Small Rearrangement):* Teleportation 1", Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½) (105 Active Points); Extra Time (however long it takes for the character to carry/drag the object to the desired location; -¼), Must Pass Through Intervening Space (-¼) (total cost: 70 points)
8u	2) *Let's Rearrange Things (Large Rearrangement):* Teleportation 1", MegaScale (1" = the entire Universe; +10), Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½) (125 Active Points); Extra Time (however long it takes for the character to carry/drag the object to the desired location; -¼), Must Pass Through Intervening Space (-¼) (total cost: 83 points)

Total cost: 98 points

SUB-POWER 2: HEY, WHAT HAPPENED?

The next aspect of Time Stop to account for is that living beings aren't aware of the fact someone's stopped time. As long as time remains stopped, they remain oblivious; when the character turns time back on, they don't even realize the merest picosecond has passed.

There are several ways to handle this particular effect. The most thorough and accurate would be Transform, but ensuring that any living being regardless of BODY or Power Defense could be completely and instantly Transformed would cost in the hundreds of thousands of Character Points. So instead, let's try something a bit simpler: Change Environment. For purposes of this power, "ability to sense the passage of time" is defined as a single Sense Group. Because the character is immune to the effect, he senses the passage of time normally.

> **Hey, What Happened?:** *Change Environment 1" radius, -40 to Time Group PER Rolls, NND (defense is time manipulation powers; +1), Selective (+½), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe; +10), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (1,677 Active Points); No Range (-½). Total cost: 1,118 points.*

Gamemasters unwilling to accept "Time Sense Group" as valid can simply buy this same power multiple times, defining the Change Environment as affecting a different Sense Group each time. (The GM may, in his discretion, simply allow the character building the power to buy multiple combat effects for a single Change Environment power, as discussed in the Rules FAQ.)

Of course, 1 in 216 people will still make their PER Rolls to realize what's happening, since a roll of 3 always succeeds. As with the Attack Rolls discussed above, the GM should apply common sense and dramatic sense and just assume none of the affected persons ever succeeds with a PER Roll.

SUB-POWER 3: SNUFFING OUT THE STARS

The third aspect of Time Stop that this power construct must account for relates to sub-power 1(b). Gravity isn't the only form of energy the power has to stop; as long as time remains stopped, stars don't burn, water doesn't boil, and other similar potentially damaging effects simply lose their ability to harm the character. He could walk on the surface of Rigel if he wanted and not feel a thing.

Star Hero opines that the damage caused by the core of Earth's Sun would inflict 975d6 Killing Damage, Continuous, Armor Piercing (x8), Penetrating (x16), per Segment. For purposes of this power, I'll assume all stars are G2V ones like Sol. That's 204,750 Active Points' worth of power to negate (or 210 points per d6!). That requires a lot of dice of Drain using the Standard Effect Rule:

Snuffing Out The Stars: *Drain Energy 68,250d6 (standard effect: 204,750 points), all Energy powers simultaneously (+2), Area Of Effect (1" Radius; +1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe; +10), Continuous (+1), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (11,261,250 Active Points); All Drained Points Immediately Return When Character Deactivates Power (-½). Total cost: 7,507,500 points.*

The Drain is bought as Continuous so that it maintains its effect as long as the character wants — neither the Sun nor any other energy phenomena can recover the lost points quickly enough to negate the ongoing effect. Defining "Energy" as a special effect is somewhat questionable, but forgiveable due to the scale of the power; GMs concerned about this can buy the power multiple times until the cover all the energy-based special effects they can think of.

SUB-POWER 4: I FEEL SO YOUNG

The last aspect of time-stopping to account for is that affected beings and objects don't age, become hungry, catch diseases, or the like. That, of course, requires Life Support.

I Feel So Young: *Life Support: Total (including Longevity: Immortality), Area Of Effect (1" Radius; +1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe; +10), Reduced Endurance (0 END; +½) (662 Active Points); Does Not Affect Character (-½). Total cost: 441 points.*

Since the Life Support has a Limitation that it doesn't affect the character, he ages normally, has to eat and sleep, and so on. The GM has to keep track of the passage of "phantom time" while the time stop effect exists.

TOTAL COST

So, what does this wonderful and amazing power cost a character?

Power	Cost
Sub-Power 1(a)	100
Sub-Power 1(b)	8,600
Sub-Power 2	1,118
Sub-Power 3	7,507,500
Sub-Power 4	441
Total	**7,517,759**

Options	Cost
Moving things around	98

So, there you have it! For a bit over 7.5 million Character Points, you, too, can stop time.

In next month's HEROglyphs, we'll go one step forward... or backward... as I discuss how to create a time manipulation power.

UN-STOPPING VICTIMS

The conditions specified for Time Stop by the original questioner indicated the character should be able to un-stop (and re-stop) individual characters at will. Presumably this could also apply to individual vehicles, or worlds, or what have you. Here's the best way to do that:

Snap Out Of It!: Personal Immunity (+¼) for Time Stop Power, Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½). Total cost: 389,270,000 points.

Given that cost, maybe the character would be better off just letting his friends remain time-stopped. ;)

HEROGLYPHS 9

FORWARD TO THE PAST!

**MANIPULATING TIME
IN THE *HERO SYSTEM***

Last month's *HEROglyphs* column delved into the topic of stopping time. Now let's discuss *manipulating* time — moving it backwards and forwards. While it's always possible to accomplish this, in a sort of crude sense, by properly defining the special effects of various simple powers (see Captain Chronos in *Conquerors, Killers, And Crooks* for some examples), for the purposes of this article I'm trying to build a more literal Time Manipulation power — one that literally allows a character to "rewind" or "fast forward" time like you see in the movies.

ASSUMPTIONS

To keep this exercise as simple as possible, I'm going to specify the following assumptions and preconditions, which are the same as the ones for Time Stop:

1. The exact size of the Universe, *a.k.a.* "Reality," is unknown, and possibly unknowable. However, a MegaArea effect at the +10 Advantage level is big enough to encompass the entire Universe, regardless of where the character happens to be situated within the Universe.
The Time Manipulation power, as designed, assumes there's just one dimension. If there are multiple dimensions and a character wants to affect all of them with this power, he should apply Transdimensional to all parts of it. (Hereafter, I refer to the various parts of the Time Stop power as "sub-powers.")

2. Characters can use multiple-Power attacks in the game. A character has to activate the different time-manipulating effects at once — but he doesn't always need every effect. Thus, he must be able to pick and choose the subparts he wants to use, yet use all the sub-powers he selects simultaneously. Using a multiple-Power attack is much easier than figuring out which sub-powers should Link to which other sub-powers, and possibly creating an arrangement that won't fit what some characters want to do.

3. The levels of power chosen for the various sub-powers are, by GM's fiat, sufficient to affect any being and thing in the Universe, from the lowliest microbe to the most powerful super-

being or god. I've built with enough points that I suspect well over 90% of the beings and things in the Universe would be affected anyway, but for the sake of game play and having fun just assume this monstrosity of a power can affect Tyrannon or Zeus.

4. Two hundred doublings of mass (a +50 Advantage) suffices to affect the mass of any single object in the Universe with a Usable As Attack power.

5. The sub-powers are constructed using multiple Areas Of Effect so that it's easy for a character to hit everyone in the Universe. While technically 1 in 216 people should be "missed" (since a roll of 18 always misses), the GM should just ignore such statistical nonsense in favor of good old-fashioned common sense and dramatic sense, and assume everyone gets zapped.

6. Rules clarifications: Be sure to consult the Rules FAQ if a power construct doesn't make sense to you. Creating the Time Stop power led to the addition of several questions-and-answers to the FAQ. You may also want to dig up my original message board post on the subject, which has a section on "Clarifications."

TIME MANIPULATION

Just like Time Stop, Time Manipulation requires multiple "sub-powers" to create.

SUB-POWER 1: WHERE YOU WERE

First, Time Manipulation has to take into account the fact that people move around. If you reverse time to a point twelve seconds ago, in the intervening twelve seconds the people in the Universe may have moved around a great deal. Moving people against their will requires a Movement Power — Teleportation — Usable As Attack.

Where You Were, Part I: *Teleportation 500", Area Of Effect (200" Radius; +1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (54,500 Active Points); Only To Move People To Where They Were/ Will Be At A Defined Moment In Time (-½). Total cost: 36,333 points.*

Where You Were, Part II: *Teleportation 1", Area Of Effect (200" Radius; +1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), Mega-Area (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (129 Active Points); Only To Move People To Where They Were/Will Be At A Defined Moment In Time (-½). Total cost: 86 points.*

This particularly part of Time Manipulation requires a bit of rules fudging on the GM's part. Technically, an Area Of Effect Movement Power Usable As Attack has to affect all targets the same way — Teleport them all 5" to the left, or make them all fly 15" straight up, or what have you. Obviously, that makes no sense for Time Manipulation; in this case, just define "affect all targets the same way" as moving all targets back to where they were at X point in time. Each experiences the same effect, even if it makes him move in a different direction from everyone else.

SUB-POWER 2: WHAT YOU WERE LIKE (REMOVING INJURIES)

Next, Time Manipulation has to account for what has happened (will happen) to the targets between the current point in time, and the point in time the character wants to rewind/fast forward to. That means the power has to repair (or cause) damage to or loss of any Characteristic, Power, or other game element. Let's start with the repairs:

What You Were Like I: *Healing All Characteristics 100d6 (standard effect: 300 points), all Characteristics simultaneously (+2), Area Of Effect (+1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (66,750 Active Points); Only To Restore Lost Characteristics To Where They Were/Will Be At A Defined Moment In Time (-½) (total cost: 44,500 points)* **plus** *Can Heal Limbs and Resurrection options for Healing BODY (total cost: 25 points). Total cost: 44,525 points.*

What You Were Like II: *Flash Healing 100d6, Area Of Effect (+1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Usable As Attack (x200 doublings of mass; +51), Reduced Endurance (0 END; +½), Personal Immunity (+¼). Total cost: 64,750 Active Points.*

What You Were Like III: *As I, but for all Powers simultaneously. Total cost: 44,500 points.*

What You Were Like IV: *As I, but for all Skills simultaneously. Total cost: 44,500 points.*

What You Were Like V: *As I, but for all Perks simultaneously. Total cost: 44,500 points.*

What You Were Like VI: *As I, but for all Talents simultaneously. Total cost: 44,500 points.*

What You Were Like VII: *RKA 100d6 (standard effect: 300 points), Area Of Effect (+1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (20,625 Active Points); Only To Destroy Entangles Based On Character's State At Defined Moment In Time (-2). Total cost: 6,875 points.*

So, that leaves us with a total cost for What You Were Like of 294,150 points.

SUB-POWER 3: WHAT YOU WERE LIKE (INFLICTING INJURIES)

Now we have to deal with the possibility that the character was (or will be) worse off at the point in time to which the character wants to move him — he was injured (or will be injured) then, or suffered a Drain, or what have you.

Former/Future Injuries I: *Drain All Characteristics 100d6 (standard effect: 300 points), all Characteristics simultaneously (+2), Area Of Effect (+1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (15,750 Active Points); Only To Remove Characteristics To Where They Were/Will Be At A Defined Moment In Time (-½). Total cost: 10,500 points.*

As above, we also have to extend Former/Future Injuries to Powers, Skills, Perks, and Talents. That means this sub-power costs a total of 52,500 points.

What about people who are Flashed or Entangled? Here's how to affect them:

Former/Future Injuries II: *All Sense Groups Flash 100d6 (standard effect: 100 points), Area Of Effect (+1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (7,219 Active Points); Only To Flash Characters As They Were/Will Be At A Defined Moment In Time (-½). Total cost: 4,813 points.*

Former/Future Injuries III: *Entangle 100d6, 100 DEF (standard effect: 100 BODY), Area Of Effect (+1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), MegaArea (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (13,750 Active Points); Only To Entangle Characters As They Were/Will Be At A Defined Moment In Time (-½). Total cost: 9,167 points.*
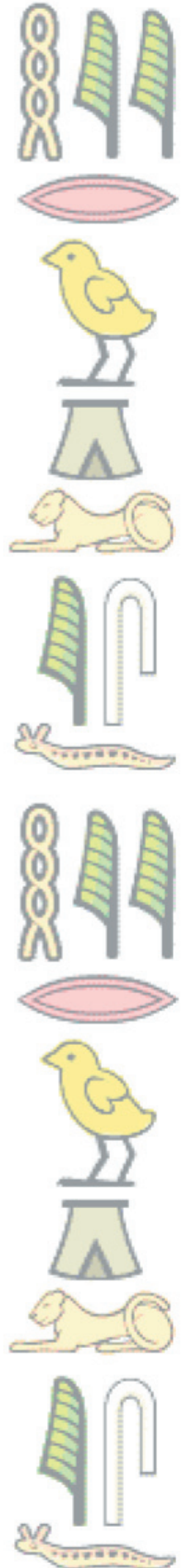
This is a little crude, since it doesn't account for variations such as Entangles that don't take damage from attacks, BOECV Entangles, and the like, but given the special effects involved, the GM can probably declare that those effects occur as they were/will.

Similarly, we have to account for the effect of Transforms. While we're at it, we can structure the Transform to make any other changes necessary, including the activation or deactivation of Disadvantages, the use of Charges, and the effects of Mental Powers.

Former/Future Injuries IV: *Major Transform 100d6 (everything and everyone back to the way it was/will be at designated point in time for effects not otherwise accounted for in the Time Manipulation write-up; standard effect: 300 points), Area Of Effect (+1), Selective (+¼), Area Of Effect (One Hex Accurate; +½), Mega-Area (1" = the entire Universe, can scale down to 1" = 1 km; +10¼), Improved Target Group (anything; +1), Reduced Endurance (0 END; +½), Personal Immunity (+¼) (22,125 Active Points); All Or Nothing (-½). Total cost: 14,750 points.*

Thus, the total cost of Sub-power 3 is 81,230 points.

TOTAL COST

So, what does this wonderful and amazing power cost a character?

Power	Cost
Sub-Power 1	36,419
Sub-Power 2	294,150
Sub-Power 3	81,230
Total	**411,799**

Only a little over 400,000 points — not to bad, considering that Time Stop costs about 7.5 million.
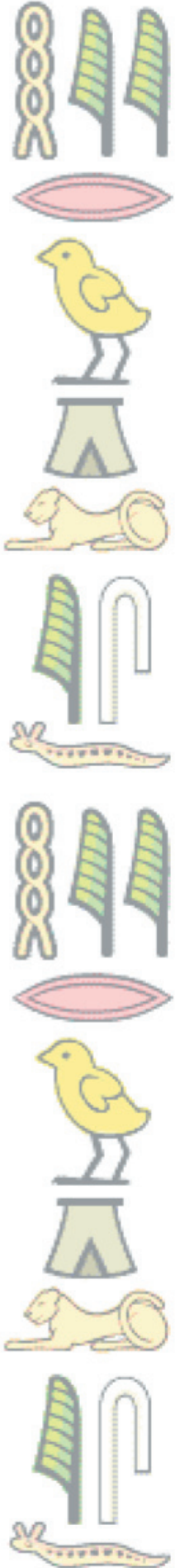
HEROGLYPHS 10

AN EARTH-SHATTERING KA-BOOM

CREATING NUCLEAR WEAPONS USING THE *HERO SYSTEM 5TH EDITION*

Several years ago, I created a *HERO System* writeup for a one megaton (MT) nuclear bomb; it was published in the *HERO System Almanac II*. Since the rules have changed a little bit since then in ways that make it easier to write up a nuke, I thought it was time to update and republish the article. In doing so I have not updated the research in any significant respect, but anyone interested can find a wealth of materials, both in print and on the web, on the subject.

Even more terrifying than biological and chemical weapons are nuclear weapons. Whereas chemical and biological warfare agents may have the capacity to affect everyone in a particular area, nuclear weapons are capable of instantaneously wiping out entire cities and killing tens of thousands of people (or more). The major nations of the world possess enough nuclear weapons to kill most of Earth's population in a very few minutes (and, according to some theories, condemn the survivors to a slow, painful death from radiation or "nuclear winter"). Currently, the United States, several former Soviet states (Russia, the Ukraine, Belarus, and Kazakhstan), the United Kingdom, France, China, India, Israel, South Africa, and Pakistan have nuclear weapons (or nuclear capability and materials); Argentina, Brazil, Chile, Iran, Iraq, Libya, North Korea, South Korea, and Taiwan have all expressed strong interest in creating their own nuclear bombs, and some have taken steps toward doing so.

Because of nukes' incredible destructive capabilities, GMs frequently use them as plot elements in *HERO System* scenarios. Therefore, GMs and playes alike may find it helpful to have an understanding of how nuclear bombs work, and how to simulate their effects in game terms. Of course, most of the time the exact effects of the bomb don't matter — it's just a plot device and doesn't need a write-up. But occasionally it could matter — for example, when a PC's base of operations is located on the edges of the blast's effect and the GM must answer the question of exactly what happens to him and his vital equipment. For this reason — and because it's intriguing to push the limits of the game system and experiment a little bit — this article presents *HERO System* statistics for the effects of a nuclear bomb.

Much of the information in this section is subject to change depending on many different factors. The weather, the topography, the accuracy of the bomb, and how perfectly it detonates can all affect the actual explosion and the effects it has. Furthermore, a lot of the present information about nuclear explosions remains subject to interpretation and debate. The author has selected what he feels is the best information, and in some cases has altered it slightly to fit the game system better. Players who prefer to rely on other data or interpretations are free to recalculate the effects of the bomb to suit themselves.

How Nuclear Bombs Work

There are basically two types of nuclear bombs: fission bombs and fusion bombs. Fission bombs work by splitting apart the large atoms of the elements uranium or plutonium. On detonation, the bomb uses high explosives to force two chunks of the fissionable material together, thus splitting one atom, which causes a chain reaction of fissioning atoms and a tremendous release of energy. Scientists refer to the smallest amount of uranium or plutonium needed to achieve this chain reaction as the "critical mass."

Fusion bombs are generally three to four times as powerful as fission bombs. They work by fusing two or more atoms together to form a different element. Usually they fuse deuterium atoms to form helium-3, or deuterium and tritium atoms to form helium-4. To cause this result, a fusion bomb uses a fission bomb as a "trigger."

For either type of bomb, the amount of material needed to produce the nuclear explosion is surprisingly small — approximately 55 pounds of enriched uranium, or a mere 18 pounds of plutonium, are all that's needed to make a bomb as powerful as the one used on Hiroshima (the United States and Russia possess the capability to make a miniature nuke out of as little as six pounds of plutonium, but terrorists and criminals do not have such resources). This makes it easy for the GM to run all sorts of scenarios involving the theft or smuggling of uranium or plutonium (both of which are produced in certain types of nuclear reactors). The actual construction of the bomb mechanism itself is far easier than acquiring the uranium or plutonium — in the past, college undergraduates have designed workable nuclear devices using only declassified United States government documents and readily available materials. It would certainly be possible for clever terrorists, criminal scientists (including former Soviet nuclear

scientists hired by criminals), or master villains to do the same. However, the machinery and technological parts needed to build the bomb may not be so easy to acquire; in many cases they are quite rare, and require highly specialized skills to build or use.

Physicists rate the force of a nuclear explosion by comparing it to an equivalent amount of tons of TNT. A kiloton equals a thousand tons of TNT, and a megaton equals a million tons. The smallest American nuclear explosive is .1 kiloton, and various nations have bombs ranging into the tens of megatons or higher. Nuclear warheads have been placed on every type of launch system, from relatively short-range artillery to intercontinental ballistic missiles (ICBMs).

The Effects Of A Nuclear Explosion

This section describes the effects of a one-megaton (1 MT) nuclear bomb using the *HERO System 5ᵗʰ Edition* rules. As stated above, much of the data on nuclear explosions is sketchy or highly debatable. The author has made various assumptions or choices so that he could drive game statistics without major difficulty (erring on the side of increased damage or effect, for the sake of drama). Gamemasters and players should feel free to do their own research and tailor the bomb's effects to suit their own opinions and/or campaigns.

Common Limitations for the nuclear bomb described below include: OAF Bulky (-1½), 1 Charge which Never Recovers and destroys bomb (-4 or less; in some cases this Charge lasts for more than a single Phase); No Range (the launching system must supply the Range for the bomb; -½); and Requires A Systems Operation Roll (-½) (total -6½, less with a Continuing Charge).

The effects of a nuclear explosion can be roughly summarized as follows:

- initial explosion (immediate release of radiation, thermal blast/flash, electromagnetic pulse [EMP])
- blast wave and wind effects
- fires, and
- lingering radiation and fallout.

Many of these effects vary substantially, depending upon whether the attack was a "ground burst" (in which some or all of the nuclear fireball touches the ground) or an "air burst" (in which the fireball does not touch ground; for a 1 MT bomb, this means it would have to be detonated about 2,000 feet to half a mile above the ground). For example, a ground burst causes a large mushroom cloud, a crater, and tremors: a 1 MT bomb creates approximately a 200 meter (100") crater 50-70 meters (25-35") deep (in ordinary soil), and its mushroom cloud may be as much as thirteen miles wide and ten miles high. A 1 MT air burst doesn't create a crater or tremors, but has a greater EMP.

Many of the nuclear bomb's effects include the Advantage *Explosion*. For ease of calculation, ignore any other Advantages on the power when calculating the dropoff of the Explosion; just subtract 1 DC per hex (or other indicated distance) as if there were no other Advantages on the power.

FIRST EFFECT: IMMEDIATE RADIATION

First, a nuclear explosion releases tremendous amounts of radiation (in the form of neutrons and gamma rays) into the area. The radiation does not cover as large an area as the heat or blast effects, but is nonetheless deadly (particularly to Desolidified characters who might otherwise survive the explosion). Scientists measure the amount of radiation released in roentgens and Roentgen Absorbed Dose (rads) (which describes the effects of radiation on humans; see *Star Hero*, pages 282-83, for more information). A 1 MT bomb irradiates about a 1 mile (1.6 km, or 804.5") radius area with over 19,000 rads, enough to kill humans instantly (if near the blast) or within minutes or hours (if slightly farther away). However, by 2 miles this has dropped off to about 24 rads, which is not likely to have much effect on humans. Persons caught between one and two miles are likely to absorb enough radiation to cause them a slow and painful death in days or weeks (in game terms, this is a Gradual Effect with reduced value because a larger than normal portion of the damage accrues immediately). Humans lacking special equipment or senses cannot detect radiation (this sort of intense burst doesn't even do STUN), but survivors feel its effects for the rest of their lives (however short those lives may be).

Initial Radiation: *Drain BODY 20d6, Delayed Return Rate (points return at the rate of 5 per Week; +1¾), NND (defense is Life Support [Safe Environment: High Radiation]; +1), Does BODY (+1), Area Of Effect (One Hex Doubled; +¾), Affects Desolidified (+½), Continuous (+1), Invisible Power Effects (creation of radiation field is perceivable, field itself afterwards is not; +½), MegaArea (each hex is 1 mile wide and broad; +½) (1,600 Active Points); OAF Bulky (-1½), Targets In Outer Ring Of Hexes Take Half Damage (-¼), Gradual Effect (everyone takes half of their damage immediately; and the other half as 1d6 per Day; -1), Requires A Systems Operation Roll (no Active Point penalty; -¼), 1 Continuing Charge which lasts 1 Hour, Never Recovers, and destroys bomb (-2¼) (total cost: 256 points)* **plus** *Drain CON 10d6, Delayed Return Rate (points return at the rate of 5 per Week; +1¾), NND (defense is Life Support [Safe Environment: High Radiation]; +1), Area Of Effect (One Hex Doubled; +¾), Affects Desolidified (+½), Continuous (+1), Invisible Power Effects (creation of radiation field is perceivable, field itself afterwards is not; +½), MegaArea (each hex is 1 mile wide and broad; +½) (700 Active Points); OAF Bulky*
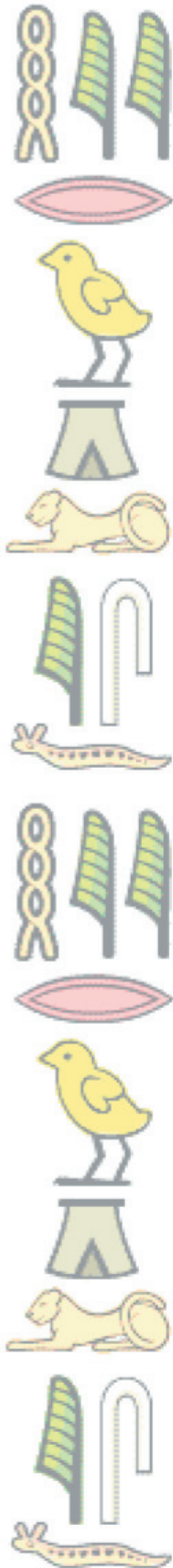
(-1½), Linked (-½) Targets In Outer Ring Of Hexes Take Half Damage (-¼), Gradual Effect (everyone takes half of their damage immediately; and the other half as 1d6 per Day; -1), Requires A Systems Operation Roll (no Active Point penalty; -¼), 1 Continuing Charge which lasts 1 Hour, Never Recovers, and destroys bomb (-2¼) (total cost: 104 points). Total cost: 360 points.

SECOND EFFECT: FLASH

When a nuclear bomb explodes, it immediately releases about one-third to one-half of its energy in the form of a blast of thermal energy. The nuclear fireball formed by the explosion of a 1 MT bomb is as hot as the heart of the sun and is more than 300 feet (about 50") wide less than a thousandth of a second after detonation. It continues to grow (and to rise off the ground) until it's about 2,000 feet to half a mile (403") wide. The heat and light energy travel at just under the speed of light, and last for about two seconds.

One of the effects from this release of energy is that persons looking in the direction of the blast suffer flash-blindness or permanent eye damage (retinal burns and possibly total blindness) because of the brightness of the light. Estimates on the reach of this effect range from 13 miles to 27 miles (21 km to 43.2 km) during the day, and 53 miles to 70 miles (112 km) at night (for the effect calculated below, ranges of approximately 50 miles (40,250") at night and 13 miles (10,465") in the daytime have been chosen).

This effect is written up as a Transform which covers a smaller area in the daytime. Victims who take twice their BODY from the effect are permanently blinded. Other victims suffer varying degrees of eye injury (with minuses to Sight Group PER Rolls) and heal from them as they would normally. In game terms, this is represented with the *Partial Transform* Advantage. A victim who undergoes a Cosmetic Transform suffers a -2 to all Sight Group PER Rolls; one who undergoes a Minor Transform suffers a -4 to all Sight Group PER Rolls.

Cost	Power
27	*Blinding Flash:* Major Transform 9d6 (sighted beings to blind beings, heals back via eye transplantation or the like), Partial Transform (+½) (202 Active Points); OAF Bulky (-1½), Limited Target (sighted beings; -¼), 1 Charge which Never Recovers and destroys bomb (-4), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -¼)
14	*Daytime Flash:* Explosion (+½) and Mega-Area (each hex is 1 km wide and broad; +¼) for Blinding Flash (102 Active Points); OAF Bulky (-1½), Limited Target (sighted beings; -¼), 1 Charge which Never Recovers and destroys bomb (-4), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -¼)
4	*Nighttime Flash:* Increase to Explosion (-1 DC/2"; +¾) and MegaArea (each hex is 1 km wide and broad; +¼) for Blinding Flash (+33 Active Points); OAF Bulky (-1½), Only At Night (-½), Limited Target (sighted beings; -¼), 1 Charge which Never Recovers and destroys bomb (-4), No Range (-½), and Requires A Systems Operation Roll (no Active Point penalty; -¼)

Total cost: 45 points

THIRD EFFECT: THERMAL BLAST

All of the heat and light described above does more than just blind people. The heat energy can vaporize metals, cause tremendous fires (see below), and inflict burns upon people. The heat travels at just under the speed of light and lasts for about two seconds.

Thermal Blast: *RKA 20d6, Explosion (dropoff as indicated by accompanying table; +½), MegaArea (1" =½ km, or about 1/3 mile; +¼) (525 Active Points); OAF Bulky (-1½), 1 Charge which Never Recovers and destroys bomb (-4), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -¼). Total cost: 72 points.*

The exact effects and range of a 1 MT thermal blast are summarized in the following chart, which is based primarily on one found in the book *Weapons*, by the Diagram Group:

NUCLEAR WEAPON THERMAL BLAST RADIUS

Minimum Range	Maximum Range	Game Range	Damage	Effects
0	2.25 miles	up to 1500"	20-16d6	Metals vaporize
1.8 miles	3.5 miles	1501-2500"	15-10d6	Metals melt
3.25 miles	7.1 miles	2501-5000"	9-6d6	Rubber and plastic ignites and melts
5.1 miles	8.0 miles	5001-6000"	5-4d6	Wood and other flam- mables burst into flame or char
7.5 miles	10.2 miles	6001-7200"	4-3d6	Skin suffers third- degree burns
9.25 miles	13.25 miles	7201-10000"	3-2d6	Skin suffers second- degree burns1.5 miles
11.5 miles	18.3 miles	10001-14732"	1d6	Skin suffers first- degree burns

An object suffers lesser burns if it is colored white (subtract up to 3 DC), and greater burns if it is black (add up to 3 DC). The same applies to people, based on their clothing. For notes on the possible effects of fires, see below.

FOURTH EFFECT: ELECTROMAGNETIC PULSE (EMP)

When a nuclear bomb explodes, the radiation it emits ionizes atoms for many miles around (with some airbursts, for more than 50 miles!). This takes mere fractions of a second, but can generate thousands of volts of radio wave-like energy. This energy does not damage humans, but it plays havoc with electrical circuits, disrupting or destroying them. This is bought as a Dispel that affects electrical circuits.

EMP: Dispel 20d6, all Electrical Circuit powers simultaneously (+2), Area Of Effect (26" Radius; +1), MegaArea (each 1" = 1 km wide and broad; +¼), Indirect (attacks all parts of objects, such as all walls in a building, +¾), Invisible Power Effects (creation of EMP is perceivable, field itself afterwards is not; +½) (330 Active Points); OAF Bulky (-1½), 1 Charge which Never Recovers and destroys bomb (-4), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -¼). Total cost: 45 points.

FIFTH EFFECT: BLAST WAVE

The blast wave is probably the most devastating part of a nuclear explosion. The force of the explosion creates massive amounts of pressure which travel outward in a wave, accompanied by incredibly strong winds. Sometimes this effect reflects off of the ground, thereby increasing its own power (this is known as a "mach wave"). The blast effect is known as "static overpressure" (SO), and is measured in pounds per square inch (psi) over the standard atmospheric pressure. The extreme increase in pressure can destroy buildings miles away from the center of the blast because it affects all parts of the building and crushes it. Anybody inside when a building collapses is likely to die. But SO has relatively little effect on soft,

malleable objects like human beings — as little as 5 psi obliterates the average residential house, but a human can withstand 30 psi before suffering injury. Unless the GM rules otherwise for some reason, the SO should not affect characters, unless the characters are unusually non-resilient (for example, they're made of metal or the like).

However, the intense winds, known as "dynamic pressure" (DP), do affect humans. They pick up all of the rubble, shards of glass, bits of metal, and other debris created by the SO and throw it against everything in their path, such as people. They also overturn cars, uproot trees, pull people out of buildings, and slam people against other objects with lethal force. As a result, one way or another a 1 MT blast kills or injures everyone within about five miles.

The effects of the blast wave can last for several seconds, depending upon the size of the bomb; with a 1 MT bomb, they should last no more than half a Turn.

Cost	Power
140	*Blast Wave (Static Overpressure):* RKA 20d6, Explosion (dropoff as indicated by accompanying table; +½), MegaArea (1" =½ km, or about 1/3 mile, wide and broad; +¼), Continuous (+1), Indirect (attacks all parts of objects, such as all walls in a building, +¾) (1,050 Active Points); OAF Bulky (-1½), 1 Continuous Charge lasting 6 Segments which Never Recovers and destroys bomb (-3¼), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -¼), Little Or No Effect On Soft, Malleable Objects (including living creatures; -1)
161	*Blast Wave (Winds):* RKA 20d6, Explosion (dropoff as indicated by accompanying table; +½), MegaArea (1" =½ km, or about 1/3 mile, wide and broad; +¼), Continuous (+1), Double Knockback (+¾) (1,050 Active Points); OAF Bulky (-1½), 1 Continuous Charge lasting 6 Segments which Never Recovers and destroys bomb (-3¼), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -¼)

Total cost: 301 points
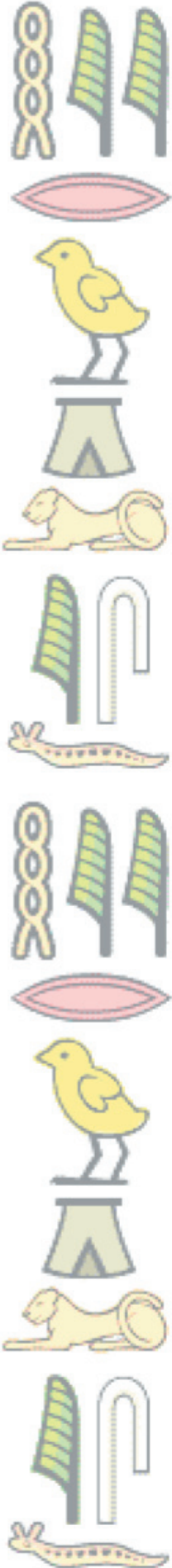
The accompanying table, also adapted from Weapons, describes the effects of a 1 MT blast wave:

BLAST WAVE TABLE

Range	Game Range	Damage	Effects
Up to 1.4 miles	up to 1127"	20-16d6	30 psi/670 mph winds: total destruction
1.5-1.8 miles	1128-1449"	15-11d6	20 psi/470 mph winds: massive structures and reinforced concrete destroyed
1.9-2.0 miles	1450-1610"	10-9d6	15 psi/380 mphwinds: multistory buildings damaged and sometimes destroyed
2.1-2.5 miles	1611-2013"	8-7d6	10 psi/290 mph winds: factories and commercial structures destroyed
2.6-3.1 miles	2014-2496"	6d6	7 psi/225 mph winds: residential structures destroyed
3.2-3.8 miles	2497-3059"	5d6	5 psi/160 mph winds: residential and light commercial structures badly damaged or destroyed
3.9-4.8 miles	3060-3864"	4d6	3 psi/116 mph winds: walls of steel-framed buildings blown away, dwellings badly damaged, vehicles overturned, persons in the open killed
4.9-5.9 miles	3865-4750"	3-2d6	2 psi/70 mph winds: wooden buildings and similar structures damaged
6.0-10.0 miles	4751-8050"	2-1d6	1 psi/48 mph winds: little appreciable affect

SIXTH EFFECT: NEGATIVE PRESSURE

After the explosion creates the static overpressure and winds blowing outward, air has to rush back in to fill the vacuum left by the outrushing winds. This effect, though much gentler than dynamic pressure, can still cause damage due to blown objects and the like.

Negative Pressure: *RKA 3d6, Area Of Effect (9" Radius; +1), MegaArea (1" = 1 km wide and broad; +¼), Continuous (+1) (146 Active Points); OAF Bulky (-1½), 1 Continuous Charge lasting 1 Turn which Never Recovers and destroys bomb (-3¼), No Range (-½), Requires A Systems Operation Roll (no Active Point penalty; -¼). Total cost: 22 points.*

SEVENTH EFFECT: FIRES

The tremendous heat generated by a nuclear explosion ignites any flammable objects not destroyed outright. The so-called "fire zone" within which this effect occurs is typically a 5-10 mile radius for a 1 MT bomb. However, the bomb's blast wave may put out many fires (the GM decides whether this occurs, and to what extent it ameliorates the fire damage).

Ignite Flammable Objects: *RKA 1 point, Area Of Effect (16" Radius; +1¾), MegaArea (1" = 1 km wide and broad; +¼), Continuous (+1), Indirect (attacks all parts of objects, such as all walls in a building, +¾), Penetrating (+½), Reduced Endurance (0 END; +½), Sticky (only affects flammables; +¼), Uncontrolled (keeps burning until extinguished or fuel is consumed; +½) (30 Active Points); OAF Bulky (-1½), No Range (-½), No Knockback (-¼), Requires A Systems Operation Roll (no Active Point penalty; -¼). Total cost: 9 points.*

It is possible for the fires to join together in two ways to cause even more damage. First, there could be a conflagration: the fires spread out of control and devastate many square miles of still-standing structures and plant life. Second, and even worse, is the firestorm, in which the fires join together in a central area and begin to suck in oxygen. The inrushing oxygen feeds the fire, turning it into a raging, self-sustaining inferno that only ends when it has destroyed everything flammable. No one can accurately predict whether a firestorm will start; Hiroshima suffered one but Nagasaki, which is hillier, only suffered a conflagration.

In game terms, this effect is a Continuous Aid, with a Trigger (the Ignite Flammable Objects effect starting) and an Activation Roll (which supplies the unpredictability). The Aid affects both the Killing Attack of the fires and the Aid itself, and it applies to all fires within the defined Area Of Effect. For purposes of the Aid, assume the bomb has SPD 2.

Firestorm: *Aid Fire Powers 4d6, two Fire Powers (the RKA and the maximum effect of this Aid) simultaneously (+½), Can Add Maximum Of 60 Points' Worth Of Fire Powers, Delayed Return Rate (points fade at the rate of 5 per Hour; +1), Area Of Effect (25" Radius; +1), MegaArea (1" =½ km, or about 1/3 mile, wide and broad; +¼), Continuous (+1), Trigger (+¼), Uncontrolled (keeps working until fires burn out or are extinguished; +½), Reduced Endurance (0 END; +½) (348 Active Points); OAF Bulky (-1½), Activation Roll 11- (-1), Requires A Systems Operation Roll (no Active Point penalty; -¼). Total cost: 93 points.*
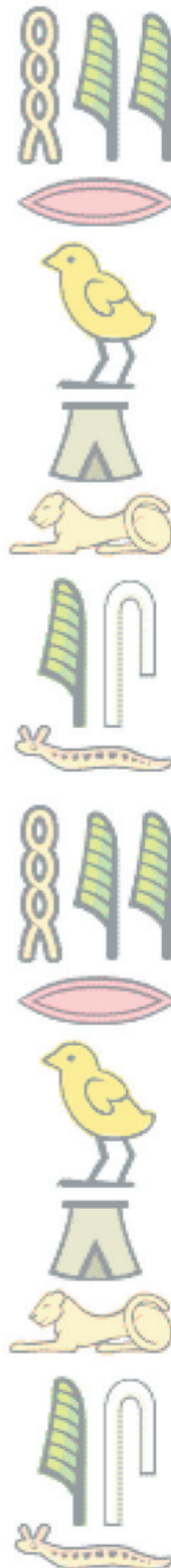
EIGHTH EFFECT: RADIATION, FALLOUT, AND NUCLEAR WINTER

The lingering radiation created by a nuclear detonation can last weeks, months, or years. It has been estimated that 1 MT explosion would force the evacuation of all people in a 4,900 square mile area around the explosion for at least a week (and in the 1,400 square mile area immediately around the explosion for a month or more). As a basic rule of thumb, GMs can use the seven-tenths rule: seven hours after the explosion, the radiation levels drop to one-tenth of what they were one hour after the explosion; 49 (7 x 7) hours afterwards, 1/100th, and so forth. For the effects of radiation, refer to pages 282-83 of *Star Hero*. Remember that in some genres (like *Champions*), radiation can have some unusual effects.

In addition to the localized radiation, the radioactive debris kicked into the atmosphere by a nuclear explosion eventually descends to Earth as fallout. The pattern of fallout from a given nuclear explosion depends mainly on how high it goes and what the prevailing weather conditions (particularly the wind) are like.

Lastly, some authorities believe a large nuclear exchange would kick so much dust and smoke into the air that it would blot out the sun, creating "nuclear winter." In the worst-case scenario, this would mean the extinction of life on Earth as temperatures dropped below freezing and food production became impossible. However, many experts question these doomsday predictions, and in any event it would require a major nuclear exchange to create this effect (something that's unlikely to happen in most gaming campaigns).

Because the effects of radiation, fallout, and nuclear winter are so unpredictable, no damage statistics are given for them. The GM should adjudicate their effects on his campaign himself.

COST SUMMARY

So, here are the total costs for a 1 MT nuclear bomb:

Effect	Active Points	Real Points
Radiation burst	2,300	360
Flash	337	45
Thermal blast	525	72
EMP	330	45
Blast, SO	1,050	140
Blast, winds	1,050	161
Negative pressure	146	22
Ignite object	30	9
Firestorm	348	93
Total:	**6,116**	**947**

HEROGLYPHS 11

TRIGGER HAPPY

EXPANDED RULES FOR TRIGGER

The Trigger Advantage is one of the most flexible and interesting Power Modifiers in the HERO System 5th Edition. However, to maximize its usefulness, it needs some expansion and additional clarification. Submitted for your inspection, and possible incorporation into your games:

TRIGGER

This Advantage allows the character to set up a power which will activate when a given circumstance occurs. Some examples of Triggers include a button which the character must press, a radio control device, an activation word, applying sufficient pressure, a reflex action, or reaching a certain altitude.

The value of Trigger depends on what conditions or circumstances activate the Trigger, how easy it is to re-set the Trigger, and related factors. See the accompanying Trigger Table for a summary of costs. The minimum value of Trigger is +¼, regardless of the modifiers applied.

Activating Conditions

The primary consideration for a Trigger is what activates it. If only one condition activates the Trigger — such as a coded radio signal, or pressing a button — then the Advantage is worth +¼. This value also applies if a discrete and related set of conditions activates the Trigger, such as "Grabbing, or being Grabbed by, another character" (see Damage Shield, below). If the Trigger can vary — the character can change it each time he sets up the power — then Trigger is a +½ Advantage. Once a character sets a +½ Trigger, he cannot change it (though he could activate the Power by satisfying the Trigger's conditions and then set the Power up with a new Trigger condition).

The circumstance which activates a Triggered power must be easily verifiable, and cannot depend on any Senses the character does not possess — characters cannot use Trigger as a cheap way to detect phenomena they could not ordinarily perceive. (If the character wants to create a Trigger that has special Senses, he can buy these specifically for use with one Triggered power for a -2 Limitation, or with any Triggered power for a -1 Limitation.) The GM may want the player to write down the circumstances which activate the Trigger; this can prevent disagreements later.

TRIGGER TABLE

Value	Basic Activating Circumstances
+¼	One defined condition, or related set of conditions, activates Trigger
+½	Character can define Trigger condition with each use of the power
	Activating Circumstances Modifiers
0 more Advantage	Activating the Trigger requires a Zero-Phase Action
¼ more Advantage	Activating the Trigger is an Action that takes no time
¼ less Advantage	Character does not control activation of personal Trigger
¼ more Advantage	Two activation conditions apply simultaneously
½ more Advantage	Three or more activation conditions apply simultaneously
	Reset Parameters Modifiers
½ less Advantage	Trigger requires a Turn or more to reset
¼ less Advantage	Trigger requires a Full Phase Action to reset
0 more Advantage	Trigger requires a Half Phase Action to reset
¼ more Advantage	Trigger requires a Zero-Phase Action to reset
½ more Advantage	Trigger resets automatically, immediately after it activates
0 more Advantage	Character can set Trigger multiple times; power must have Focus or Charges
	Miscellaneous Modifiers
¼ less Advantage	Trigger can expire (it has a time limit)
¼ less Advantage	Trigger can Misfire
½ more Advantage	Damage Shield (see text)

The minimum value of Trigger is +¼, regardless of the modifiers applied.

Example: *Arkelos is leaving his tower behind, and wants to set up some magical traps. He casts a guardian spell — Entangle, Area Of Effect, with a +¼ Trigger. The Power goes off whenever anyone tries to enter the room without saying "I'm home." Since Arkelos has no special Senses, only intruders perceivable by normal human Senses can activate the trap. If a visible thief tries to enter the room, he sets off the Entangle, likely trapping him until Arkelos returns. However, since Arkelos himself cannot see invisible beings, an invisible thief would not activate his Triggered spell.*
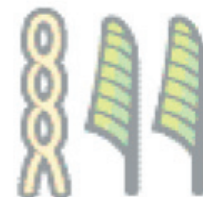
In some cases, activating a Trigger requires a character to take some specific action. As a default, this is a Zero-Phase Action, but the character can make it an Action that takes no time by paying for an additional +¼ Advantage.

Example: *Lt. Andy Barrett of the U.S. Navy SEALs is going on an infiltration mission. He realizes that if he's spotted, the enemy can shoot him easily because he'll be seriously outnumbered. Since he may need a way to generate some quick cover, he gets four smoke grenades and rigs them to a bandolier. He buys the grenades (Darkness to Sight Group on a Focus) with a Trigger, defined as a reflex action — whenever he needs some cover, he reflexively reaches up and "pops smoke" so the enemy can't see him. The GM allows him to set the Trigger for all four grenades. If it becomes necessary to use the grenades, activating the Trigger is a Zero-Phase Action.*

If a character has a Trigger for a personal power for which he cannot control the activation, he may, at the GM's option, reduce the value of Trigger by ¼. An example would be an Aid STR, Triggered when the character becomes Enraged (or Berserk). Since the character cannot become Enraged at will, he gets less use out of his Triggered power, so the GM might reduce the Advantage's value. (The GM may also allow the power to take the No Conscious Control Limitation, if appropriate.)

Normally only one activation condition can apply to a Trigger at one time. If two conditions can apply simultaneously (for example, "power activates if five minutes pass or I say "relgarb""), Trigger costs ¼ more Advantage. If three or more activating conditions can apply simultaneously, Trigger costs ½ more Advantage. The GM may restrict the number of activating conditions a character can apply simultaneously in the interest of common sense, dramatic sense, or game balance.

Some Triggers can Misfire, meaning conditions or events other than the predefined circumstances can activate them. For example, a bomb with the Trigger "radio detonator" might Misfire if a radio tuned to certain frequencies comes within 2" of it. A Trigger subject to Misfire costs ¼ less. The typical chance to Misfire when the condition occurs is 11-; the GM may modify this based on the situation and the nature of the power.

A Trigger remains "ready" even if the character who bought the power goes to sleep or is Knocked Out. If the character dies, the fate of the Trigger depends on the circumstances. In some cases, such as powers bought through a Focus, the power may remain active (other characters may be able to use it, if the Focus is Universal). In other cases, the power may fade away, or the Trigger may activate automatically upon its creator's death (this works well for some types of spells, for example).

A Trigger has no preset time limit or duration. It's possible for a Trigger to remain ready for use for years. If a Trigger has a defined time limit (it will no longer work after a specified time period has passed), the GM may reduce the Advantage's value by ¼, but in this case whether the duration has passed should be obvious to an observer.

Reset Conditions

The next thing to consider about a Trigger is how the character resets it. As a default, a character must use a Half-Phase Action to reset a Trigger power; he may only reset a given Trigger once per Phase. If it takes longer to reset the Trigger (a Full Phase, or a Turn or more), the Advantage costs less.

Some Triggers take less time to reset; these cost more. A Trigger that a character can reset as a Zero-Phase Action costs +¼ more. A Trigger that resets automatically after every time it's used costs +½ more. This takes no action on the character's part. This effectively makes the Trigger equal, in many ways, to a Constant power or the like, so the GM may want to establish a minimum value of +1 for any Trigger with this reset condition.

Example: *Severin d'Compeigne is a master fencer who has a lethal riposte technique — every time he Blocks a sword-blow, he can strike back at whoever attacked him. He defines this as an HKA 1d6 with a Trigger that has a single activating condition (whenever he Blocks a weapon attack with his sword). He specifies that the Trigger resets automatically after each use, and that it activates as an Action that takes no time. This costs him +1 total. Whenever he Blocks a weapon attack, his Trigger attack activates automatically and he strikes back at his attacker. Immediately after it activates, the Trigger resets, so that the attack applies every time he Blocks a weapon attack, even if he Blocks ten weapon attacks in the same Segment.*

Typically, a character may only set a Trigger once; after the Trigger activates, the character must reset the Trigger. (This does not apply to Triggers that automatically reset, of course.) If a Power has the Focus Limitation or the Charges Power Modifier, the character can set the Trigger multiple times. This would be appropriate for attacks like landmines, for example. The GM can allow characters to set other Triggers multiple times, if desired, or forbid multiple setting if appropriate.

Using Trigger Powers

To Trigger a power, the character must first set up the power — for example, a landmine (2d6 RKA, Explosion, Trigger [when sufficient pressure applied, +¼]) must be buried at the proper location and activated before it will go off. The character pays END for the Trigger when he sets up the power; Limitations such as Activation Roll, Extra Time, Concentrate, and Requires A Skill Roll also apply when the power is set up, not when it is used.
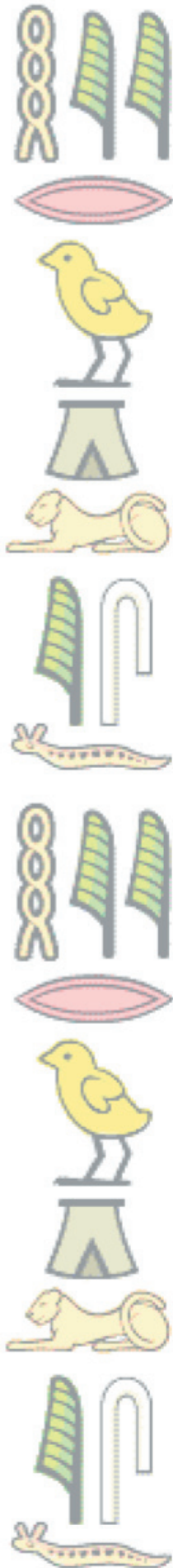
For Triggered powers not activated by the character who bought the power, the target of a Triggered power is the person who sets off the Trigger — who steps on the landmine, who walks into the zone that activates a trap, or the like. Of course, that may make other people targets as well (if, for example, the Triggered power is an Explosion). In situations where the character controls the activation of the Trigger, such as the bandolier of grenades mentioned above, the character may choose his target.

The character makes the Attack Roll needed to hit a target with the power when the Trigger activates, not when he sets up the power. For a power not typically intended for use in combat (such as a Triggered trap, or a landmine), the character uses his OCV at the time he sets up the attack. Based on the special effects, the nature of the Trigger, and other such factors, the GM may, in his discretion, forbid characters to use bonuses from Combat Skill Levels, maneuvers, or the like, and simply require the use of base OCV only. For a power typically intended for use in combat (such as the bandolier of grenades mentioned in the example above, or a Damage Shield), the character uses his OCV at the time he makes the attack, and can apply Combat Skill Levels normally.

In either case, the GM may, in his discretion, impose modifiers on the character's OCV to reflect the situation when he Triggers the attack. For example, if he can't see the location of the Triggered power clearly (perhaps it's blocked by Darkness), he may have a harder time Triggering it precisely. On the other hand, some Triggered powers (like a landmine, whose Triggering the character doesn't really control at all) might not suffer a reduced OCV in this situation.

For a typical Triggered power, calculate the Range Modifier from the point at which the power is "located" (where the character set the Trigger and left it). With other Triggered powers, like the bandolier of grenades mentioned above, the "location" of the power and where the character is when he activates it are the same, so he calculates the Range Modifier from the character as normal.

Even though a power has been set with a Trigger and not yet used, another character may Dispel or Drain that power, or deactivate it by other appropriate methods. For example, an enemy wizard could Dispel Arkelos's guardian spell, saving himself from being captured by Arkelos's trap. A soldier could defuse a landmine before it goes off with a Demolitions roll.

If a character applies an Adjustment Power to increase a Triggered power, or he Pushes a Triggered power, the effects of the Adjustment Power or Pushing fade at their normal rate. A character cannot "boost" a Triggered power, set the Trigger, and thus "lock in" the boosted effect. Characters may not Haymaker Triggered powers.

Characters can usually spot a power with a Trigger with a PER Roll, unless the power has the Advantage Invisible Power Effects.

Damage Shield

These expanded and revised rules for Trigger make it possible to dispense with Damage Shield as a separate Power Advantage, and simply make it a modifier for Trigger. In this case, the Trigger is activated if the character Grabs, or is Grabbed or touched by, another person (+¼; increase to +½ if the character can activate the Damage Shield whenever he touches another character). It takes no time to activate (additional ¼) and resets automatically (additional ½). The Damage Shield modifier (an additional ½ Advantage) reflects that fact that the Triggered power automatically hits the target, without the need for any Attack Roll (characters may not apply this Advantage under any other circumstances). Thus, the total cost for a Trigger Damage Shield is +1½. Using this arrangement, a character need not apply Continuous (+1) to a non-Constant power used for Damage Shield, and may apply the No Range (-½) Limitation to Ranged powers used for Damage Shield.

> **Example:** *Feuermacher has a "Fiery Mantle" Damage Shield, built as follows:*
>
> **Fiery Mantle:** *RKA 1d6+1, Trigger (when Grabs, or is Grabbed or touched by, another character, activates as an Action that takes no time, resets automatically; +1), Damage Shield (+½) (50 Active Points); No Range (-½), No Knockback (-¼). Total cost: 29 points.*
>
> *Whenever Feuermacher is Grabbed or touched by another character, or when he Grabs someone, his Damage Shield causes that person 1d6+1 Killing Damage. This occurs automatically; he does not have to make an Attack Roll. Furthermore, his Damage Shield's Trigger activates and resets automatically; neither action requires him to do anything or takes any time.*

Trigger Cost Multiplier: See table.
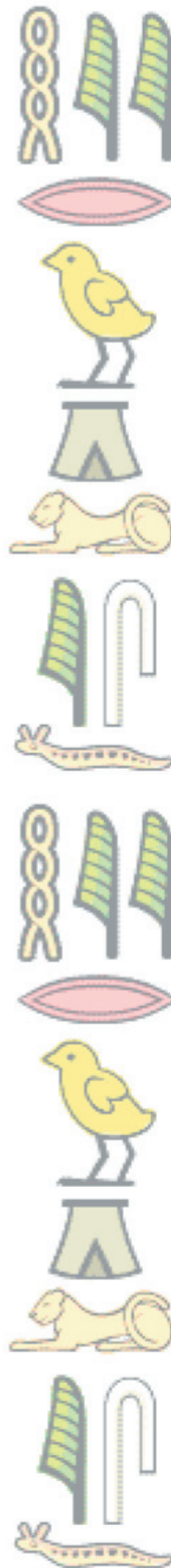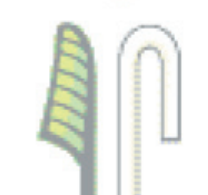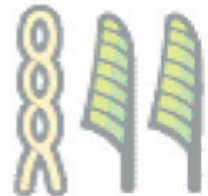
HEROGLYPHS 12

THE NEED FOR SPEED

VARIANT SPD CHART RULES

As just about every *HERO System* player knows, the SPD Chart is one of the most interesting features in the game. A unique (to my knowledge) rule amongst the panoply of roleplaying games, it lies at the heart of a lot of other HERO System rules (such as how Adjustment Powers work, holding your breath, and taking Recoveries). For many people, it's a key, defining element of the system, one the game can't do without.

And yet, many gamers, even those who on balance love the SPD Chart, find it a little frustrating. It creates a level of predictability that makes it easy for "power gamers" and rulesmongers to exploit the system in ways that diminish the fun of the game, and it tends to introduce an element of "sameness" into every combat.

Over the years many Hero gamers have developed or adopted many optional, variant, and new rules for SPD and the SPD Chart, and I though it might be fun and interesting to present and discuss some of them here. I can't claim credit for all of them; many of them were devised by other gamers (usually more than one, since Hero players are a creative lot!) and passed on to me through various means; others attempt to simulate the way actions and initiative work in other roleplaying game systems. If the SPD Chart isn't entirely to your liking, perhaps you'll find an option here that suits you better. ;)

ROLL WITH IT, BABY

One variant for the SPD Chart that gets rid of at least some of the predictability mentioned above is to have characters roll to see if they get a Phase in each Segment. If they succeed with the roll, they get a Phase, in the normal order of DEXs.

The main issue with this system is how to roll. The GM needs to evaluate the possible methods carefully to ensure balance within his group. Some possibilities include:

1. Get a twelve-sided die (d12) from That Other Game. Each Segment all characters roll a d12; characters who roll less than or equal to their SPD get a Phase on that Segment. On the average, that should give each character the same number of Phases per Turn that he normally gets... but they won't occur in predefined Segments.

You could substitute 2d6-1 instead of 1d12, but the bell curve that results from rolling two dice means characters will get far fewer actions than normal (or have to spend a lot more points on SPD).

The benefit to this method is that it eliminates predictability. The drawback is that it does such a good job of eliminating predictability that it may leave a character action-less for a long period of time. If a player happens to get a string of unlucky rolls, his character just has to stand there, unable to do anything, which may not make much sense and certainly leaves the player feeling frustrated.

2. At the beginning of each Turn, each character rolls 1d6 and adds his SPD, to a maximum of 12. This indicates the number of Phases the character gets in that Turn. The GM may assign those Phases to the Segments indicated by the SPD of the same number, or use some other method of allocation (see below).

The benefit to this method is that it creates variability; a character can never count on having more Phases per Turn than his SPD plus one. However, it also causes several potential problems. First, it gives all characters +1 SPD, which isn't unbalanced (everyone gets it, after all) but can slow the game down. Second, sometimes a relatively slow character may get more actions than a relatively fast character — in fact, in a game where the slow and fast characters aren't separated by more than a point or two of SPD, this could happen frequently. That result may not be very satisfactory; it may mean the dice are more important than the SPD the character paid for. The same "the dice are better than the SPD" problem can result in Heroic games with characters who have low average SPDs (3-4).

3. Each Segment, every character rolls 2d6-1 and adds it to his SPD. If he gets a 12 or better, he gets a Phase that Segment. Characters with SPD 12 thus automatically get a Phase every Segment, and characters with SPDs of 9 or above will usually get one every Phase thanks to the bell curve of the 2d6 roll.

The benefit to this system is that it should allow every character roughly the same number of Phases per Turn, but not in predefined Segments. The drawback is that it tends to give some characters more Phases than normal, which may slow down combat.

One drawback all of these methods have is that they may increase the time it takes to run a combat. They add in some extra die rolling and number-tracking in place of the SPD Chart's relative ease of use.

VARIABLE PHASES

Instead of changing the number of Phases a character has, you can change which Segments they occur in.

The easiest way to do this is to declare that all characters get a number of Phases per Turn equal to their SPDs — but they can use those Phases in any Segments they wish. For example, a SPD 5 character could choose to take his Phases on Segments 2, 3, 7, 9, and 12 during one Turn, and on Segments 2, 4, 5, 10, and 12 the next Turn. To keep characters from abusing this rule (by, for example, acting in Segments 1-4 and then acting in Segment 5 to Martial Dodge with all Combat Skill Levels in DCV), the GM may require characters with SPDs below 7 to skip at least one Segment between Phases (really low SPDs, such as 2-3, may have to skip two or more Segments).

Another possibility is to use the same distribution pattern for a character's Phases, but randomly determine which Segment they start on. At the beginning of each Turn, every character rolls½d6; the number rolled indicates the Segment the character's Phases begin on. For example, if a SPD 5 character rolled a 1, his Phases would occur on 1, 3, 6, 8, and 10 — the same pattern as SPD 5, but on different Segments. If necessary, the GM may need to alter the distribution pattern to ensure every character gets his full number of Phases per Turn.

COUNTDOWN

Some roleplaying games use a "countdown" system for initiative. Each character has a certain number of initiative dice; the faster the character, the more dice. At the beginning of a combat round, all characters roll their initiative dice. Starting with the highest number rolled, the GM counts down to 0. Each character gets one action on his highest number rolled, and another action every X steps below that. Thus, the higher the number a character rolls, the more times he gets to act in that round.

To simulate this sort of initiative in the *HERO System*, you need to do two things: (a) decide how many dice to roll, and how characters buy them, and (b) how to count down (*i.e.*, how many points to subtract between actions). For example, perhaps characters roll a number of initiative dice equal to their SPD, and then you subtract 4 points between actions. That would yield a number of actions per Turn roughly equal to the character's SPD, but with the possibility of sometimes going more or fewer times. If you wanted to allow more actions, you could reduce the subtractor; to allow fewer actions, increase it.

> **Example:** *Andy decides to use a "countdown" system for initiative in his Champions game. Every character rolls dice equal to his SPD to get an "action total." A character gets a Phase on his action total, then gets one more Phase every 4 points below that. A character can Hold his Action to a later point in the countdown, but must use it before his next number comes up. If two character have a Phase on the same number, the one with the highest DEX goes first; if DEXs are tied, highest INT goes first; if INTs are tied, the highest PRE goes first; if PREs are tied, neither character gets an action because Andy is now incredibly annoyed at both of them.*

At the start of a battle, Defender (SPD 5) and Ankylosaur (SPD 4) roll initiative dice. Defender rolls 5d6 and gets 16; Ankylosaur rolls 4d6 and gets 19. Ankylosaur clearly has the upper hand in this battle in terms of initiative!

The combat starts on 19, and Ankylosaur gets an action. He also acts in 15, 11, 7, and 3 — he gets one more action than he could expect on the average since he rolled well. On the other hand, Defender goes in 16, 12, 8, and 4, so he doesn't act quite as often as he normally would.

OBTAINING EXTRA PHASES

Many gamers like the SPD Chart as a concept, but find it somewhat rigid and inflexible in a rules system that otherwise has a high degree of flexibility and customizability. They want to provide an option for characters to take extra Phases, or move their Phases to different Segments, at the cost of some penalty.

One such system focuses on CV. A character can move a Phase down the SPD Chart (i.e., take his Phase earlier) for a -1 CV penalty per Segment (this applies to both OCV and DCV). The penalty lasts until the character skips a future Phase (*i.e.*, does nothing, not even taking a Recovery). If a character takes multiple Phases early, the penalties are cumulative, and he must skip one Phase per penalty to remove the penalties.

> **Example:** *A character with SPD 5 decides he wants to take his Phase in Segment 5 in Segment 4 instead. He does so, suffering a -1 CV penalty. He keeps that penalty until the end of the Turn, unless he skips one of his Phases (in Segment 8, 10, or 12). If he decides to take his Segment 8 Phase in Segment 6, he suffers another -2 CV penalty for a total of -3 CV. He skips his Phase in Segment 10, which reduces the penalty to -2.*

A character can still Abort to a defensive action using the normal rules. This has no effect on CV, but of course forces the character to do nothing in his next Phase.

On the other hand, at the GM's option a character who delays his Phase by one Segment gets a +1 CV bonus per Segment delayed. This is *not* the same as Holding an Action. Holding gains no such bonus, but lets the character act whenever he wants to or a specified condition occurs; a delayed Phase can only be taken on a future Segment at the character's DEX in the initiative order.

Additionally, a character may take *extra* Phases if he wants to, but the penalty is more severe: -3 CV per extra Phase. If a character takes multiple extra Phases, the penalties are cumulative; extra Phase penalties are also cumulative with early Phase penalties. Characters cannot remove this penalty; it lasts until the combat ends or the GM decides it vanishes.
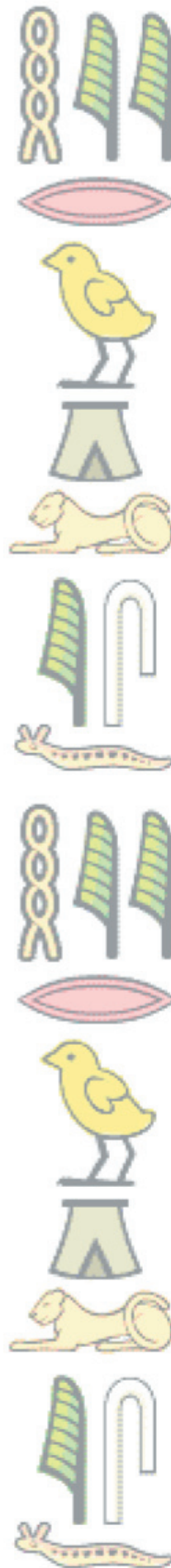
Example: *Continuing the example from above, after skipping his normal Phase in Segment 10, the character decides he needs to take an extra Phase in Segment 11. This adds -3 to his CV penalty, for a total of -5 (remember, he eliminated one -1 penalty by skipping his Phase in Segment 10). Good luck!*

At the GM's option, all penalties may disappear when the Turn ends. This could encourage character to add or advance Phases late in the Turn, though, so consider this rule carefully before implementing it.

Of course, CV isn't the only thing a system like this could penalize. The rule could instead impose a DEX reduction (say, -2 DEX per early Phase or -4 per extra Phase), for example. The GM may also want to include other restrictions, such as not allowing the use of Optional Combat Maneuvers or multiple-Power attacks on early or extra Phases.

The GM should examine carefully any Skill Levels (of any type) bought to counteract the early/extra Phase penalties. The proper way for a character to obtain more Phases with points is to buy more SPD, not to eliminate the early/extra Phase penalties.

RELATED RULES CHANGES

If you change the way SPD works, you may need to change the way some other rules work. For example, you may want to eliminate the Post-Segment 12 Recovery, or change the way the points gained/removed by use of an Adjustment Power fade/return. As with any other major new rule introduced into the game, be prepared to change or abandon it if it proves unworkable.

HEROGLYPHS 13

GETTING TO THE POINT

ADDITIONAL AND ALTERNATE RULES FOR ARMOR PIERCING

Armor Piercing ("AP") is one of the most popular Advantages for Attack Powers. Here are a few ideas for expanding it, changing it, or creating similar effects.

Altering The Rate Of Subtraction

As first discussed by Steve Perrin in his *GM's Discretion* column in *Adventurer's Club* #20 (from which I've gleefully swiped some inspiration — thanx, Steve!), some gamers have a conceptual difficulty with AP because it's defined as reducing a target's defenses by half — a flat percentage. That means it removes more defense from a high-defense character than a low-defense character. For instance, an Energy Blast 10d6, Armor Piercing when used against a character with 30 ED reduces his defense by 15 points... but when used against a character with 18 ED, it only removes 9 points of defense. To some gamers, this seems like illogical "meta-game" thinking; the effect should be more absolute and predictable, not dependent on the amount of the target's defenses.

Steve Perrin's article suggested treating AP like Penetrating: the amount of points of defense removed by AP depends on the "Normal Damage BODY" rolled on the dice. That makes the defense removed more predictable, but with a little variability. For pure predictability, have AP reduce the target's defenses by 1 point per DC in the attack (without accounting for the *Armor Piercing* Advantage itself) (thus, an Energy Blast 10d6 Armor Piercing would always remove 10 points from the target's defenses).

Using this sort of system requires a few other changes. First, you have to define Hardened not in terms of cancelling out one level of AP, but negating X points of AP effect. For example, perhaps one level of Hardened reduces an AP effect by 10 points. Thus, an Energy Blast 12d6 Armor Piercing used against Hardened ED would only remove 2 points of ED, not 12. You should set the value of Hardened high enough that the average attack with one level of AP cannot remove any defense.

Second, you need to alter the rules for buying AP or Hardened multiple times. Using this rule, each additional purchase of AP increases the points removed by the same amount as the first purchase. Thus, an Energy Blast 10d6 Armor Piercing removes 10 points of defense; if it has Armor Piercing (x2) it removes 20 points of defense; with Armor Piercing (x3) it removes 30 points of defense, and so on. Buying Hardened multiple times increases the protection it provides at the same rate.

DEFINING THE POINTS REMOVED BY THE VALUE OF THE ADVANTAGE

Instead of using the DCs of the attack, or some similar system, to quantify the value of AP, you can simply have it depend on the value of the Advantage. For example, each +½ worth of AP might remove 8 points of defense. For greater granularity, reduce it to ¼ increments: for a +¼ Advantage, AP removes 4 points; each additional +¼ Limitation adds +4 points to the points removed. You just have to decide how many points the base purchase of AP removes.
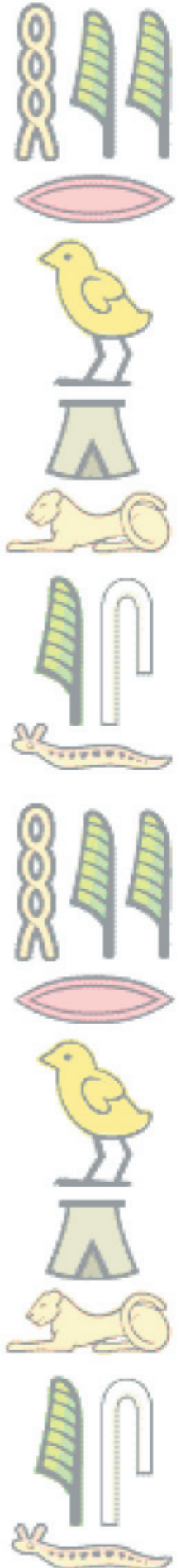
SEMI-ARMOR PIERCING (+¼)

Here's another option for altering the rate at which AP removes points of defense — a lesser form of the Advantage.

Sometimes characters don't want the full halving of defenses that AP provides. They can use this +¼ Advantage to create attacks which can penetrate armor more easily than regular attacks, but not as well as Armor Piercing attacks. Semi-Armor Piercing subtracts one-fourth of the target's defenses or 3 points of defense (whichever is less) before you apply the damage. Semi-Armor Piercing does not work against Hardened defenses; characters cannot buy it multiple times.

Piercing Points

Way back in 1984, *Champions III* introduced a new power called Piercing. Piercing reduced the target's defenses against the attack for which it was bought. The number of points removed from defenses depended on the number of Piercing points purchased; the cost of the Piercing points depended on the type of defense removed.

If you'd like to apply this Power in your games, the accompanying table indicates the cost for Piercing points. Piercing points have the same duration as the base Power they're purchased for (*e.g.*, Instant for an Energy Blast, Constant for Change Environment), have the same Range as the power they're purchased for, and cost END to use (based on the total Active Point cost of the power plus its Piercing points). The Power Modifiers applied to the base power must also be applied to the Piercing points. A Piercing point affects both Physical and Energy defenses, if appropriate.

PIERCING POINTS COST

Defense Pierced	Cost
Normal Defenses	2 Character Points per point of defense removed
Resistant Defenses	3 Character Points per point of defense removed
Mental Defense	3 Character Points per point of defense removed
Power Defense	3 Character Points per point of defense removed
Flash Defense	3 Character Points per point of defense removed

HEROGLYPHS 14

MACHINE POWERS — ACTIVATE!

A NEW POWER FOR ACTIVATING DEVICES

While I was writing T*he UNTIL Superpowers Database*, I created several powers that involve directly manipulating or using a weapon or deviced possessed by another character, usually for an effect the possessor wouldn't care for. Examples include *Legion Of Weapons* (page 46), *Legion Of Attackers* (page 154), and the *Touch Off* power in the Fire and Electricity powers sections of the Online USPD.

The difficulty with those powers is that they're all sort of "kludgy." To account for what happens when a character takes control of a weapon or like machine, the power has to be built with all sorts of open-ended effects as well as a Drain of the Charges or ammunition used. The end result gets the job done, but isn't always very satisfying... and it certainly seems unusually complicated for the simple act of activating a device.

Accordingly, I've been giving some thought to a new Power for these purposes, which I present below. While I don't think this Power is strictly necessary — after all, the USPD shows that you can build a power to activate machines using the standard rules — it might come in handy for some games or character concepts.

ACTIVATE

Standard Power/Attack Power
Instant
No Range

A character with Activate can turn on/off, or activate/deactivate, a machine, device, or similar object that he does not directly control, have use of, or possess the activating mechanism for (keys, password, or the like). Examples include a cyberkinetic character's ability to activate computers remotely, a device installed in a car that automatically causes all stoplights to turn green for that car, or a wizard's spell that lets him take control of another spellcaster's magic ring. Activate costs END to use.

If a character can Activate a single type of machine, or very limited class of machines (blaster pistols, Macintosh computers, Nissan Sentra automobiles), Activate costs 10 Character Points. If a character can Activate a limited class of machines (computers, weapons, automobiles), Activate costs 20 Character Points. If a character can Activate any type of machine, Activate costs 30 Character Points. The GM may increase these costs as appropriate for campaigns in which technology plays an important role, or decrease them for games in which technol-

ogy is rare. Activate is an Instant Power and has No Range. Characters often apply the *Continuous* (+1) and/or *Ranged* (+½) Advantages to it when creating powers with it.

Using Activate is an Attack Action. The character must make an Attack Roll to "hit" the device. If the device is held or carried by another character, the device has that character's DCV. If the device is not under the direct control of another character but has a DEX or DCV of its own (such as a Vehicle), use the device's standard DCV. If the device is not under the direct control of another character and has neither DEX nor DCV, calculate its DCV based on its size, or simply assign it a flat DCV of 3.

When an Activate attack succeeds, the character turns on or activates the targeted device. He does not need the key, the activation code, the password, or the like to Activate the device; he can do so automatically. (If the GM finds this unbalancing, he may require the character to make a Security Systems roll to bypass any security devices, such as electronic card-key locks; if the roll fails, the attempt to Activate the device fails, but the character may try again using the standard rules for repeated attempts to use a Skill.)

When Activated, a device turns on normally, and has any effect it would ordinarily have. For example, if the character Activates a loaded weapon (such as a gun, blaster, or howitzer), the weapon fires. In this case, to determine if the weapon's shot hits a target, the character uses his base OCV (DEX/3) plus any appropriate negative modifiers (such as the Range Modifier), but no positive modifiers. (He may, however, buy 2-point Combat Skill Levels solely for the purpose of increasing his base OCV with Activated attacks.) The GM determines who the weapon is aimed at when Activated, and thus the DCV of the potential target.

If a device has Charges or uses END (whether from the device itself or from the character who possesses it), then turning it on or using it with Activate uses a Charge or END. Thus, Activate sometimes allows a character to force another character to use up Charges or expend END. If the activation of the device is subject to any Limitations (such as Activation Roll, Concentration, or Extra Time), those Limitations apply to the character using Activate as well — even if he didn't know about them. Thus, a character using Activate may suddenly find his DCV reduced to zero when he has to Concentrate to turn on a super-weapon or the like. To avoid such difficulties, the character can cease his attempt to Activate the device, but of course this means he's used up his Phase.

An Activated device normally de-activates or turns off as soon as the character's Phase ends. But if the character applies the *Continuous* (+1) Advantage to Activate, the device remains active/turned on, and the character may control its operation as a Half Phase Action. For example, he could Activate a car, then shift it into gear and drive it along the road. He must maintain a Line Of Sight to the device to continue to control it in this manner; if he loses LOS, he immediately loses control of the device and it deactivates/turns off (or some other effect occurs that the GM considers appropriate — perhaps the device starts to run out of control). The character can, of course, attempt to regain control of the device in later Phases if he can regain LOS. If a character maintains control of a device via Continuous Activate, he may deactivate or turn off the device as a Zero-Phase Action.

If a character uses Activate to operate a device, the GM may require the character to make rolls with appropriate Skills to do so. For example, if a character tries to use Activate to drive a car, the GM might require a Combat Driving roll if the character attempts any actions other than simple driving. If the Skill Roll fails, the character immediately loses control of the device and it deactivates/turns off (or some other effect occurs that the GM considers appropriate — perhaps the device starts to run out of control). The character can, of course, attempt to regain control of the device in his next Phase.

If a character Activates a device possessed by another character, the possessor can still use the device normally on his own Phases. However, if the Activate has Continuous so that the character with Activate maintains control of the device, the possessor of the device cannot automatically use it normally. He must fight the other character for control of the device. Typically the GM resolves this with a Characteristic Roll Contest (such as STR Roll Versus STR Roll, DEX Roll Versus DEX Roll, or EGO Roll Versus EGO Roll), but he may choose any other method he sees fit.

A character cannot use Activate to automatically deactivate a device that's already turned on. He must first successfully "activate" the device with Activate, then use his next Zero-Phase Action to turn the device off.

At the GM's discretion, a character can also use Activate to activate or "turn on" an innate power or ability possessed by a character. An example would be forcing a lycanthrope to transform from human into animal shape, or triggering a character's Energy Blast against his will. However, characters cannot normally use Activate to deactivate or turn off innate powers or abilities currently in use; that usually requires Drain, Dispel, or the like.

Activate is most useful in campaigns taking place in industrial or post-industrial eras, or which feature a lot of technology, such as modern-day or *Star Hero* campaigns. However, characters in a Fantasy setting might use it to activate enchanted items or the like. The GM should monitor the use of Activate carefully and forbid any potentially abusive or unbalancing uses; the Power is intended to allow characters to build useful and interesting powers easily, not to run rampant Activating their enemies' weapons at every turn

HEROGLYPHS 15

BROKEN-DOWN DEX

VARIANT RULES FOR DEXTERITY

Dexterity, according to the rulebook, "represents a character's agility and reaction time [and] accuracy[.]" As such, it's extremely important for just about every character and character conception, so most PCs and NPCs spend at least a few points on it despite the fact that it's the most expensive Primary Characteristic — 3 Character Points per point. In fact, it's so useful that many characters buy high DEXs even when that doesn't fit their conception particularly well.

Since DEX provides so many benefits — CV, Skill Rolls, initiative, SPD, and the like — one way to customize characters a little more, and hopefully to prevent them from buying a high DEX just for the sake of the game-related benefits they obtain, is to divide DEX into three Primary Characteristics instead of one. These "new" Characteristics are:

- Accuracy
- Agility
- Reaction

Each of these "DEX Characteristics" costs 1 Character Point per point (but see *Game Balance Considerations* for more discussion).

Accuracy (ACC) represents a character's eye-hand coordination and general ability to attack accurately. It's used to calculate a character's Combat Value — CV equals the character's ACC divided by 3.

Agility (AGI) represents a character's general nimbleness, adroitness, and dexterousness. It's the basis for the character's "DEX Roll" (ACC and REA do not normally have a Characteristic Roll) and for most DEX-Based Skills (aptly named "Agility Skills").

Reaction (REA) represents a character's reaction time and related attributes. It's the basis for a character's initiative (when his Phase occurs in a Segment, and whether he goes before or after someone else).

SPEED

Using these DEX Characteristics means changing some of the rules for things related to DEX, such as SPD. You have several options for SPD. In all cases, the special rounding rules for SPD apply — you always round down.

First, you can calculate SPD as (1 + ((ACC + AGI + REA)/30)). In other words, add ACC, AGI, and REA together, divide by 30, and add 1 to the result. Since the total cost of ACC, AGI, and REA is in theory at least close to the cost of DEX, this should derive a SPD roughly the same as what you'd get using the standard DEX rules.

Second, since INT is supposed to represent (at least in part) a character's ability to react to unusual or dangerous circumstances, you could work it into the mix. Now SPD becomes (1 + ((ACC + AGI + REA + INT)/40)).

Third, since REA is supposed to represent reaction time and initiative in combat, you can use it alone to calculate SPD: (1 + (REA/10)). However, because REA is much cheaper than DEX, this tends to create "SPD inflation," so the GM needs to pay close attention to characters' SPDs, and perhaps even change the calculation (to, for example, REA/20 or REA/30) to maintain game balance.

SKILLS

Here's how the DEX-Based Skills break down in the new system:

Skill	Characteristic
Acrobatics	Agility
Breakfall	Agility
Climbing	Agility
Combat Driving	Agility
Combat Piloting	Agility
Contortionist	Agility
Fast Draw	Reaction
Lockpicking	Agility
Riding	Agility
Sleight Of Hand	Agility
Stealth	Agility
Teamwork	Reaction
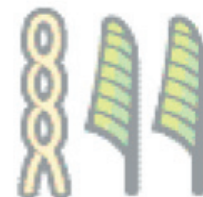
GAME BALANCE CONSIDERATIONS

Keeping the costs of the DEX Characteristics at 1 Character Point per point each in theory results in characters spending as much on these three Characteristics as they tend to spend on DEX. But theory doesn't always work in practice, so this may cause problems. First of all, if you want to prevent "DEX abuse," this may not do the trick; characters can end up with the same "DEX" as they would otherwise have by buying all of the DEX Characteristics to the same level. ACC 20, AGI 20, and REA 20 cost 30 Character Points in total, just like DEX 20.

Second, you may find players "min-maxing" their characters by buying one or two of the DEX Characteristics to high levels. For example, with ACC costing only 1 Character Point per point, a base CV 10 only costs 20 Character Points. This could unbalance some campaigns (though since all characters have the same ability to buy high CVs, it's just as likely simply to increase CVs across the board, leading to no significant balance changes in many games).

Correcting or compensating for these problems is usually just a matter of changing the costs of the DEX Characteristics. For example, if you change them all to 2 Character Points per point, min-maxing becomes less attractive, and "DEX abuse" across the board becomes twice as expensive. Alternately, you could weight them depending on what you think is most important or useful in your campaign. For example, maybe ACC is 2 Character Points per point, AGI is 1 Character Point per point, and REA is 3 Character Points per point (thus allowing SPD to be 1 + REA/10 and provide the same results as DEX). If you like to alter character standards based on archetype, you could vary the cost that way as well — perhaps speedsters and rogues pay only 1 Character Point per point for all of the DEX Characteristics, bricks and warriors pay 3 Character Points per point for all of them, and all other characters pay 2 Character Points per point each.

HEROGLYPHS 16

CHARGE!

EXPANDED RULES FOR CHARGES

Here are a few expanded rules and explanations for Charges, one of the most popular Limitations in the book. Some of them come from the Rules FAQ (but are restated here for clarity), others are brand new.

USING MULTIPLE CHARGES

Characters often define weapons with multiple settings, or similar types of devices, as Multipowers (or, less commonly, other Power Frameworks). Typically these Multipowers have Charges for the entire reserve, representing a fuel cell, clip of ammunition, or like "power source" for the entire weapon or device. That raises the possibility of some slots in the Multipower using more than one Charge. For example, if you have a Laser Rifle, maybe slot #3, Overpowered Shot, represents providing extra power to the weapon to create a more powerful beam. This qualifies as a separate Limitation on the slot (not the Multipower reserve) called *Requires Multiple Charges*. The accompanying table indicates the value of Requires Multiple Charges.

REQUIRES MULTIPLE CHARGES

Limitation Value	Number Of Charges Used
-¼	2 per use
-½	3-7 per use
-¾	8-12 per use
-1	13-17 per use
... and so on.	

This chart assumes the character has a fairly high number of Charges — 65 or more — for his Multipower. For each step up the Charges Table, add an additional -¼ Limitation value (though a slot can never require more Charges than the entire Multipower has at full strength). Thus, for a Multipower that has 16 Charges for the entire Multipower, a slot that consumes 4 Charges per use gets a -1¼ Limitation.

CONSERVED CHARGES

Sometimes a device, power, or ability needs Charges to represent the fact that it gets used up, runs out of power, or the like — but not every use of the device, power, or ability should necessarily consume a Charge.

Consider, for example, the *macahuitl* — the Aztec "sword," consisting of a sort of wooden club with razor-sharp bits of obsidian set into each edge.

The obsidian blades become dull from repeated use, which you can represent with Charges... but not every "activation" of the macahuitl uses up a Charge. Sometimes an attack misses, or cuts through so cleanly that it doesn't dull the stone.

In *HERO System* terms, you can simulate this with *Conserved Charges*, which reduces the value of Charges based on how likely it is that any given activation of the power will use up a Charge. The reduction listed in the accompanying table is based on a roll — the GM makes the roll each time the character activates the power, and if he rolls less than or equal to that number, a Charge is consumed.

Alternately, you can define circumstances in which a Charge is or is not used up, and assign a Limitation value to that based on the rolls listed in the table. With the macahuitl, for example, you might define it this way: activating the power uses up a Charge if the Attack Roll indicates a hit, the Attack Roll misses by only 1 or 2, the attack is Blocked, or the circumstances otherwise indicate the obsidian blades have impacted something hard enough to chip or dull them. The GM assigns this a value of ½ less Limitation, similar to an 11- roll.

CONSERVED CHARGES

Roll	Reduction In Value
14-	¾ less Limitation
11-	½ less Limitation
8-	¼ less Limitation

This reduction in value can convert Charges from a Limitation to an Advantage.

ADJUSTING CHARGES

Sometimes a character wants to use an Adjustment Power to affect not a power, but that power's Charges. Examples include a superhero with electricity powers who wants to "juice up" a run-down battery (Aid Charges) or a magic spell that removes bullets from a gun (Drain Charges).

To do this, the character must define his Adjustment Power properly. First, unless the GM rules otherwise, the Adjustment Power has to work against a particular special effect, *and* be defined as only affecting Charges: Aid Electricity Charges; Drain Bullets Charges. That prevents the ability from becoming unbalancingly powerful. Second, the character must apply a +¼ Advantage, *Charges Adjustment*, to the power. This signifies that the change in Charges doesn't fade normally. Instead, added Charges remain until used up, and removed Charges remain lost until the character recovers
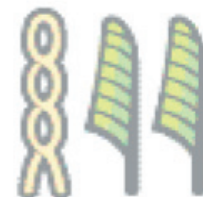
them normally the next day (or physically gets them back, in the case of things like Drained bullets or arrows that remain in existence).

To determine the "cost" of each Charge in a device or power, divide the Active Points in the power by the number of Charges it has. That gives a "Character Point cost" for each Charge. Then you can apply the Adjustment Power as per normal.

INCREASED RELOADING TIME

Clips is a popular option for guns and many other devices that have Charges. Reloading a clip of Charges normally takes a Full Phase. If it takes longer than normal for a character to reload a clip, the character can increase the value of his *Charges* Limitation, as indicated in the accompanying table. A character with Fast Draw can reduce the increased reloading time by half with a successful roll.

INCREASED LOADING TIME

Value	Increased Loading Time
¼ more Limitation	2 Full Phases
½ more Limitation	1 Turn
¾ more Limitation	1 Minute
1 more Limitation	5 Minutes
...and so on.	

RECOVERY TIME ISSUES

Here are some expanded and optional rules for recovering used Charges.

Reduced Recovery Time

As noted in the rules, the default for Charges is that a character recovers them once per Day (unless they are Recoverable Charges, in which case it depends on how long it takes him to get them back).

Generally, characters should not use Recoverable Charges to simulate a power with Charges that return more quickly than once per day (they're primarily appropriate for Charges based on physical objects the character can retrieve), but the GM can allow this if he wishes. For example, a character could define his Recoverable Charges as returning per Hour instead of per Day.

Alternately, the GM can more precisely allow for rapid Charge recovery by reducing the value of the *Charges* Limitation based on how quickly the character regains Charges. The accompanying table lists the suggested reduction values.

Increased Recovery Time

The *Increased Recovery Time* addition to the value of Charges is described on page 284 of the *HERO System 5th Edition, Revised* rulebook (as is the *Never Recovers* addition, which is essentially just an extension of Increased Recovery Time).

As a default, characters cannot apportion the recovery of Charges with Increased Recovery Time over the course of the defined time — they all come back at the end of the period. For example, if a character has a power with 30 Charges and Increased Recovery Time of 1 Month (-1), he cannot regain 1 Charge per Day or the like; instead,

REDUCED RECOVERY TIME

Reduction	Charges Recover Per
¼ less Limitation	6 Hours
½ less Limitation	1 Hour
¾ less Limitation	20 Minutes
1 less Limitation	1 Minute
1 ¼ less Limitation	1 Turn

Characters cannot reduce the recovery period for Charges below 1 Turn.

This reduction in value can convert Charges from a Limitation to an Advantage. For example, if a character has 4 Charges (-1) that recover on per Turn basis (1¼ less Limitation), it becomes a (1 - 1¼) +¼ Advantage.

all 30 Charges come back at the end of the month. However, a GM can choose to allow apportionment if desired, but if he does so, he should reduce the value of the Limitation (or increase the value of the Advantage) by ¼ (or more) to reflect the beneficial change.

The value of Increased Recovery Time has a cap of -2, since that's the value of Never Recovers. By definition any recovery period, no matter how long, is less hindering than never having the Charges come back.

There's no hard-and-fast rule that limits how many Charges a power with Increased Recovery Time or Never Recovers can have. However, as always, the GM should use his common sense, dramatic sense, and appreciation for game balance issues when evaluating a power with these Limitations. Charges which Never Recover are primarily intended for intriguing power constructs with a small number of Charges, like a magic wand with a restricted "battery" of magical energy, not for more routine powers.

Generally speaking, a power cannot have both Recoverable Charges and Charges which Never Recover; by definition, the special effects justifying these two Limitations are so incompatible as to be exclusive. A GM might allow a character to combine the two if he felt it wouldn't cause game balance problems and was justified by proper character/power conception.

MULTIPLE-USE CHARGES

There are some situations in which a character wants a single supply of Charges to work with more than one power or device. The typical example is a character with multiple weapons that all use the same type of ammunition — if he runs out of bullets for his 9mm submachine gun, he can take the clip out of his 9mm pistol and use those bullets for the SMG. For example, in the *UNTIL* sourcebook, it's mentioned that all UNTIL weapons of a particular type (*e.g.*, all blasters) can use each others' energy packs if necessary.

In some cases the GM can write this off to "special effects" without worrying about it further. But if the GM wants to account for the increased utility of the Charges in this situation, he could reduce the value of the *Charges* Limitation by ¼ — or possibly even ¼ for every x2 powers/devices the Charges can work with.
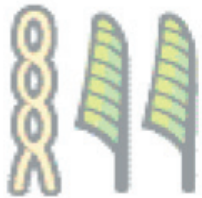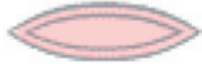
HEROGLYPHS 17

A PROPORTIONAL RESPONSE

RULES FOR PROPORTIONAL POWERS

A while back, a fan on the Hero message boards, a newcomer to the *HERO System* I believe, posted a question for me concerning the *Limited Power* Limitation. He referred to the Limited Power Guidelines table on page 298 of the *HERO System 5th Edition, Revised*, which helps you determine the value of a *Limited Power* Limitation based on how much of its effectiveness the power tends to lose. For example, if a *Limited Power* Limitation causes a power to lose about half of its effectiveness, the rules suggest a value of -1.

The person posting the question wanted to know if that meant a power with that sort of Limitation would have only half effect when the Limitation applied. I answered no, because that's not how Limitations work; if, for example, a power *Only Works In Twilight*, then it has no effect in daytime or full night, not half effect.

However, his question got me to thinking. Creating "proportional" powers in the *HERO System* — powers that only have partial effect in some situations, or increased effect in some situations — is a relatively complicated matter. It involves buying the power in sections, with varying levels of Limitation. For example:

Example: *Sir Gwethon is a knight in a Fantasy campaign. Thanks to a birth-gift from the faerie-folk, Sir Gwethon becomes twice as strong as normal in the hour before and hour after noon, but correspondingly weaker in the hour before and hour after twilight (defined as occuring at 6:00 PM for game purposes). Assuming the player wants Sir Gwethon to normally have STR 20, and that the campaign uses the Normal Characteristic Maxima rules, here's how you'd build that ability:*

Cost	Power
5	*Weakest Between 5:00 And 7:00 PM:* STR 15
4	*Normal STR:* +5 STR (5 Active Points); Does Not Apply Between 5:00 And 7:00 PM (-¼)
3	*Strongest Between 11:00 AM And 1:00 PM:* +5 STR (10 Active Points); Only From 11:00 AM To 1:00 PM (-2)

Total cost: 12 points.

Now, that power construct definitely gets the job done — but it's complicated, and it takes up a lot of space on the character sheet.

Similarly, players often want to build abilities for a character that reflect the fact that the ability becomes more powerful in certain circumstances. For example, maybe a character with magnetism powers wants his Magnetic Blast to be more powerful when he's exposed to cold temperatures. Either the character has to buy extra dice of effect with the Limitation Only In Temperatures Below 40 Degrees Fahrenheit (-1), or buy an Aid that's Triggered by being in such temperatures (for example, see the Cold Weather Enhancement power on page 138 of The UNTIL Superpowers Database). Again, this works just fine, but it's not necessarily intuitive (especially to relatively inexperienced HERO System players) and perhaps more complicated than it needs to be.

Rather than forcing characters to jump through these sorts of hoops, it might be worth considering devising a Power Modifier that allows for proportionaly better or worse effect based on defined conditions or circumstances. Here's my take on the concept:

PROPORTIONAL

Value: Varies

This Power Modifier — sometimes an Advantage, sometimes a Limitation — makes a power more or less effective in certain defined circumstances. For example, a power might be twice as effective at nighttime, or only have half effect against dwarves.

The value of Proportional depends on two factors: first, the commonality or frequency of the circumstance which triggers the proportionality; second, the extent to which the ability gains (or loses) power.

The *Proportional* Advantage

The accompanying table lists the suggested values for Proportional as an Advantage.

THE PROPORTIONAL ADVANTAGE

Value	Increase In Power Of Ability
+½	Ability has up to 1.5 times as many Character Points' worth of effect
+1	Ability has two times as many Character Points' worth of effect
+2	Ability has three times as many Character Points' worth of effect
+3	Ability has four times as many Character Points' worth of effect
+4	Ability has five times as many Character Points' worth of effect
...and so on	
Value	Commonality/Frequency Of Increase
2 less Advantage	Very Uncommon (character rarely, if ever, gets the increase in power)
1½ less Advantage	Uncommon (character gets the increase in power about a fourth of the time)
1 less Advantage	Common (character gets the increase in power about a third of the time)
½ less Advantage	Very Common (character gets the increase in power about half the time)

The minimum value of the *Proportional* Advantage is +¼, regardless of the subtraction applied for commonality/frequency.

For example, suppose a werewolf has 20 STR (cost: 10 Character Points). He wants to have twice as much effect — 20 Character Points' worth of STR, or STR 30 — at night. That's a two times increase in power (+1 base Advantage) which applies about half the time (½ less Advantage). That's a total of a +½ Advantage on his STR, so his STR with Proportional increase costs (10 x (1 +½)=) 15 points.

As indicated in the Commonality/Frequency section of the table, a Proportional Advantage should not apply more than about half the time. Otherwise, it's too similar to being at greater power all of the time. The better approach in that case is to buy the power at its maximum desired effect, then use the *Proportional* Limitation to define those few circumstances in which the ability works at lesser effect. If the application of the Commonality. Frequency modifier would mathematically turn the Advantage into a Limitation, that's a good indication you ought to use the Proportional Limitation instead. See the continuation of the werewolf example below for further discussion.

The *Proportional* Limitation

The accompanying table lists the suggested values for Proportional as a Limitation.

THE PROPORTIONAL LIMITATION

Value	Decrease In Power Of Ability
-¼	Ability loses up to 20% of its Character Points' worth of effect
-½	Ability loses 21-33% of its Character Points' worth of effect
-¾	Ability loses 34-49% of its Character Points' worth of effect
-1	Ability loses 50-59% of its Character Points' worth of effect
-1½	Ability loses 60-69% of its Character Points' worth of effect
-2	Ability loses 70-79% of its Character Points' worth of effect
-3	Ability loses 80% or more of its Character Points' worth of effect
Value	Commonality/Frequency Of Decrease
2½ less Limitation	Very Uncommon (character rarely, if ever, suffers the decrease in power)
2 less Limitation	Uncommon (character suffers the decrease in power about a fourth of the time)
1½ less Limitation	Common (character suffers the decrease in power about a third of the time)
1 less Limitation	Very Common (character suffers the decrease in power about half the time)
½ less Limitation	Extremely Common (character suffers the decrease in power over half the time)
¼ less Limitation	Ubiquitous (character almost always suffers the decrease in power)

Normally, the minimum value of the *Proportional* Limitation is -¼, regardless of the subtraction applied for commonality/frequency, but the GM may decrease this to -0 if appropriate.

For example, suppose a werewolf has 30 STR (cost: 20 Character Points), but that full level of STR only applies during the full moon. The rest of the time, he has 20 STR. The 20 STR costs half what 30 STR does, so he's losing half of his Character Points' worth of effect for a base -1 Limitation. He suffers this decrease almost all the time; he's only got the extra STR about three days out of the month. Thus, the final value of the Proportional Limitation is -¾, so the STR costs him (20/(1 +¾)=) 11 points.

Multiple Proportionality

A character might want to have multiple levels or types of proportionality. For example, a character's STR might wax and wane as the moon waxes and wanes — he'd be his strongest at the full moon, then slowly become weaker until the new moon (when he'd be at his weakest), then get stronger
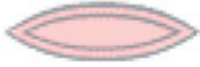
again as the moon became larger in the sky. Or, like Sir Gwethon above, the character might be more powerful in some circumstances, and less powerful in others.

In this case, the player and GM should work together to decide two things: first, whether the power is overall stronger or weaker than just having an unmodified ability; second, the degree to which it's better or worse. Then determine the value of the *Proportional* Modifier in the usual way.
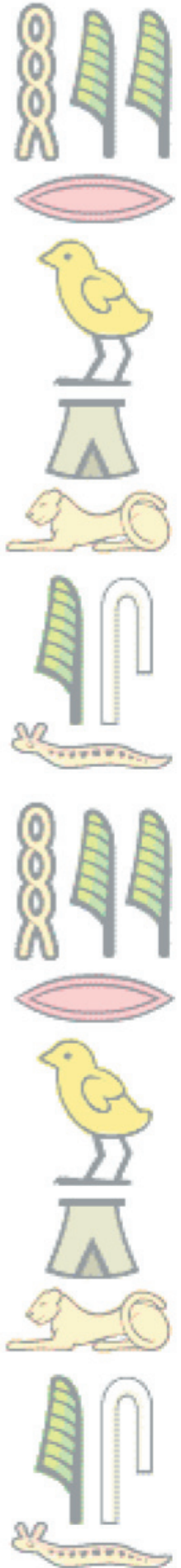
HEROGLYPHS 18

SAVE VERSUS RULES CONVERSION

BUILDING AVOIDANCE RULES INTO POWERS

One of the subjects I chose not to cover in *Fantasy Hero* was the topic of general rules for avoiding some types of damage, spells, powers, or other effects — what That Other Game (TM) calls a "saving throw." In general terms, this means the target of some types of attacks can make a roll of some sort to avoid or diminish the effects the attack, so we'll call this an "avoidance roll" system.

In *HERO System* terms, creating a rule for this involves two things. First, you have to decide what roll characters can make to avoid an attack. Second, you have to decide the effects of a successful roll, and then represent that in game terms; this includes deciding what attacks can and cannot be avoided with an avoidance roll.

EFFECTS OF AVOIDANCE ROLLS

Taking the second question first, the effect of an avoidance roll is easily stated: it allows a character to wholly or partly avoid the effects of an attack. He takes less damage, or no damage, or the like.

If an ability — be it a spell, a weapon, an innate power, or something else — doesn't always fully affect its target, then it's restricted. In *HERO System* terms, restrictions on powers are represented with Limitations. The accompanying Avoidance Roll Table offers suggested values for this Limitation, based on the protective capacity of a successful roll and any modifiers to the roll. If the protective capacity depends on how successful the roll is (such as "reduce attack by 50%, +5% per point by which the roll is made"), then determine the base value of the Limitation from the base level of reduction (50%, in this case).

Defining avoidance rolls as a type of Limitation also tells you which attacks can and cannot be avoided with a roll: if the attack takes the *Avoidance Roll* Limitation, targets can avoid its affects (partly or wholly) with a successful roll; if it does not take that Limitation, no avoidance is possible. The GM has the final say as to whether an ability should take the Limitation, and if so how the roll should be defined and what affect it has.

THE ROLL ITSELF

When determining the rolls involved in an avoidance roll system, the GM has to decide two things:

1. What types of rolls are used?
2. How many rolls are used?

AVOIDANCE ROLL TABLE

Value	Effect
-½	Successful roll reduces effect of attack by up to 49%
-1	Successful roll reduces effect of attack by 50-75%
-1¼	Successful roll reduces effect of attack by 76-99%
-1½	Successful roll reduces effect of attack by 100%

Value	Modifier
1 more Limitation	Character makes avoidance roll at +4
½ more Limitation	Character makes avoidance roll at +2
¼ more Limitation	Character makes avoidance roll at +1
0 less Limitation	Character makes unmodified avoidance roll
¼ less Limitation	Character makes avoidance roll at -1
½ less Limitation	Character makes avoidance roll at -2
1 less Limitation	Character makes avoidance roll at -4

The maximum value of the Limitation is -0; modifiers cannot make it an Advantage.

Types Of Rolls

First, GMs need to determine the types of rolls involved. Generally speaking, the options are:

—Characteristic Roll(s)
—Rolls using existing Skill(s)
—Rolls using Skill(s) created solely for the avoidance rule system

In many avoidance roll systems, Characteristic Rolls are involved. Typically, a system uses DEX Rolls to avoid standard attacks that have some sort of physical manifestation, EGO Rolls to avoid mental attacks, and CON Rolls to avoid attacks that affect the character's hardiness, stamina, or the like (such as diseases or poisons). The benefits to this are that all characters already have those rolls, and this allows the GM to tailor character types by including Skill Levels for one or more of these rolls in Package Deals. The drawback is that it may be too cheap and easy for characters to get high avoidance rolls.

Some avoidance roll systems rely on existing Skills — for example, Acrobatics to avoid standard attacks that have some sort of physical manifestation, Deduction to avoid mental attacks, and Survival to avoid attacks that affect the character's hardiness, stamina, or the like (such as diseases or poisons). The benefit to this system is that it's
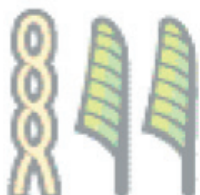
more difficult for characters to obtain high avoidance rolls. The difficulties are that (a) the Skill List doesn't necessarily include Skills that pertain to avoiding attacks in any significant respect, and (b) it encourages characters to buy Skills that don't necessarily fit their character conception just to obtain an avoidance roll.

One way to avoid some of the difficulties of an "existing Skill" system is to create special Skills just for use as avoidance rolls: Avoid Physical Attacks; Avoid Mental Attacks; Avoid Stamina Attacks. The GM could set the cost however he wanted, making them Characteristic-Based or Background Skills as desired. Presumably, all characters would get at least a Familiarity with each of these Skills in the Package Deals they buy during character creation. While this does solve some problems, it may require characters to spend too many points on avoidance rolls, and may set a bad precedent in terms of Skill creation.

Regardless of what types of avoidance rolls a system uses, including them does not remove or change any other rules regarding rolls to avoid or diminish the effects of an attack. For example, even if characters get EGO Rolls to avoid the effects of Mental Powers, a character who fails the roll (or who doesn't succeed in avoiding the entire effect) still gets his normal Breakout Roll.

Number Of Rolls

The other thing to consider is how many different types of avoidance rolls a system features. All of the above examples use three rolls, but depending on the GM's preference an avoidance system could use one roll, two, five, ten, or the like — it all depends on how the GM wants to subdivide the types of attacks avoidance rolls apply to. Having fewer rolls may reduce some of the cost problems mentioned above, but raise the potential problem of characters buying their avoidance rolls too high.

EXAMPLE AVOIDANCE ROLL ABILITIES

Here are some example spells for a *Fantasy Hero* game with an avoidance roll system based on using DEX, EGO, and CON Rolls, as described above.

CHARM MIND

Effect: Mind Control 10d6
Target/Area Affected: One character
Casting Time: Half Phase (Attack Action)
Casting Procedures: Focus, Gestures, Incantations
Duration: Instant
Range: LOS
Magic Roll Penalty: -5
END Cost: 5

Description: This spell allows the spellcaster to take control of another person's mind; the target can avoid the effects with a successful EGO Roll.

Game Information: *Mind Control 10d6 (50 Active Points); OAF Expendable (special gold coin with a sorcery rune carved in each side, Very Difficult to obtain; -1½), Avoidance Roll (if target succeeds with an EGO Roll, he suffers no effect; -1½), Gestures (-¼), Incantations (-¼), Requires A Magic Roll (-½), Spell (-½). Total cost: 9 points.*

INFLICT PLAGUE

Effect: Drain 2d6, any Characteristic one at a time
Target/Area Affected: One character
Casting Time: Full Phase (Attack Action)
Casting Procedures: Focus, Gestures, Incantations
Duration: Instant
Range: 325"
Magic Roll Penalty: -7
END Cost: 7

Description: This spell allows a spellcaster to inflict a loathsome disease upon another person. The target may make a CON Roll at +1 to avoid the illness.

Game Information: *Drain 2d6, any Characteristic one at a time (+¼), Ranged (+½), Delayed Recover Rate (points return at the rate of 5 per Month; +2) (75 Active Points); OAF Expendable (the tongue of a pig steeped in serpent's venom, Difficult to obtain; -1¼), Avoidance Roll (if target succeeds with a CON Roll at +1, he takes no damage; -1¾), Extra Time (Full Phase; -½), Gestures (-¼), Incantations (-¼), Requires A Magic Roll (-½), Spell (-½). Total cost: 12 points.*

LIGHTNING BOLT

Effect: RKA 4d6
Target/Area Affected: One character
Casting Time: Half Phase (Attack Action)
Casting Procedures: Focus, Gestures, Incantations
Duration: Instant
Range: 300"
Magic Roll Penalty: -6
END Cost: 6

Description: This spell projects a powerful bolt of lightning at a target from the caster's fingertips. A sufficiently agile target may avoid some of the bolt's effects, but not all of them.

Game Information: *RKA 4d6 (60 Active Points); OAF Expendable (a small piece of meteoric iron, Difficult to obtain; -1¼), Avoidance Roll (if target succeeds with a DEX Roll at -2, he takes half damage; -½), Gestures (-¼), Incantations (-¼), Requires A Magic Roll (-½), Spell (-½). Total cost: 14 points.*
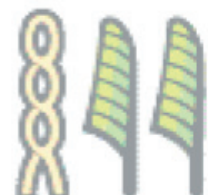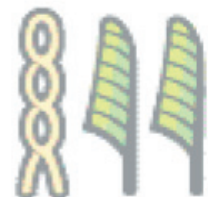
HEROGLYPHS 19

LAYERS UPON LAYERS UPON LAYERS

DEALING WITH "LAYERED" DEFENSES

The *HERO System* rules include many different Defense Powers — many ways for characters to protect themselves from injury. Oftentimes, two or more Defense Powers can apply to a single attack. In most cases, you just add the defenses together to determine how much protection the character has. For example, if a character's attacked with an Energy Blast, he adds his ED, his ED Armor, and his ED Force Field together to determine his total defense against the attack's STUN and BODY.

But depending either on the type of attack or the types of Defense Powers involved, there are circumstances in which this simple "stacking" of defenses isn't necessarily satisfying. It's simple and easy to handle in the game, and that's why it's usually the default approach. But if an unusual situation arises, you may want to consider the issue of *layering of defenses* — in other words, in what order do multiple defenses apply?

BASIC PRINCIPLES

Before you bring up the topic of layered defenses in your campaign, keep two primary rules in mind:

1. If a character has Ablative defenses, those defenses are always "on top" — they get affected first, before any other defenses. Otherwise the Limitation may not actually restrict or hinder the character to any significant degree.

2. If a character has Damage Reduction that applies to an attack, it applies last — after all ordinary (subtractive) defenses diminish the damage.

In light of the guidelines discussed below, as well as common sense, dramatic sense, and considerations of game balance, the GM is of course free to waive or ignore either of these rules. But in general they should always apply, since they help to maintain the balance between attacks and defenses in the *HERO System*.

LAYERED DEFENSE GUIDELINES

In general, here's the order in which you should apply "layered" defenses:

1. Force Walls and other defenses that manifest outside or away from the character's body.

2. Force Fields and other defenses that manifest at or around the character's body, but which surround the body in such a way as to cover worn defenses.

3. Worn defenses — defenses bought through a Focus such as a suit of powered armor, an armored costume, or the like — and other defenses immediately next to the character's body.

4. Innate defenses — defenses the character has or buys as innate abilities that aren't listed above, including his standard PD and ED, Damage Resistance, some special effects of Armor, defenses provided by Density Increase and Growth, and so forth.

Of course, these are *guidelines*, not necessarily rigid rules. No set of rules can account for every possible combination of Powers, special effects, and in-game circumstances, so the GM should modify these guidelines as he sees fit.

EFFECTS OF LAYERED DEFENSES

In most instances, the layering of defenses has little, if any, game effect. All you need to do is add up the character's applicable defenses and use them to reduce the damage rolled on an attack that hits him, and that's it. But there are some situations in which layering can matter.

Hardened

First, it may be that some of the character's defenses are Hardened, and some are not. In that case, the Hardened defense applies in full against an Armor Piercing attack, and non-Hardened defenses have half value as usual. Against Penetrating or Indirect, any Hardened defense, no matter where it's layered in, stops the Advantage from affecting the character.

Of course, GMs should remain wary of players who attempt to unfairly exploit this rule by buying a tiny amount of some defense and making it Hardened just to stop Penetrating attacks. As stated in the Rules FAQ on the Hero Games website, this is presumptively illegal; if a character applies Hardened to a defense, he must buy it for the entire defense. Doing otherwise is contrary to the spirit of the rules and the need to maintain game balance, and should be disallowed.

However, some GMs may prefer to establish alternate rules/guidelines. On possible method is this: if the DCs of the Penetrating attack exceed the number of points of a layered Hardened defense, the Hardened won't counteract the Penetrating. Suppose, for example, a character has a Hardened Force Field (10 PD/10 ED) and some innate Armor and PD that aren't Hardened. An 11d6 (or greater) Penetrating attack would ignore the Hardened, allowing Penetrating to have its usual effect. If that particular standard doesn't work for you, it shouldn't be too hard to come up with one that does.

Another possibility, taking a cue from my column on the subject of Armor Piercing in *Digital Hero* 13, is to have the points of Hardened directly reduce the points of Penetrating. Assume, for these purposes, that any Penetrating attack will Penetrate a number of points of damage equal to the DCs in the attack. Then, use the Hardened defense to reduce that number, and if any "points of Penetrating" remain, they affect the character as normal for Penetrating. In the above example, the target has 10 Hardened Defense and the Penetrating attack has 11 DCs, so the target is affected by (11 - 10 =) 1 point of Penetrating.

Lastly, the GM can establish a lower threshhold than "the entire defense must be Hardened." For example, he might rule that only half of the defense needs to be Hardened to resist Penetrating, Armor Piercing, and Indirect.

Limited Defense Powers

Second, sometimes a character applies Limitations to some of his defenses so that they don't protect him against certain types of attack. For example, a fire elemental might have extra defense that *Only Protects Against Limited Form Of Attack* (fire; -½). When defenses are layered, a restricted defense may be more or less effective than it otherwise would be, particularly if, for example, the target has a relevant Vulnerability.

Similarly, other Limitations on a defense may interact with the layering of defenses. For example, suppose that one of the character's defenses is an armored costume — an OIF. If an enemy wants to attack and damage not the character, but his Focus, it may be important to know if the character has other defenses "above" the armored costume to reduce the damage before it hits the Focus. (In this situation the GM may require the character to buy a Focus that would normally be considered Accessible as Inaccessible, since it has protection that most Accessible Foci lack.)

LAYERING CONSTANT DEFENSE POWERS

Related issues arise when characters have Constant Defense Powers — Force Wall and Force Field. Some characters may want to activate one of those Powers again and again (paying the END cost each time, of course) to "stack" the defenses to the point where they cannot be harmed.

In the case of Force Field, this is illegal. A character with Force Field cannot activate it multiple times to provide himself with multiple points of Resistant Defense; he can only have "one use" of a single Force Field-based power active at a time. However, characters can buy multiple powers built with Force Field and have them all active at one time if they choose (provided the GM doesn't object for some reason).

In the case of Force Wall, characters *can* create multiple Walls by taking the appropriate Action and paying the END cost for each one created. Even if activating the Force Wall is a Zero-Phase Action, the character can only create one Wall per Phase. If the character wants to create a Force Wall beyond one that's already established, the power must have the *Indirect* Advantage (to get past the initial Wall). Similarly, to "wrap" one Force Wall around another, the second Wall has to have enough inches of length to reach the entire distance (in the case of simply establishing one straight wall after another to, for example, block a corridor, this won't matter). Of course, the GM can forbid this practice in the interest of common sense, dramatic sense, and game balance; allowing characters to do this repeatedly (or perhaps at all) could significantly unbalance some campaigns (especially if the Force Wall costs 0 END to establish and/or maintain). In most cases, a character shouldn't have more than one Force Wall protecting himself; it's not "in genre" and potentially causes too many problems in the game.
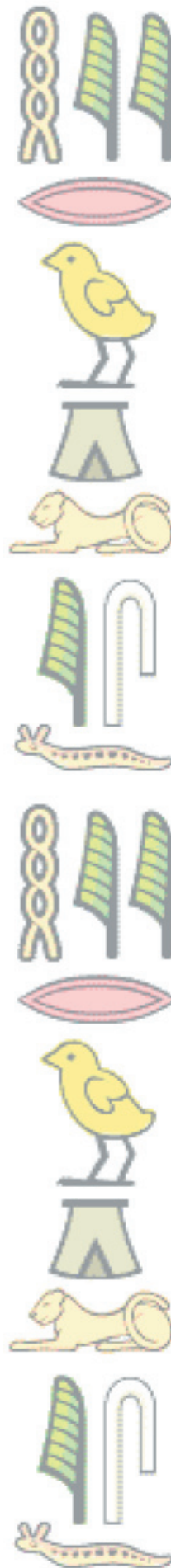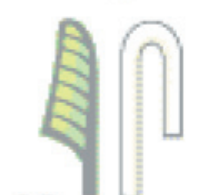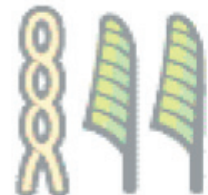
HEROGLYPHS 20

DOWN THE DRAIN

APPLYING ADJUSTMENT POWERS TO CHARACTERISTICS BOUGHT AS POWERS

It's not uncommon for characters to buy Characteristics as Powers — for example, some extra *STR Only For Lifting* (-1), or a DEX boost based on taking a drug (OAF, Continuing Charges), or a magic amulet that provides +1 SPD. This raises some interesting rules issues with regard to Adjustment Powers, primarily Drain.

For purposes of this discussion, let's consider four characters, each of whom has some extra STR bought as a Power:

1. Drogar, *a Fantasy Hero* warrior with 15 STR who has a potion that provides +30 STR (OAF Fragile, 4 Continuing Charges lasting 1 Minute each).

2. Captain Tentacle, a superhero with 10 STR who wears a harness that has four steel tentacles he can control by cybernetic command. He buys this as an OIF that provides him with Extra Limbs (4), plus +30 STR *Only With Extra Limbs* (-½), plus Stretching 4" (though only the +30 STR matters for purposes of this discussion).

3. Graall Axetooth, a troll with 35 STR who has a magic amulet (OAF) that grants him +30 STR.

4. Fleshtone, a supervillain with "biokinetic" powers who can increase his normal STR of 20 by +30 with Increased Endurance Cost (x2 END; -½).

Where you read "STR" below, you can of course substitute any other Characteristic; this article only refers to STR to make the discussion easier to read.

Because of the wide variety of potential powers and situations involved, there aren't necessarily any hard-and-fast rules you can apply. The text below provides *guidelines*, but the GM has to decide how best to apply those guidelines in light of common sense, dramatic sense, the special effects involved, and considerations of game balance.

Generally speaking, the basic guideline in these situations is that the Drain comes "right off the top" — in other words, it affects the character's entire STR. For example, if Drogar (STR 15 + 30 = 45) were subjected to a Drain STR spell that removed 14 points of STR, he'd have STR 31 until the Drain's effects wear off.

INNATE VERSUS SEPARABLE CHARACTERISTICS

In situations where the extra STR is *innate* to the character once applied — as with Drogar's potion or Fleshtone's biokinesis — there's generally no need for further rules or guidelines. Such STR doesn't really differ, in rules terms, from the character's natural STR in any significant way (even though it may come from an outside source), because once it's applied to the character it can't be taken away from him directly.

But if the STR is *separable* from the character — as with Tentacle's harness or Graall's amulet, both Foci — other considerations come into play, primarily this: what happens if the source of the STR is taken away from the character? For example, imagine that Graall, with a total STR of 65 (35 innate, +30 from magic amulet) suffers 14 points of Drain STR effect. Then he loses his amulet. Perhaps an enemy Disarms it away from him; it's Accessible, after all. So, what is Graall's STR at this point?

In many cases, the best answer from the viewpoint of both common sense and dramatic sense is that the Drain affects the character's innate STR before his separable STR — thus, Graall would have STR 21 if he lost the amulet (and the person who took the amulet away from him could use it to gain +30 STR himself). Otherwise, if the Drain affects the separable STR first and exceeds the amount of separable STR, the separable STR functions as a sort of defense against the attack. Suppose Graall suffered a Drain STR of 35 points, reducing his STR (with the amulet) to 30. If the Drain affected the amulet first, he could de-activate it or take it off and have his normal 35 STR — thus effectively "healing" 5 points of Drain effect. That hardly seems sensible or fair; it may also seem contrary to the nature of the source of the STR. (If the GM follows this rule, an attacker could, in appropriate circumstances, target the source of the separable STR directly — in short, target the magic amulet, not Graall himself. This may be difficult, if the item is small and thus has a high DCV.)

In some cases, the GM may want characters to build their STR-providing items to comply with this rule. For example, perhaps Graall's magic amulet has the Advantage *Inherent*, representing the fact that any Drain STR used against him affects only his normal STR, not the STR from the amulet. Similarly, Captain Tentacles might build his harness not as a Focus, but as an Automaton Follower with DEX, SPD, and other relevant Characteristics equal to his own. That way it's a separate "character" who has to be targeted with attacks separately. (There's a *Steel Tentacles* device in *Gadgets And Gear* built this way.) This definitely emphasizes the concept of "separable" Characteristics.

ENDURANCE RESERVES

A similar issue arises with respect to Endurance Reserve. If a character's hit with a Drain END, what does it affect — his own END, or the Reserve's END? What if he has two or more Endurance Reserves?

Generally speaking, the same rules should apply. One of the reasons characters buy Endurance Reserves is to separate that source of END from "themselves," so that they don't have to worry about what happens if they run out of innate END. Taking into account special effects — such as an electricity-based power that only affects batteries — the GM may rule that a Drain applies to the Reserve and not the character, or affects them both in some ratio (usually 50-50), or the like.

Since Endurance Reserves are discrete things, usually if a Drain affects one and reduces it to 0 END, it doesn't go on to affect a second Reserve or the character's personal END if it has "Drain points" left to use. But as always, the GM has to interpret this in light of special effects, game balance, and other considerations. If a character buys several small Endurance Reserves to try to exploit this rule, the GM should allow "overage" to affect other Reserves, or maybe establish some other restriction (such as imposing an Extra Time requirement for switching from one Reserve to another, for -0 Limitation value).
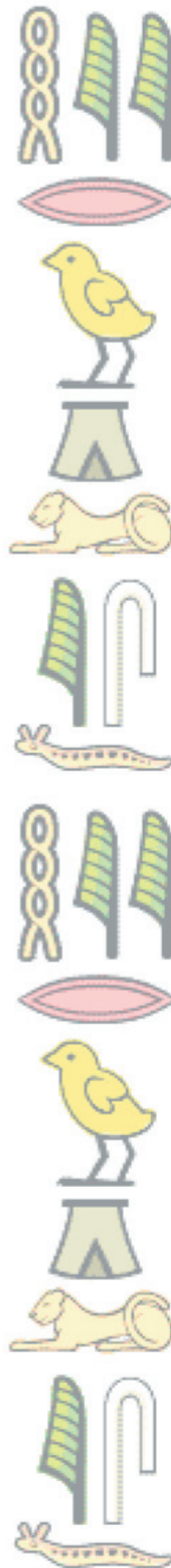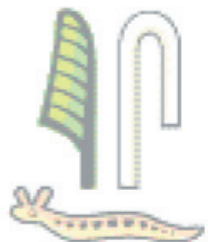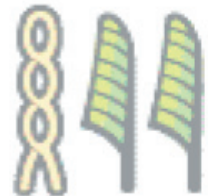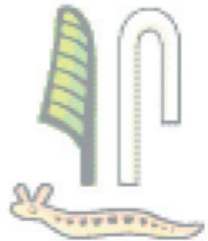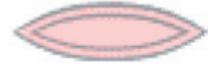
HEROGLYPHS 21

BECAUSE IT'S THERE

ADVANCED RULES FOR THE *CLIMBING* SKILL

As many of you are aware, I've been working on *The Ultimate Skill* in my "copious spare time." A lot of this work involves researching the various Skills to determine what can be done with them, what modifiers should apply, and the like. So far, the average Skill writeup has gone from the 200-400 words in the *HERO System 5ᵗʰ Edition* rulebook to an average of, by my rough guess to date, 5,000 words! In short, there's going to be a lot of information in TUS, folx.

I thought it might be fun to give y'all a quick glimpse into TUS. Here's roughly what the writeup for *Climbing* is like (though admittedly this is one I wrote early on, so it will probably need a little polishing when all's said and done). Naturally, it's all subject to change until you see it in print. ;)

CLIMBING

Type:	Agility Skill (roll: 9 + (DEX/5) or less)
Cost:	3 Character Points for a base roll, +1 to the roll per +2 Character Points

Climbing allows characters to climb mountains, trees, buildings, and similar objects, typically at a rate of 1" per Phase (or less).

Climbing is primarily a physical Skill. However, it grants the character knowledge of related subjects, such as: climbing methods; climbing equipment; famous climbing sites and climbers. It also grants the characters the following abilities: knot-tying (though the knot-tying ability granted by Climbing is not as comprehensive as that granted by Contortionist or PS: Knot-Tying); the ability to use ropes to ascend, rappel, and so forth; the ability to perceive/find safe climbing routes; the ability to judge the weight-holding capacity of a ledge or outcropping.

The Climbing roll can be modified by: the type of surface being climbed; the type of equipment being used; the way the equipment is used; and the general Skill Modifiers covered on page 45 in the HERO System 5ᵗʰ Edition, Revised.

Climbing is an Everyman Skill for all genres.

CLIMBING SURFACE

Climbing is usually only required if a surface is steeper than 45 degrees. If there are plenty of easy handholds or the surface is otherwise easily climbable, characters may be able to ascend surfaces of up to 60 degrees without Climbing.

The modifiers to the Climbing roll listed in the accompanying table are based on the surface being climbed. Note that all modifiers are cumulative, so that, for example, scaling the outside wall of a glass skyscraper, a 90-degree extremely slippery surface with almost no handholds, would be as much as -12 to the Climbing roll. If it began to rain and the glass became wet, this would increase to as much as -14.

EQUIPMENT

The *Climbing* Skill assumes that the character is "free climbing," *i.e.*, climbing with no equipment (or only with equipment for safety purposes, rather than equipment which actually makes climbing easier). However, for most difficult climbs and related activities, climbers use ropes (either regular rope or ropes made especially for climbing), and sometimes advanced equipment such as special climbing shoes or boots (which provide increased traction), clawlike devices (such as the *ashiko* and *shuko* used by ninja), pitons (climbing pegs), nylon webbing, crampons (boot spikes), carabiners (climbing rings for sliding rope through), climbing rigs and harnesses, belaying devices (used to hold a rope to stop a falling climber), protection devices (metal wedges, chocks, or spring-loaded camming devices wedged into crevices to offer additional support to the climber), ascending/descending devices, and so forth.

Unlike most Skills, Climbing does not suffer a penalty for using bad equipment — since "free climbing" is assumed, any equipment can help (or at least not hurt). However, the drawback to using equipment of poor quality is this: if a Climbing roll is failed, the odds of a fall are much greater (see "Consequences Of Failure," below).

Most use of equipment does not require a roll. However, rappeling (also called abseiling) — the rapid descent of a surface by use of a rope — requires not only the use of equipment (a harness, rope, and anchor point for the rope), but a Skill Roll. Basic rappeling, which involves descending horizontally with the climber's feet towards the climbing surface, requires a Climbing roll at -0. This allows the character to descend at the rate of 10" per Phase; if the character wishes to descend more quickly than that, impose a modifier of -1 to the roll for every additional 2" descended. Australian rappeling, in which the character descends rapidly face-first with a quick reversal at the bottom to land on one's feet (used by Australian commandos to exit helicopters quickly, hence the name), requires a roll at -4. A character can descend up to 10" without penalty while Australian rappeling, -1 per additional 2". Basic and Advanced Equipment modifiers

CLIMBING MODIFIERS TABLE

Incline Of Surface	Modifier*	Example
45-60 degree incline	-0	Steep hill, average mountainside
61-75 degree incline	-1	Steep mountainside
76-90 degree incline	-2	Tree, building, very steep mountainside
91-105 degree incline	-4	
106-120 degree incline	-6	
121 or greater degree incline	-6 -8, if climbable at all	

Slipperiness Of Surface		
Slippery surface	-2	Wet rocks
Very slippery surface	-4	Ice-covered rocks
Extremely slippery surface	-6	Glass skyscraper wall
Incredibly slippery surface	-8	Wet or icy glass skyscraper wall

Handholds		
Numerous handholds	+4	Tree with lots of branches
Many handholds	+2	
Average handholds	-0	Tree with a few branches
Few handholds	-2	
No/Almost no handholds	-4	Flagpole

Equipment	Modifier	Example/Notes
None ("free climbing") or worse than Basic equipment	-0	
Basic equipment	+3	Rope, grapnel
Advanced equipment	+6	Rope, carabiners, belaying rings, and so forth
Very Advanced equipment	+12	Advanced climbing rigs, ropes, and so forth
Climbing footwear	+1	Cumulative with most other equipment bonuses
Climbing claws	+1	*Ashiko, shuko,* crampons; foot-worn claws (shuko, crampons) are not cumulative with Climbing Footwear bonuses

Use Of Equipment	Modifier
Basic rappeling	-0 for up to 10" descended, -1/+2"
Australian rappeling	-4 for up to 6" descended, -1/+2"

*: Modifiers are cumulative, but in most cases the GM should cap them at -10, the equivalent of an Extraordinary Skill Roll.

do not apply to Climbing rolls to rappel, since rappeling assumes the use of some equipment; Very Advanced Equipment will add +2 to the roll.

Powers And Climbing

Many Movement Powers, such as Flight and Teleportation, often render Climbing unnecessary. Similarly, Clinging allows characters to ascend sheer walls without having to worry about handholds or ropes; characters may buy Clinging with *Requires A Climbing Roll* (-½) and *Cannot Resist Knockback* (-¼) to represent a "super-Skill" at climbing.

CLIMBING AND COMBAT

While climbing, a character is at half OCV and DCV if he has any freedom of movement (for example, while climbing a tree which he can hold onto with his legs, leaving his arms/upper body free to move), and 0 OCV and DCV if he has no freedom of movement (for example, while scaling a sheer cliff barehanded).

A character who fights while involved in an easy climb (such as up a ladder) suffers a -1 DCV. Character involved in more strenuous climbs suffer the higher OCVand DCV penalties described above. Additionally, a character involved in a strenuous climb must subtract 2 DCs from all attacks he makes, and may not be able to use some Combat or Martial Maneuvers (for example, it's hard to kick when a character needs to keep both his feet firmly planted on a ledge, and hard to punch if he's holding onto a rope).

If a character is involved in a fight and is knocked off a ledge due to Knockback or the like, with the GM's permission he may make a DEX Roll to grab onto the ledge, a rope, or something else so that he's hanging on and doesn't fall. (The GM might not allow this if, for example, the character takes so much Knockback that he'd have no real chance to grab onto the ledge.) He may then, as a Full Phase Action, make a STR Roll or Climbing roll (GM's choice) to pull himself back up on top of the ledge (but of course, his opponent may not let him try to climb back up unhindered...). While holding on for dear life and pulling himself back up on top of the ledge, a character is at½ OCV,½ DCV.

CONSEQUENCES OF FAILURE

In most cases, a failed Climbing roll indicates that the climber has reached an impasse — due to lack of handholds or some other reason, he cannot climb any higher. If it is possible to do so, he may make a Climbing roll at +2 to descend the surface, and then another Climbing roll to find another route up the surface (the GM may impose negative modifiers on this roll if the alternate route would be particularly hard to find, or may rule that it cannot be made at all because there is no other route).

However, in some situations, particularly those where the character fails the roll badly (typically by 4 or more in most situations, or 3 or more in situations with especially difficult surfaces or where poor-quality equipment is being used, but GM's discretion always prevails), he will fall. If the character is using climbing equipment, that equipment will probably prevent him from falling very far, and thus from taking any damage. However, the GM may require an additional, unmodified, roll to

determine whether the character set up his equipment correctly; if this roll is failed, the equipment breaks, separates from the surface, comes apart, or otherwise does not work properly, and the character falls. In the event of a fall, Breakfall may be used to stop the fall partway down (if this is possible, in the GM's discretion) or to reduce the damage taken from the fall. Refer to *Breakfall* on page 51 and the *HERO System 5ᵗʰ Edition, Revised*, pages 434-37, for more information on falling damage.

BASE TIMES

Characters can climb most surfaces at the rate of 1" per Phase. The GM may alter this rate of movement at his discretion, or perhaps provide an inch or two "bonus" in a Phase when the character makes his roll by half or more.

CLIMBING BY GENRE

Cyberpunk/Near Future

In the near future, all types of equipment listed above are available, and even more advanced equipment may make climbing even easier and safer.

Dark Champions

All types of equipment are available.

Fantasy

In this genre, only Basic climbing equipment is available — ropes, grapnels, and the like. Advanced and Very Advanced equipment, such as climbing harnesses, is not available. However, in Oriental fantasy games, or games which take place in especially advanced fantasy societies, additional tools such as climbing claws or collapsible ladders may be used; see *The Ultimate Martial Artist*, pages 97-89, 209, 219.

In many Fantasy settings, magic may turn climbing into an easy task. Enchanted ropes and Spells of Spider Climbing make ascending even the sheerest rock face simple.

Martial Arts

All types of equipment are available if the game takes place in a modern-day setting; in fantasy/historical settings, refer to *Fantasy*, above.

Pulp

Advanced climbing equipment is available in this genre, but not Very Advanced equipment.

Science Fiction

In this genre, climbing equipment may be rendered unnecessary (except for recreational purposes) by the advent of personal anti-gravity packs and similar devices. Climbing equipment as advanced as Cyberpunk/Near Future will still be available for those who want it, though.

Superheroes

All types of equipment are available, and super-technology may even create better types of equipment than are available in the real world (such as "cling-grips" that make climbing skyscraper walls easy).

Western/Victorian

In this genre, only Basic climbing equipment is available — ropes, grapnels, and the like. Advanced and Very Advanced equipment, such as climbing harnesses, is not available.
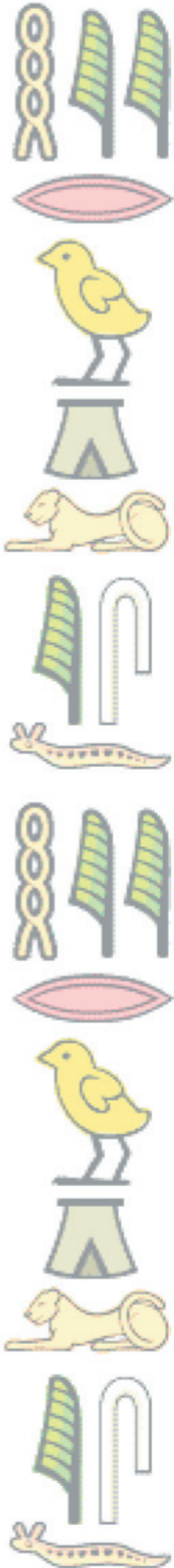
HEROGLYPHS 22

SCRAMBLED!

ENCRYPTED COMMUNICATIONS IN THE *HERO SYSTEM*

I've been working on *Dark Champions* a lot recently, and naturally that's turned my mind to thinking about various subjects pertaining to modern-day action-adventure. One of those subjects is encrypted communications — ways for two (or more) characters to communicate without others being able to overhear (and/or understand) what they're transmitting.

Using the *HERO System* rules, there are at least five ways I can think of to represent encrypting and decrypting transmissions:

CONCEALED

The first is to apply the *Concealed* Sense Modifier to the Sense doing the transmitting. In this case the special effect of the Sense Modifier could be one of two things: either "transmission cannot be detected" (which is what Concealed is normally used for); or "even if detected, the transmission cannot be understood." The end result is the same — the enemy doesn't have a transmission he can comprehend (though in the second case he might have one he can triangulate on). Decrypting this sort of encryption requires decoding equipment built with an Enhanced Sense that can "perceive" through the encryption. If a character buys a set of radios (or the like) which all have Concealed, it's safe to assume each of them can understand (decrypt) the transmissions of the others — the encryption/decryption process is programmed or hardwired into the devices.

Encrypted Radio Handsets: *Radio Perception/ Transmission (Radio Group), Concealed (-5 to Radio Group PER Rolls), Usable Simultaneously (up to eight persons at once; +1) (30 Active Points); OAF (-1). Total cost: 15 points.*

Improved Encrypted Radio Handsets: *Radio Perception/Transmission (Radio Group), Concealed (-10 to Radio Group PER Rolls), Usable Simultaneously (up to eight persons at once; +1) (40 Active Points); OAF (-1). Total cost: 20 points.*

Alternately, instead of relying on the fallible (but more "realistic") Concealed, characters can buy Invisible Power Effects (invisible to tracing) for their radios. That way, no matter how good a Systems Operation roll an enemy makes, he can't perceive the transmission (he may not receive it at all, or at best it sounds like meaningless static).

Ultimate Encrypted Radio Handsets: *Radio Perception/Transmission (Radio Group), Invisible To Tracing (+¼), Usable Simultaneously (up to eight persons at once; +1) (22 Active Points); OAF (-1). Total cost: 11 points.*

LANGUAGE VARIABLE POWER POOL

Page 118 of *Champions* describes another way to scramble transmissions: a Variable Power Pool for Languages. Only a person with another radio device, programmed with the same "language," can understand what's being sent. This method requires the GM's permission, since Skills are Special Powers, and therefore cannot be bought in Power Frameworks without the GM's approval — but since this is an intriguing, fun, and not especially abusive construct, most GMs will probably allow it.

To encrypt a transmission, the characters simply agree on which Language their radios will use. They don't necessarily have to be real languages; the characters can simply call them Language A, Language B, and so on. Identifying the language precisely doesn't matter; the Languages are just a way to represent the special effect of "encrypted communications" in *HERO System* terms.

The Language VPP method is cheap and easy, but it has some drawbacks. A successful Cryptography roll can decrypt a scrambler "language," but the users can counter the cryptographer by changing the computer-generated "language" at frequent intervals. This constitutes changing the Pool and requires 1 Minute. To change the Pool in just a Full Phase, the character must buy a Skill to do so, though GMs should consider allowing characters to use ordinary Cryptography or Systems Operation instead of making them buy a separate Skill.

Radio Handset with Scrambled Transmission Option: *Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1) (total cost: 5 points)* **plus** *Variable Power Pool (Scrambler Pool), 4 base + 2 control cost; OAF (-1), Only For One Language At A Time (-1) (total cost: 5 points). Total cost: 10 points.*

BATTLE CODES

Another way for characters to keep their communications secret is to develop their own unique language — a "battle code," if you will. When used with an encryption system, a unique language (or a very rare real-world one, such as Navajo) provides a double layer of security. However, it is vulnerable to characters or equipment built with the *Universal Translator* Talent.

This sort of scrambling is also vulnerable to certain types of decryption equipment. In game terms, you can represent that equipment with Universal Translator that Requires A Systems Operation Roll.

MIND LINK

Another way to create a closed, untappable communications system is Mind Link. The character defines the number of radios he has, and that tells him how many people he can communicate with at once. (Alternately, he can buy Mind Link to Link with one other person who has bought the same power.) For true privacy/encryption, leave the Mind Link as a Mental Power, meaning that only other characters with appropriate Mental Powers, or decryption devices built with those Mental Powers, can penetrate the communications net. But more realistically, characters should apply the Limitation Affected As Radio And Hearing Groups, Not Mental Group (-½) — that way things like Darkness to the Radio Group can block their transmissions.

> **Closed Radio Link (Type 1):** *Mind Link, specific group of up to any 8 minds, No LOS Needed (35 Active Points); OAF (-1), Affected As Radio And Hearing Groups, Not Mental Group (-½). Total cost: 14 points.*

> **Closed Radio Link (Type 2):** *Mind Link, any one mind, No LOS Needed (25 Active Points); OAF (-1), Only Can Be Maintained With Others Who Have Mind Link (-1), Affected As Radio And Hearing Groups, Not Mental Group (-½). Total cost: 7 points.*

CRYPTOGRAPHY

The fourth method is to give the radio equipment its own Cryptography Skill to represent its ability to encrypt its transmissions (and to decrypt those it receives, though as long as two users agree on the form of encryption the decryption will be automatic). Decrypting this sort of encryption requires decoding equipment built with its own Cryptography Skill to crack the code in a Skill Versus Skill Contest.

> **Radio Handset with Encryption System:** *Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1) (total cost: 5 points)* **plus** *Cryptography 20- (25 Active Points); OAF (-1), Only To Encrypt/Decrypt Its Own Transmissions (-1) (total cost: 8 points). Total cost: 13 points.*

SYSTEMS OPERATION

Similarly, a radio could be built with its own Systems Operation Skill. The character trying to send an encrypted transmission makes a Systems Operation roll to reflect his ability to hide/encrypt the transmission; a character trying to intercept the transmission makes a competing roll to locate/decrypt it. In either case, Computer Programming, Cryptography, and/or Electronics may act as Complementary Skills.

> **Radio Handset with Encryption System:** *Radio Perception/Transmission (Radio Group) (10 Active Points); OAF (-1) (total cost: 5 points)* **plus** *Systems Operation 20- (25 Active Points); OAF (-1), Only To Encrypt/Decrypt Its Own Transmissions (-1) (total cost: 8 points). Total cost: 13 points.*

THE RANGE OF TRANSMIT

Usually it's not necessary to establish an exact range over which a Sense with the *Transmit* Sense Modifier can "broadcast" — the GM can simply establish ranges for Transmit on a case-by-case basis, depending on special effects, the technology used in the campaign, common sense, and dramatic sense. In situations where knowing the exact range is important, GMs can use one of two methods.

For strict precision, give any Sense with Transmit a broadcast range of 1 kilometer per Active Point. To increase this range, apply the *MegaScale* Advantage, with the +¼ level increasing it to 10 km per Active Point, and so on up the MegaScale Table from there. Characters may need to apply MegaScale as a naked Advantage, or put Senses in a Multipower (one slot MegaScaled, one not), to create both short-range and long-range communications systems.

For more "dramatic" results, assume a transmission can reach anywhere within an area defined by the GM (one city, one nation, one planet, one solar system, or the like). For each +5 Character Points, the character can increase the range of transmission by one step down the MegaScale Table.

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LOOKIN' GOOD

ADVANCED RULES FOR COMELINESS

Of all the Characteristics, Comeliness (COM) sees the least use, since it has little game effect (aside from possibly modifying some Interaction Skill rolls on occasion). It's more of a roleplaying or character definition sort of thing than a Characteristic with a specific game benefit. As a way of giving COM a little more play in the game, here are some alternate rules that involve more precisely defining where a character's "good looks" come from.

CATEGORIES OF COMELINESS

For purposes of these rules, Comeliness derives from three sources:

Attractiveness: Physical good looks, including such things as a pretty face, a nice figure, excellent hair or smile, and so forth.

Magnetism: A character's "social Comeliness" — his ability to arouse interest (of various sorts) in other persons, primarily persons of opposite sex. In some ways this represents personality, but in other ways the sort of intangible quality that some people seem to have of attracting another person's attention based on their desireable/attractive qualities.

Vocals: Comeliness of voice — the fine tones, timbre, and pitch of the character's speech.

BONUSES FROM COMELINESS

A character's COM may improve his chances of performing certain Interaction Skills, based on what he defines his COM as representing.

As a default, a character's COM is a blend of Attractiveness, Magnetism, and Vocals. His COM doesn't stress any one area over another, it derives from all of these qualities mixed together. He receives no bonuses on Interaction Skills (unless the GM assigns some on a case-by-case basis), but suffers no penalties.

However, a character may choose to emphasize one or two areas over others. This could represent a character with beautiful physical features but a neutral voice, one who speaks and carries himself well but has only average looks, and so on. Emphasizing one or two sources of COM grants a character bonuses on certain Skills, but possibly penalties on others. For every 2 points of COM (costing 1 Character Point), the character may assign a +1 bonus to one of the Skills indicated below:

- Attractiveness: Conversation, Seduction, Trading
- Magnetism: Bribery, Conversation, Seduction
- Vocals: Oratory, Persuasion, PS: Singing

A character may not assign more than +3 worth of bonuses to any one Skill on the basis of COM (regardless of how many categories the bonuses come from). These bonuses are assumed to apply to any roll of the Skill, but the GM may forbid their use in situations where the relevant aspect of COM would have no significant affect. (The GM may add Skills to the list as he sees fit.) With the GM's permission, a character may apply a COM-derived bonus to an Everyman Skill.

Example: *Howler has COM 18. That gives her a total of +4 worth of bonuses she can assign to Skills based on COM. The GM decides that some of her COM comes from the beauty of her voice (Vocals), but some from the beauty of her body (Attractiveness). He assigns +1 to Persuasion and +1 to PS: Singing (both from Vocals) and +2 to Conversation (from Attractiveness; this adds to her Everyman 8- with that Skill).*

If appropriate, the GM may allow a character to buy extra COM only to obtain COM-derived bonuses for one Skill in one category, for a -1 Limitation. This is sometimes known as a "highlight" or a "best feature."

Penalties From Comeliness

A player may also decide that his character is *less* comely in some ways than others. The beautiful woman with an annoyingly nasal voice or piggish laugh is a staple of sitcoms, and some people display great Magnetism despite the fact that their looks aren't particularly noteworthy. A character may choose to assign a -1 penalty to any of the Skills listed for one of the categories of COM. He can only do this if he has not assigned any bonuses to a Skill based on that category of COM. He may assign no more than -3 worth of penalties for each category of COM. For each -1 assigned, he can add a +1 bonus for any of the Skills in another category (but still cannot exceed +3 for any one Skill on the basis of COM). A character may not take a penalty to one Skill for one category, and a bonus for that same Skill from another category.

> **Example:** *Dave is creating a female NPC. He decides that while she's not particularly good-looking, she's got a certain personal attraction that draws peoples' interest. He gives her COM 12, and assigns the +1 bonus from spending a point on COM to Seduction from the Magnetism category. However, he decides she'll also take a -1 to Trading based on lack of Attractiveness. He assigns that 1-point modifier to Seduction from Magnetism as well, for a total of +2 to Seduction.*

PS: Style

Sometimes characters can enhance their physical good looks by how they dress, style their hair, carry themselves, and so forth. The Professional Skill *Style* represents this. In appropriate circumstances, the GM can have the character make a Style roll. For every 2 points by which the character makes his roll, he adds +1 to his COM only for purposes of calculating Attractiveness bonuses. He must declare to what Skill he'll assign the bonuses before he makes the roll, and can gain no more than +2 worth of bonuses this way (and these bonuses only last for a limited time, based on the GM's evaluation of the situation). With the GM's permission, the character can exceed the normal limit of +3 for any one Skill from COM by means of Style.

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MOVIN' OUT

SOME OPTIONS FOR MOVEMENT POWERS

I've had a few ideas here and there about Movement Powers recently, so I thought I'd combine them into one column — call it a "Movement Powers grab-bag." Some of them have been inspired by questions I've received on the Hero message boards, so special thanks to the fans out there who've given me something to think about. ;)

METERS INSTEAD OF HEXES

To create greater "granularity" and precision for movement within the game, consider changing Movement Powers from being defined by hexes to being defined by meters. Thus, instead of buying Flight 15" or Running 9", a character would buy Flight 30m and Running 18m. Here's what the various Movement Powers cost using this system:

Power	Cost Per 1 Meter Of Movement
Extra-Dimensional Movement	N/A
FTL Travel	N/A
Gliding	½ Character Point
Flight	1 Character Point
Leaping	½ Character Point
Running	1 Character Point
Swimming	½ Character Point
Swinging	½ Character Point
Teleportation	1 Character Point
Tunneling	1 Character Point per 1m Tunneling through 1 DEF material; increase the character's velocity for +1 Character Point per each +1m; increase the DEF Tunneled through for +3 Character Points per each +1 DEF

If you switched to this system, you might also consider changing other Powers to work on a meters basis instead of via hexes. For example, maybe Darkness to Sight Group would cost +5 Character Points for each +1 meter radius; Area Of Effect (Radius) gives a power a radius of 2 meters per 10 Active Points for a +1 Advantage. Change Environment, Images, and Explosion could all use meters as well.

ALTERABLE MODES OF MOVEMENT

There's a +¼ Advantage for Flight called *Usable Underwater* that effectively allows Flight to function like Swimming. With the GM's permission, a character can take that same Advantage, renamed *Usable As [Second Mode Of Movement]*, for any other Movement Power. In that case the character has the same number of inches in the secondary mode of movement as he does with the primary mode of movement, regardless of their relative Character Point costs, whether one adds to the character's base movement and the other doesn't, or the like. (In the case of Movement Powers not measured in inches, such as FTL Travel, use the Character Points spent on the base primary Movement Power to determine the speed or effect in the secondary mode of movement.) Changing from one mode of movement to another is a Zero-Phase Action, but a character can only do it once per Phase.

The GM can forbid any particular use of this Advantage that seems unbalancing or inappropriate. The GM can also allow a character to buy this Advantage multiple times for the same Movement Power, allowing it to function as three, four, or more modes of movement.

Here are some examples:

Broad Wings: The character has large wings. Normally he uses them to fly, but when he's tired he can simply glide.

Flight 15", Usable As Gliding (+¼) (37 Active Points); Restrainable (-½). Total cost: 25 points.

Ice Slides: The character can create narrow sheets of ice in front of himself on which he can "skate" at high speeds. Normally he just uses the slides to move along the ground, but if he starts above ground level, he can slide downward, provided he has a nearby solid surface (the ground itself, the side of a building, a large tree, or the like) to which he can anchor the slide. As the character "skates" downward, he can occasionally create a small "mogul" to give himself a little bit more altitude. Unfortunately, this power leaves large chunks of ice lying around after the character passes through the area, which may pose various hazards until they melt.

Running +9", Usable As Gliding (+¼) (25 Active Points [includes the cost of putting the Advantage on the character's base Running]); Physical Manifestation (-¼), Side Effects (leaves big chunks of ice around the environment; -0). Total cost: 20 points.
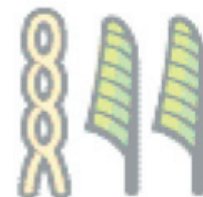
Spaceflight: The character can fly both in atmospheres at standard speeds, and in the icy depths of space at faster than the speed of light.

Flight 15", Usable As FTL Travel (up to 1,000 LY/year; +¼). Total cost: 37 points.

CHANGING MOVEMENT SKILL LEVELS

In some campaigns, GMs may find that Movement Skill Levels (*HERO System 5ᵗʰ Edition, Revised*, page 369) are too useful. They not only improve a character's Turn Mode, they can also sometimes improve his DCV while he's moving, help him to accelerate and decelerate, and so on. That's a lot of utility for 2 Character Points per Level! If this is causing problems in the campaign, the GM should increase the price of "MSLs" — at least to 3 Character Points per Level, and possibly 5, for Levels that only apply to one type of movement, and at least to 5 Character Points for Levels that apply to all modes of movement.

Alternately, the GM could change the cost of Movement Skill Levels for a single Movement Power based on the Power they apply to, since they're more useful for some Movement Powers than others. Here's a list of suggested costs:

Power	Cost Per 1 Movement Skill Level
Extra-Dimensional Movement	N/A
FTL Travel	N/A
Gliding	3 Character Points
Flight	3 Character Points
Leaping	2 Character Points
Running	2 Character Points
Swimming	2 Character Points
Swinging	2 Character Points
Teleportation	2 Character Points
Tunneling	1 Character Point

FIXED LOCATIONS

Under the standard rules, characters cannot buy Fixed or Floating Fixed Locations for any Movement Power other than Teleportation. However, the GM might want to consider allowing this in some circumstances. For instance, characters might want to buy a Location for:

—Leaping (particularly MegaLeaping) to ensure they can always hit the Location without having to make an Attack Roll to land in the correct "hex."

—MegaRunning or MegaFlight, so they can run/fly to the exact spot they want and stop right there.

—Extra-Dimensional Movement powers that allow travel to multiple locations within one or more dimensions, to ensure they can always reach a particular location in a particular dimension without any worries or effort.

LINKED POWERS

Characters sometimes want to Link a power to a Movement Power. Usually this is a Defense Power or the like, but sometimes they want it to be an attack, such as an Explosion (a "sonic boom" they create when they move), or an HKA (defined as "running past someone and slashing him with my claws/sword/whatever"). In this case, the character can define the Linked attack as occuring wherever he wants to along his movement path, provided the GM doesn't object — but he has to choose where it occurs when he buys the power, and can't alter it thereafter. Some possibilities include at the beginning of his movement path, at the end of his movement path, and in the middle of his movement path. If he wants the power to take effect all along the path of his movement (such as a sword slash, where he can attack everyone he runs past), he should buy that attack as an Area Of Effect (Line) with a length equal to his maximum Combat Movement.

A character can use a Power that's Linked to a Movement Power when he makes a Half Move, but pursuant to the standard proportionality rules governing Linked (*HERO System 5ᵗʰ Edition, Revised*, page 299), can only use it at half effect.
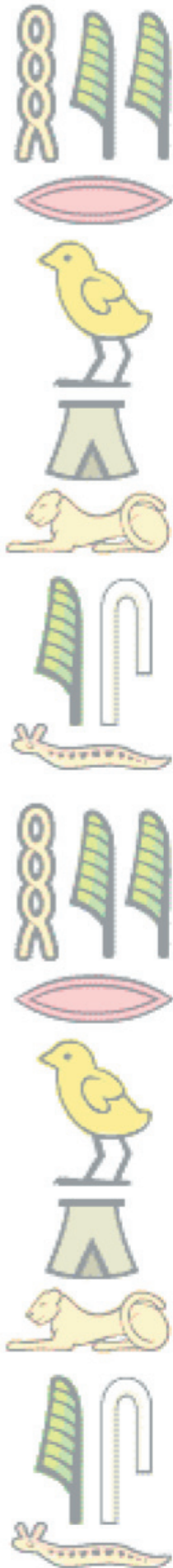
HEROGLYPHS 25

HANDI-CAPABLE

EXPANDING PHYSICAL LIMITATION

One of the areas of the HERO System that I think needs a little expansion is the Physical Limitation Disadvantage. As it stands, it offers relatively few "pigeonholes" into which gamers can place the enormous variety of physical and mental disabilities characters can suffer from. Just for fun, let's see what an expanded version of Physical Limitation might look like.

PHYSICAL LIMITATION (EXPANDED)

Value	Limitation Occurs
5	**Infrequently:** The Physical Limitation affects the character at least once every five or so game sessions
10	Frequently: The Physical Limitation affects the character at least once every three or four game sessions
15	**Very Frequently:** The Physical Limitation affects the character at least once every other game session
20	All The Time: The Physical Limitation affects the character every single game session

Value	Limitation Impairs
+0	Barely: Even when it affects the character during game play, the Physical Limitation rarely has a significant impact on his ability to function effectively
+5	**Slightly:** The Physical Limitation tends to impair the character's ability to function effectively by 25-50% when it affects him
+10	**Greatly:** The Physical Limitation tends to impair the character's ability to function effectively by 33-75% when it affects him
+15	**Fully:** The Physical Limitation tends to impair the character's ability to function effectively by 76-100% when it affects him

The GM may, in his discretion, adjust the value of a Physical Limitation up or down to reflect campaign circumstances or the true degree of a character's impairment.

FREQUENCY

With this version of Physical Limitation, as with the standard version, the most important issue is the Disadvantage's "frequency" — that is, how often it tends to become a factor in game play. A Physical Limitation "affects" a character when it has a measurable effect on his ability to function during the game. Obviously many physical conditions, such as lameness or lack of a particular sense, affect a character "all the time." The issue for game purposes is how often the handicap arises in game play as something that hinders the character. The mere fact that the condition exists doesn't entitle the character to any Disadvantage points — he gets the points because his condition restricts his ability to act and function in important game situations.

DEGREE OF IMPAIRMENT

The second consideration when valuing a Physical Limitation is how greatly the handicap impairs the character's ability to function when it becomes a factor in the game. Some Physical Limitations barely hinder the character at all, while others cripple him to the point of utter ineffectiveness. The GM should be wary of Physical Limitations that have both a high frequency and a high degree of impairment — given how they can hinder a character and interfere with game play, allowing them into the game may not be worthwhile.
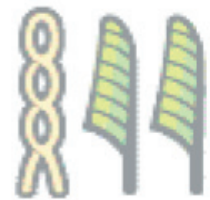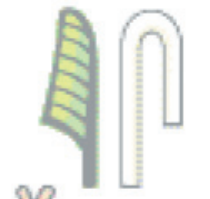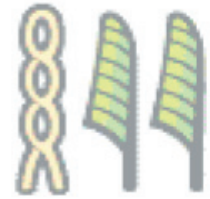
Examples

Using the Expanded Physical Limitation table, here's how I'd build some of the example Physical Limitations provided in various HERO System books:

SENSORY PHYSICAL LIMITATIONS

Lack of, or a reduced degree of, a Sense or Sense Group is a common Physical Limitation in many genres.
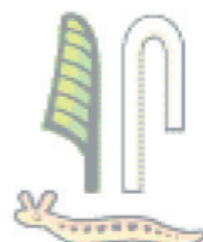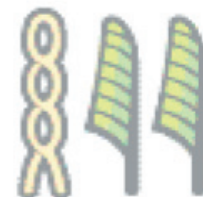
Value Description

35 *Blindness:* character has no Sight Group Senses (All The Time, Fully Impairing)

25 *Deafness:* character has no Hearing Group Senses (Very Frequently, Greatly Impairing)

10 *No Chemoreception:* character has no Smell/Taste Group Senses (Infrequently, Slightly Impairing)

5 *Numbness I:* character has no Touch Group Senses (no defined game effect) (Infrequently, Barely Impairing)

25 *Numbness II:* character has no Touch Group Senses (suffers a -3 or greater penalty on Skill and Characteristic Rolls that involve handling or grasping physical objects, including many Attack rolls) (Very Frequently, Greatly Impairing)

Other Sensory Restrictions

10 *Heavy Sleeper:* character suffers additional -3 penalty to Hearing PER Rolls to perceive intruders and wake up (Infrequently, Slightly Impairing)

20 *Missing One Eye:* character lacks depth perception (he is ½ OCV with all Ranged Attacks) and has no peripheral vision on one side (Frequently, Greatly Limiting)

5 *No Mental Awareness:* character has Mental Powers but no Mental Awareness (Infrequently, Slightly Limiting [restricted to 5 Character Points because that's all it costs to buy Mental Awareness])

SIZE/WEIGHT PHYSICAL LIMITATION

In many genres, it's possible that characters could be permanently larger or smaller than human normal, which can cause problems.

Value Description

30 *Insectile:* character is down to 1/64 human size and/or mass (.032m, or .016") or smaller, and suffers +18" Knockback from attacks (All The Time, Greatly Impairing)

25 *Minute:* character is down to 1/32 human size and/or mass (.064m, or .032"), and suffers +15" Knockback from attacks (All The Time, Slightly Impairing)

20 *Minuscule:* character is down to 1/16 human size and/or mass (.125m, or .064"), and suffers +12" Knockback from attacks (Very Frequently, Slightly Impairing)

15 *Tiny:* character is down to 1/8 human size and/or mass (.25m, or .125"), and suffers +6" Knockback from attacks (Frequently, Slightly Impairing)

10 *Diminutive:* character is down to one-quarter human size and/or mass (.5m, or ¼"), and suffers +6" Knockback from attacks (Infrequently, Slightly Impairing)

5 *Small:* character is down to half human size and/or mass (1m, or ½"), and suffers +3" Knockback from attacks (Infrequently, Barely Impairing)

0 Human size and/or mass (no Limitation)

10 *Large:* character is up to twice human size and/or mass (4m, or 2"), and is -2 DCV and +2 to PER Rolls to perceive him (Infrequently, Slightly Impairing)

15 Enormous: character is up to four times human size and/or mass (8m, or 2.1-4"), and is -4 DCV and +4 to PER Rolls to perceive him (Frequently, Slightly Impairing)

20 *Huge:* character is up to eight times human size and/or mass (16m, or 4.1-8"), and is -6 DCV and +6 to PER Rolls to perceive him (Very Frequently, Slightly Impairing)

20 *Gigantic:* character is up to 16 times human size and/or mass (32m, or 8.1-16"), and is -8 DCV and +8 to PER Rolls to perceive him (Very Frequently, Slightly Impairing)

25 *Gargantuan:* character is up to 32 times human size and/or mass (64m, or 16.1-32"), and is -10 DCV and +10 to PER Rolls to perceive him (All The Time, Slightly Impairing)

30 *Colossal:* character is up to 64 times human size and/or mass (128 m, or 32.1-64") or larger, and is -12 DCV and +12 to PER Rolls to perceive him (All The Time, Greatly Impairing)

OTHER PHYSICAL LIMITATIONS

Here are a few miscellaneous Physical Limitations

Value Description

35 *No Hands* (All The Time, Fully Impairing)

25 *No Knowledge Of Earth Culture* (Very Frequently, Greatly Impairing)

25 *Unable To Walk:* character must also sell back his Running 6" (Very Frequently, Greatly Impairing)