FUDGE FACTOR & OTHER FUDGE ARTICLES

Taking All (*Fudge*) Factors Into Account
Monday, July 25, 2005

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This addition to the Action Resolution section of the ***Fudge*** rulebook offers some ideas on taking a variety of different factors into account when determining the outcome of any given action. It also provides a common framework and vocabulary for describing ***Fudge*** actions in simple and straightforward terms.

3.31 Action Factors

A number of things factor into determining the outcome of any given action. By applying all the appropriate factors for a given action, you can quickly determine the outcome of the character's attempt. You can quickly and easily determine results, often without needing to roll dice!

The factors involved in any given action are: the character's capability of performing that action, the conditions under which the action is performed, the amount of time and effort put into the action, and, lastly, a measure of luck.

Capability

A character's capability is key to any action and is represented by the character's level in the trait relevant to the action. All other factors being equal, characters can *reliably* achieve an outcome equal to their capability in any given action: a Good swordsman usually achieves Good outcomes, a Great writer can reliably produce Great writing, and so forth. If capability is not a factor, then the action isn't really an action, just a random happenstance, left up to the whims of chance (either a die roll or the decisions of the gamemaster).

Option: Combined Capability: While one trait usually determines a character's capability for any given action, the GM may choose to have two or more traits measure a character's overall capability. In this case, use the lowest of all the required traits, as a chain is only as strong as its weakest link. A complex scientific problem requiring skill in Mathematics, Physics, and Chemistry uses the lowest of the character's three skill levels to determine his capability.
Option: Supporting Traits: A supporting trait is a secondary trait that contributes in some way to the success of an action. This secondary trait can belong to the character performing the action or someone else providing assistance. Providing support is a Good action in itself, so the character must have some capability or success with the supporting trait for it to be of any help.

Verne is at the library, researching an obscure South American Indian ritual. He uses his Research skill of Good, but he also has a Good Anthropology skill. The GM decides it is a suitable supporting trait and gives Verne a +1 modifier to Research for this action because he's researching a familiar area.

Support differs from combined capability in that the supporting trait is not required to complete the action, it's just helpful in doing so. In the example, if Verne were not Good at Anthropology, he could still research the obscure ritual, because he's Good at Research. Being Good at Anthropology just makes his research more effective.
Option: Hindering Traits: A hindering trait is the opposite of a supporting trait, a trait so bad it makes related traits less effective! Essentially, if a character has a Terrible trait, then actions related to, but not directly using, that trait suffer a -1 penalty.

If Verne is Good at Research but Terrible at Anthropology and researching an obscure South American ritual, the Game Master can apply a -1 modifier, meaning Verne is only Fair at researching things related to anthropology, because he's so bad at understanding it.

Conditions

Conditions can make characters more or less effective in performing an action. For example, a character who is Hurt suffers a -1 modifier to all actions. A character with exceptionally fine tools or resources for an action may receive a +1 modifier, and so forth. As a general rule, makeshift or difficult conditions impose a -1 modifier, while good conditions grant a +1 bonus. Very bad conditions are -2, while ideal conditions are +2.

Time

Time can be an important factor in completing an action in two different ways. The first is taking time to prepare *before* attempting an action, and the second is actually taking more time to *perform* the action itself. Which one applies depends on the type of action. Generally, taking about twice the normal time required is a +1 modifier, while taking ten times the normal amount (a painstaking effort) is at +2. Taking more time than that doesn't significantly affect the outcome. Conversely, not having enough time can adversely affect outcome: rushing an action is a -1 modifier, while extremely rushed or slap-dash efforts impose a -2 modifier.

Effort

Effort is how hard the character tries to succeed, other than putting in extra time as describe previously. If how hard the character tries doesn't really matter, then effort isn't a factor.

Effort is measured against anything normally required for that action. So, if an action requires a certain minimum level of effort, putting in more effort provides a bonus, while putting in less effort imposes a penalty. This means more capable characters operating under good conditions can usually succeed with less effort, while less capable characters need more effort in order to succeed at all.

The measurement of effort depends on how fatigue is handled in the game. In general, putting additional effort into a task, enough for a +1 bonus, should cause an amount of fatigue equivalent to a Hurt damage level, the loss of a level in a trait like Endurance or Strength, or something similar. Likewise, similarly reducing the amount of effort should equal a -1 penalty.

Luck

Luck is the final factor in completing an action. If the character's final outcome after applying all the other factors isn't sufficient to achieve the desired effect, then all the character can do is rely on luck and hope for the best.

Luck is a roll of the dice, providing a modifier between -4 and +4. It is the biggest potential modifier, but also the least reliable, since there's no way of knowing if luck will favor you this time or not!

Luck is not a factor in some actions, such as lifting a heavy object or jumping across a span. For other actions, luck is practically the only factor! Optional in most actions, the GM can require a luck roll as she sees fit. In most cases, characters can choose to achieve an outcome based only on their other factors, primarily capability. This is the "slow and steady" approach: it's reliable, but it also doesn't innovate or give spectacular successes either (unless the character is so capable as to achieve Superb outcomes all the time).

Adding the luck factor to an action that doesn't require it is called "trying your luck." You're pushing things a bit and relying on luck to help you through. This offers the possibility of a greater outcome at the risk of a great failure.

Option: Luck is Mysterious: The trouble with luck is you can't rely on it, and you never know if the outcome was a lucky break or not. Whenever a player decides to try his luck at an action, the GM should roll the dice to determine the luck factor and not tell the player the result. The Game Master just adds the luck factor to the other factors and tells the player the final outcome, so it isn't immediately clear what was due to luck and where other conditions came into play.

3.32 Applying Factors

Not all factors apply equally to all actions. Some actions rely solely on time and effort, others on luck and the right conditions. Generally, an action can be described in terms of what factors apply to the outcome. For example: Understanding the scroll is a task of Great difficulty requiring knowledge, time, and luck. This can also be expressed in shorthand, such as: Decipher Scroll (Great Difficulty; capability, time, luck).

Here are some examples of applying action factors:

Weight-Lifting: Kor the Barbarian needs to lift a heavy iron portcullis. The GM decides it is a Legendary feat of Strength to do so without any real effort. Kor has Great Strength, so without some additional factors, he cannot succeed. The GM has also decided time and luck are not factors in this action; someone can either lift the portcullis or not, taking extra time won't make any difference, and a lucky break isn't going to help someone lift any better. Since the conditions are a +0 modifier, Kor's player needs to rely on effort to get the job done. Kor seizes the bottom of the gate and strains with all his might. One level of fatigue is enough for a Superb outcome, not quite enough; the iron gate moves slightly. Kor's player says he'll take two levels of fatigue, which pushes the outcome to Legendary. With a roar of triumph, Kor heaves the portcullis up and open.

Picking a Lock: Fast Eddie needs to pick a lock. Fast Eddie is actually Good at Lockpicking, and the GM has determined it requires about a minute and a Good outcome to pick this particular lock. That means, all other factors being equal, if Eddie has a minute, he can pick the lock. No roll (luck factor) required, he just does it.

Now, suppose Fast Eddie doesn't have a minute to pick the lock. He needs it open *now* and has to live up to his name. Eddie's player says he wants to pick the lock quickly. The GM decides that is a -1 time factor, lowering Eddie's outcome to only Fair, which won't be enough (or, in other words, picking the lock fast requires Great Lockpicking, which Eddie doesn't have). Eddie's player needs to come up with some positive factors if he's going to succeed. He asks the GM if Eddie can try harder, really concentrating on getting the lock open. She agrees and says Eddie can suffer a level of fatigue in exchange for a +1 modifier, which is enough to succeed.

Shooting: Robin is shooting a bow and is Fair at Archery. If she's merely target shooting, she achieves a Fair outcome. If she takes twice the normal time to aim, she gets a Good outcome (a +1 modifier). If she's shooting in the dark (poor conditions, a -1 modifier), the outcome is Mediocre. The GM decides Robin can put additional effort into a shot only if it is carefully aimed (taking extra time as well). She also decides that shooting in combat is always a situation where luck is a factor, since combats tend to be so chaotic. Note, however, this doesn't apply to an ambush where Robin has time to set up and carefully choose her shot.

What's My Motivation?
Monday, March 06, 2006

by Jonathan Wells (wells.jonathan @ gmail .com)

Many gamers aren't very good roleplayers. Most RPGs don't try to teach good roleplaying habits. Most new players just focus on the system, and play characters that fit that system, with personalities that enable an easy power grab. Everyone reading this has seen characters who are just a type of game-piece, to be steered towards power and fortune by a crafty player. At the extreme, this gives you an entire group playing sociopaths.

Motivation is a system to encourage & reward good roleplaying. Specifically, a melodramatic, soap-opera style of roleplaying. This system was designed for Stan Lee/Jack Kirby comic book style, and it does not encourage subtlety.

The idea of the system is simple: A character's personality is described by Motivations. By following his motivations in the face of hardship, the PC is rewarded with Fudge Points. This is more than just a generic extra-XP-for-good-roleplaying rule. The system tries to minimize GM judgment calls, making the rewards more reliable. Also, there are rules to avoid abusive, antisocial motivations. I don't believe in the "just playing my character" excuse.

Motivations are the elements of a character that will drive his personal story. They can come from within, like a moral value or a personality quirk, or they can be imposed from the outside, like having an enemy or being a target of bigotry.

The GM's Outlook

The PC's Motivations are a useful source of information to the GM. Figuring out a reason for the PCs to go adventuring together is a simple matter of finding compatible Motivations. A list of Motivations is essentially a list of plot hooks. More than that, Motivations determine what themes and issues the game will deal with. A Player's choice of motivation is a way of communicating what type of game he'd like play.

Player's Outlook

Choose one or more Motivations for your character. Choose them from the list below, or invent your own. Be sure to check your choices with the GM. She might set a minimum or maximum number of Motivations, or declare some choices restricted or obligatory.

Many of the Motivations in the list involve a relationship between your character and an NPC. It's up to the Player to detail this character. Usually a name and a profession will be enough.

Fishing for FPs

GMing is a big job. A GM can easily forget to hand out a Motivation reward. Players should feel free to speak up, but remember there's a line between a friendly reminder and blatant begging.

Awarding Fudge Points:

So when does a given action merit a reward? Naturally, the action must match one of the PC's Motivations. If it's not on the character sheet, there's no reward.

Unexceptional actions don't merit rewards. A PC motivated by Altruism shouldn't get a reward for every little old lady he helps across the street, and a PC motivated by Lust shouldn't get one for making a pass at a random NPC. The two yardsticks for a reward are Coolness and Grief.

Coolness

Does the PC's action make the game cooler? This is best determined by the opinion of the gaming group as a whole. If the weight of opinion holds that a player is derailing the game, hogging the spotlight, or being otherwise antisocial, there should never be a reward. On the other hand, if a player's action gets a round of applause, cheers, or high-fives around the gaming table, it's probably worthy of reward, even with little or no Grief. Most actions are somewhere in the middle, and are determined by Grief alone.

Grief

Does the PC's action make his life more complicated or difficult? A character's motivations are the things he's willing to struggle for, the burdens he must bear, and the tragic flaws that will lead him to trouble. A PC who only plays his motivations when there's no real risk or cost isn't trying hard enough.

Player-to-Player is extra Cool

In roleplaying, the best scenes are often played out between the PCs, rather than between a PC and the GM. GMs should be a bit more generous in these Player / Player scenes, especially if a Player takes the initiative in establishing the scene. If nothing else, it will make the GM's job easier.

Baiting your PCs

If Players aren't taking the initiative in making their Motivations part of the game, try dangling a carrot. Point out the opportunities. Let a PC know before he makes a decision that there is a Motivation reward involved. After a while Players will start looking on their own.

The Grief will come

Give a reward now or later? There are many cases where the Grief resulting from an action is delayed. A GM can either reward the player immediately, or when the Grief manifests. There are advantages and disadvantages to both.

The Big List:

- **Altruism** [aka Compassion, Charity]: The character is moved to help those who can't help themselves. The essential heroic motivation. Practically mandatory in some genres.
- **Ambition** [aka Power, Glory]: The character is driven to elevate herself in the world, to seek power and authority. A very traditional tragic flaw.
- **Anger**: The character seeks to vent his rage, either verbally or physically, and doesn't much care who the target is. This can cause all manner of Grief.
- **Authority** [aka Law-abiding, Law]: The character respects the will of authority figures, even if she personally disagrees. Like a good samurai, she will loyally serve a dishonorable master. (See Fidelity.)
- **Bond** (with who?): There is a person who the character feels very strongly about. (See also Family, Fidelity, Idol, & Love)
- **Cause** (what cause?): The character is part of a social or political movement, and seeks to advance its goals, discredit its enemies, and proselytize others into the cause.
- **Code** [aka Vow] (what code?): There is code of behavior that the character follows, from the code of chivalry to the code of piracy.
- **Discovery** [aka Curiosity]: The character seeks out new information, either in a scientific sense or simply snooping into the private lives of his friends.
- **Fame**: The character wants to be famous. Whether his reputation is good or bad doesn't matter as much as simply being known.
- **Faith** (what faith?): The character is devoutly religious. Faith can show itself in many forms, from acts of charity, to slaying infidels.
- **Family**: The character is loyal to his family, who pop up pretty frequently in the character's life.
- **Fidelity** [aka Duty] (to who?): The character has a master, lord, or boss, who he has sworn to serve.
- **Friendship**: The character deeply values his friends, and is wiling to make sacrifices for them. Conveniently, this works to hold the PCs together in a game. Like Altruism, this motivation is very common in heroic genera.
- **Greed**: The character seeks money and material things.
- **Hatred** (who?): The character hates a certain person, ideology, or class of people. This seems like the least heroic motivation, but many classic heroes have very personal grudges against their enemies. (eg: Hates criminals, Hates Nazis, Hates Dr. Evil, etc.)
- **Idol** (who?): The character idolizes a certain person, and struggles to be like his hero. Your idol might not appreciate your devotion, and might not live up to your idea of her.
- **Justice**: The character is driven to protect the innocent, and punish the guilty. This can get you caught up in all sorts of Grief.
- **Love** (who?): The character is in love. He seeks to be with and protect his love. The object of his affections may or may not return his affections. If not, the love-stricken PC will try to change this attitude.
- **Lust**: It's like love, but a lot less picky. The Grief potential is infinite. As is the potential amusement value to the other players.
- **Nemesis** (who?): Someone has a grudge against the character. The PC can try to avoid or confront the foe, but either way there will be Grief.
- **Peace**: The character values peace and seeks to avoid violence and conflict.
- **Pleasure**: The character is a total hedonist, seeking personal pleasure. The degree of Grief this can bring depends on the character's favorite indulgence.

- **Pride**: Like they say, it goes before a fall. The character seeks to prove himself, accepting challenges to prove his superiority.
- **Quest** (what goal?): There is a specific, tangible goal that the character is driven to achieve.
- **Rebellion**: The opposite of Authority. The character is instinctively suspicious of authority figures. Often he dislikes being in any team or organization that has a leader, unless he personally trusts the leader.
- **Rival** (who?): The character is in competition with someone else, either professionally or romantically.
- **Secret** (what and why?): The character has a secret to keep. There has to be a big reason why the character has the secret.
- **Stigmatized** (why?): The character is part of some minority group which is feared or distrusted greater society. Naturally, this is very much dependent on the campaign. Individual groups will have to decide who would be considered stigmatized in a given setting.
- **Truth**: The character's word is bond. The character will make every effort to keep his promises.
- **Trust**: The character believes in trust, and is quick to trust strangers. This can be simple naivety, or a willingness to make a leap of faith.

Making Yourself as a Character in Fudge
Monday, May 23, 2005

by Kyle Schuant

Almost every roleplayer has, from time to time, used their favourite system to make themselves as a character. In general, this is quite difficult to do objectively. Most players have either too low self-esteem - "I'd be useless, I have no skills" - or too high self-esteem - "but one zillion experience points isn't enough to describe all the skills I have."

Why Do It?

Two of the essential elements of roleplaying are playing the role of someone different to yourself, and overcoming obstacles while doing so. Many players consciously choose a character similar to themselves in skills, attitudes and values, changed enough to be interesting. Many others unconsciously choose one making up for self-perceived deficiencies - thus, skinny nerds playing hulking barbarians, or slightly thick players playing sneaky cunning thieves - or they play characters which are a super-skilled version of themselves, such as a first year Chemistry student playing someone with an exotic drug lab. Others, still, game out some more lurid fantasy; thus, the large number of Lesbian Stripper Ninja characters running around. Others, of course, play whichever character comes to hand.

The "self" game falls more generally within the first of the these types of characters. That is, you play a character which is quite similar to yourself, but different in some way. I contend that a person can have a fun experience playing themselves with just two changes: more braveness, and more curiosity. I've long expained roleplaying to newbies in the following terms. You know how when you watch a horror movie, you sit there saying to the screen, "don't go back into the dark old house, don't go back into the dark old house". Well, the adventurer ALWAYS goes back into the dark old house. They are curious, and/or brave. If we just add that curiousity/bravery to the "self" character, then they become hero material, however terrible their skills may be.

In truth, all roleplaying is of an "alternate self." Playing yourself as a character simply makes this explicit, instead of implicit. This is not for everyone, of course. If "Kyle Schuant" gets shot in the groin, I'm bound to take it more personally than if "Grolkk the Destroyer" gets shot in the groin. It may also make me uncomfortable to have "me as a character" do horrendous things "me as a person" would never do; but perhaps this is a good thing.

If the "me as a character" survives for a while, it'll evolve and change, get new skills, quirks, ideas, and experiences, and evolve into a different person to that which I am ever likely to be. For this reason, I find it good to name "me as a character" some variation of my own name: perhaps my middle name, and mother's maiden name, something like that.

Which System?

There are three basic types of character creation systems.

Level-based: this is not very suitable for "self" games. The assumption behind it is that everyone starts off useless and then, if they manage to survive, become a great hero. Typically, they start with nothing, being about as competent as your average 12 year old who's received too many smacks in the head from his mother's wooden spoon over the years.

Point-based: this holds some promise for a "self" game, in that the GM may assign different power levels to the player-characters, one point per year of age, or something like that, and the players make themselves as characters as best they can from that. The danger here is the Self-Esteem Problem, again, where people under or over value their abilities, especially if your gaming group consists of the stereotypical young male nerds, who, despite their brash and noisy exterior, often have sensitive egos. Another difficulty can be the minute granuality of

a point-based system. Suppose that Jim and Bob are both in wrestling class together, and usually come out even in matches against each-other, though Jim gets the upper hand slightly more often. Does Jim have 56% skill, and Bob have 50% skill? Can anyone really tell the difference?

Lifepath-based: In this system, the player describes the history and background of the character, and thus justifies the skills their character has, or the GM assigns what seems appropriate. This also holds some promise for a "self" game, in that going through this process helps quantify real-life experiences to put on a character sheet. The low self-esteem players will often find they have more skills than they thought, while the high self-esteem players may be brought down to earth a bit, or at least will tell some entertaining stories of their fantastic skills. Thinking like this leads me to say that Fudge is a good system for a "self" game, focused on the subjective character creation method. Descriptors like "Fair" and "Terrible" can be pretty easily understood by people, and related to their own abilities.

House Rules for Fudge

I like to keep character sheets relatively compact; not more than a dozen skills and attributes altogether. But I also note that in real life, people often have supporting knowledge which backs up some of their skills; that suggests they have heaps of skills. How to compromise between a short character sheet, and the many skills and supporting skills that people often have?

Here are my suggestions.

Base Abilities

Each person may be rated in the following areas. Each of these Base Abilities will be rated, on a simple scale of Terrible, Poor, Mediocre, Fair, Good, Great, Superb.

A rating of Fair will give no particular impression. A rating of Good or Mediocre will be apparent to those who know the person well; one of Great or Poor will be obvious within half an hour of meeting them, seeing them move and speak. One of Superb or Terrible level will, as noted above, be the dominant feature of the person, and almost immediately obvious.

Strength

The pure ability to move weight. This is tested in a gymnasium. To give a rough idea, find out how many complete full push-ups a person can do. If less than ten, that's Poor. If less than 20, that's Mediocre. 21 to 40 is Fair. 40 or more is Good or better. If the person can do 10 or more chin-ups with their full body weight, that's possibly Great Strength.

Agility

A measure of flexibility, quickness of reflexes, balance, and manual dexterity. This is difficult to assess. Anyone regularly performing gymnastics or similar sport will be of Good Agility or better. Being able to perform the splits indicates at least Good Agility, also. Someone who cannot even touch their toes will have a Mediocre Agility at best.

Fitness

The ability to recover from exertion, to push oneself physically, and general resistance to disease and such. This may be tested by a run, jogging at a decent pace until it becomes too uncomfortable to go on. Being able to jog for five minutes only indicates a Poor Fitness; 10 minutes, Mediocre; 20 minutes or so, Fair; 45 minutes, Good; 60 minutes, Great; and more than a couple of hours, since it's approaching marathon performance, is Superb.

Perception

How observant the player is, their ability to notice small details, to pick out patterns and so forth. This may be measured by an IQ test. IQ 70 or less, Poor; 90 or less, Mediocre; 91 to 110, Fair; 111 to 130, Great; 131+ Superb.

Education

Not merely raw years at school, but general knowledge. It's quite possible to find someone with a low Education ability who's an academic; they have a specialised area of knowledge. Contrariwise, it's possible to find a person who has a good general knowledge of the world and sciences, yet who never finished high school. Thus, the general rating.

Confidence

The assertiveness, bravado, and willpower of the person. It is this that will keep the person going when the fitness runs out. Anyone who refuses to perform any of these tests automatically receives a Poor rating in Confidence, and of course, a Poor rating in those tests as well.

Other Considerations

For most people, it's found that though the six Base Abilities vary widely, they may be ranked from best ability, to worst. The ratings are then, from best to worst, Superb, Great, Good, Fair, Mediocre, Poor. Where one Base Ability is higher, another is lower.

There are two additional Base Abilities. These need not be tested separately, since it's been found that they're aspects of the others. These are Speed, which is the average of Strength and Agility, and Toughness, which is the average of Strength, Fitness, and Confidence.

Speed

Speed is the quickness of movement and reaction of the person. To test, rate the running speed per second of the person by means of an 800 meter run (runs of less than this distance will give results too high; runs of greater than this distance require Fitness to be factored in). Each meter per second above or below 5 meters/second, is one level of Speed. Thus, Mediocre Speed is 4 m/sec, Good Speed is 6m/sec, etc. If Speed and Strength are known, the more difficult to assess Agility may be surmised.

Toughness

Toughness is the ability to take physical punishment and keep going, to recover from injuries and so on. Strength affects this because it grants the person physical bulk with which to absorb blows, dilute toxins and so on. Fitness contributes to it because it represents cardiovascular health, and a person with high fitness will be accustomed to recovering from or enduring pain or discomfort (ie, exercise). Confidence contributes to it because this is the ability of the person to mentally persist through difficulties, to "break through the pain barrier," and so on.

In rating the person's abilities, if any question arises as to whether they're Superb, then they're probably not. With a person who is Superb, there can be no doubt as to their ability. Any Superb ability is a dominant feature of the person's character, one which cannot be denied, as examples: the strength of Lou Ferrigno, the agility of Tatiana Grigorieva, the fitness of Robert de Castella, the perception of Sherlock Holmes, the education of Indiana Jones, or the confidence of Robert de Niro in most of his roles. The same can be said with a rating of Terrible: if there's a question, they're not Terrible.

Skills

Limiting Skills

To keep character sheets tight, the most different skills a character may have are six, plus the sum of Perception, Education, and Confidence (where Fair is zero). There is only so much anyone can notice, remember, or be bothered to recall.

If for example a character has Good (+1) Perception, Terrible (-2) Education, and Superb (+3) Confidence, then they could have a maximum of eight (base of 6 +1 -2 +3 = 8) skills. Note that this rule means that if a character has Terrible or worse in those three Attributes, they can have no skills at all! (There really are people like this.)

If, after the game has been running a while, a new skill takes a character beyond this maximum, they must forget one of their old skills. The actual level of the skills is not affected. So Joe Average could have six skills at Terrible, six skills at Fair, six skills at Outstanding, whatever; he could only have six skills, though.

This isn't as bad as it sounds. Your character might not officially have the skill, but still be able to give it a go anyway - they get to use their default skill.

Default And Similar Skills

In this implementation, there are two types of skills, Specialist, and Anyone. Specialist skills are those that you need a teacher to learn; Anyone skills you can teach yourself. The trained skills are in bold on the list below. The difference is in their default.

Anyone skills default to the relevant Base Ability -3. So for example someone with Excellent (+2) Agility would have default Swimming of Mediocre (-1); whereas someone with just Fair (+0) Agility would be a Terrible (-3) Swimmer.

Specialist skills have no default. So if for example someone without Surgery skill tries it -- they don't try it. They simply don't know where to begin. Of course, if they have a similar skill, they may be able to try it anyway.

Similar skills default to each-other at -2. These are skills which are somewhat related or have some overlap in education, for example Chemistry/Biochemistry, Big Guns/Smallarms, Computer Operations/Computer Programming, etc. So if, for example, someone has Superb (+3) Chemistry, they will have Good (+1) Biochemistry as their default. Without any particular effort towards Biochemistry, they use their education, their knowledge of general Chemistry to figure some things out. Of course if they just had Mediocre (-1) Chemistry, then their Biochemistry wouldn't be up to much, being Terrible (-3). Since it is a Specialist skill, they'd be grateful at least to be able to roll, try to scratch up the relevant knowledge from somewhere.

Don't bother writing your Similar Skills in; they will be determined as relevant during play.

A skill with a default worse than Terrible may not be attempted.

The Specialist skills in the skill list are italicized.

What is a Specialist skill, and what an Anyone skill, will vary from campaign to campaign, and place to place and person to person. For example, Computer Operations (as opposed to Programming!) is in the modern developed West an Anyone skill. Anyone can give it a go and do reasonably. But if you take a Kalahari Bushman and show him a computer, for him it's a Specialist skill. But the reverse would apply with regards to Survival (Savannah) skill.

Rating The Base Abilities And Skills

Subjective Method

It's already been described how you might rate the Base Abilities. As to Skills, the following guidelines should apply:

Terrible: The default rating of an Anyone skill for a person with a Fair attribute. "No, of course I don't know what I'm doing."

Poor: Better than useless, but you're still nervous watching him. It's plain he's largely just guessing.

Mediocre: This person is stumbling along, but they'll get there.

Fair: The minimum requireed to use the skill day to day in a profession. They won't be promoted or congratulated on a good job, though.

Good: This person shines on some days, or does fair jobs quickly, etc. They're confident with their work (but don't confuse that with Confidence!).

Great: This person, as soon as you see them doing the job, you know they know what they're doing.

Superb: This is a stand-out guy. If they tell you, "this is how it's done," it doesn't occur to you to doubt them.

Game Balance Method

The alternate method of rating is the one that saves measuring things and risking fragile egos. Arrange the six Base Abilities from best to worst. The best one is Superb, the next Great, then Good, Fair, Mediocre, Poor. Now figure out the other two, Speed and Toughness, from those.

As to skills, assume the Native Language is known to the equivalent of Education; this doesn't take up a skill slot. Now, select two Professional skills (used in your most recent paid profession), two Background skills (learned while growing up and two Hobby skills (stuff you do for fun). Rate the Professional skills as Superb and Great; the Background skills as Good and Fair, and the Hobby skills as Mediocre and Poor.

Those who claim a plethora of skills in support of their Professional skills, generally we can take care of that with the similar skills. For example, someone who has Superb native language, will have Good knowledge of their native language's literature. Someone with Great Surgery, will have Fair First Aid at least.

This method provides not the "real you," but a caricature of you. It has the same relationship to you that your passport photo does. It's probably not very flattering, but it's recognisably you.

Generous GMs may let the players add one or two new and different skills at Mediocre. "If you had the time, money and patience, what might you go and learn about?" This fills out the character a bit, and makes up for the Average Gamer who's a bit useless.

Add in the courage and curiousity, and you've got an adventurer.

No Skills, No Attributes, Just Traits by **Pippenstein,**
Posted: Tue Jan 06, 2009 7:34 pm (http://www.fudgeforum.com/forum/phpBB2/)

Ok, so, if you read the Fudge "rules" carefully, this isn't really a new concept, but I think I added a slightly new spin to it. I was heavily influenced by Over The Edge with this one.

1. Don't call 'em Attributes - don't even think of them as Attributes. They only are bought and sold like Attributes during character creation or character advancement. They're simply Traits, or, more exactly, "Broad" Traits. These Traits can be occupations, character qualities, non-human races, bundles of related skills in a single category, etc.

2. Players can have whatever Traits they want, though a GM can always, of course, veto any Traits that a player comes up with. Traits all begin at Fair, though technical and/or unusual Traits would begin at "non-existent". (Certain GMs may allow for a grainier system, where unusual or uncommon Traits might start at Terrible, Poor, or Mediocre instead of just non-existent.)

3. If a Trait is "narrow" enough for the GM to allow it, some Traits can be bought and traded in at the rate of Skills. Remember, these aren't skills, just like Broad Traits are not Attributes. They're Narrow Traits.

Ok. So why are they not Attributes and Skills? Well, by not thinking of them in terms of "Attributes" and "Skills", but as mere Traits, the player (and the GM) can free up their minds a bit, get a little more kooky, and have an easier time freely describing their character.

When some people think of Attributes, they think of things like "Strength," "Willpower", "Charisma", "Agility", etc., but don't usually think of things such as "Good (+1) Live Action Star Wars Gamer" (which might include fencing, acting, star wars lore, collections of star wars memorabilia, etc.) or "Superb (+3) Slob" (which includes an ability to ignore the 5 second rule for dropping spaghetti on the floor, a resistance to disease, a body odor that repels most sane creatures, and pet roaches.)

Narrow Traits should only be those Traits that seem more for "Flavor" than actually useful, within game. Now, of course a wise GM will find a use for such a Trait in game, but the frequency of such a Trait being useful should be rare at best. A player of mine actually took the Trait "Great (+2) Emcee" because it fleshed out his character. I didn't want to punish him for sacrificing Trait Levels to make his character come to life, even though this game involved time travel, hunting mutants in the sewers, and finding out that your friendly next-door neighbor is actually a cannibalistic demon-worshipper who's been spying on you through your medicine cabinet for years now, so I let him raise his Emcee Trait, from non-existent, at a third of the cost of a "Broad" Trait.

Maybe he'll hold one of the hottest hip-hop concerts for a horde of C.H.U.D. in years!

Yeah, I know it's poor form to reply to one's own post, but I just threw that one together and a couple notes might be in order.

1. This is not a system that gives primacy to accuracy and crunchiness in a game. It probably works best for GMs and players that prefers to keep thing loose and don't like to "waste time" with math and rummaging through lists of skills and attributes.

There are times when I even prefer a more crunchy game with lots of detail, but this system seems to work well for stories that are a little more surreal than others.

2. A table of sorts might help one get at what this is all about at a glance. I know nothing about html, so I can't do this table for you. However, I can show you what would come up from a matrix of this sort.

There are 4 kinds of Traits. Each Trait is either Broad or Narrow (column A), and either Exoteric or Esoteric (column B). Combining an item from column A with column B, we get these four types of Traits:

Broad and Exoteric Traits: These types of Traits default to Fair (+0) and their Levels costs the same as Attribute Levels in the Fudge book. (2 of these Trait Levels can be traded in for a Gift, for example.) Possible Broad/Common Traits include Warrior, Outdoorswoman, Train-Hoppin' Hobo, Swashbuckler, etc.

Broad and Esoteric Traits: These types of Traits default to Non-Existent (sub Terrible, and unusable unless you actually have the Trait, in which case it would begin at Terrible) and cost the same as Attribute Levels. Possible Broad/Rare Traits include Sorcerer, Esoteric Martial Artist From An Exotic Foreign Land, Jedi Knight, Scientist (Mad or otherwise), etc.

Narrow and Exoteric Traits: These Traits default to Fair (+0) and are worth as much as Skills in a normal Fudge game. Examples include Plumber, Swordswoman, Fisherman, Horse-Rider, Cat Trainer, Pugilist, Boxman (a safe-cracker), Pickpocket, Coin Collector.

Narrow and Esoteric Traits: These Traits default to Non-Existent (below Terrible and unusable by most characters) and cost as much as Skills in the Fudge book to raise, trade in, etc. Examples of Narrow/Esoteric Traits are Drunken Kung-Fu Stylist, Hypnotist, Inventor, Alchemist, Tea-Reader, Speaks Latin, Perfume Designer, etc.

Rules of Thumb: If a Trait can be broken down into more narrow Traits, it's a Broad Trait. If you can't break a Trait down any further, it's probably a Narrow Trait. If a trait is common enough that most people have seen the Trait enough that they could probably do a Fair job at it themselves, or they have picked up a little bit of that trait, even if only through osmosis, it is probably an Exoteric Trait. If it's not an Exoteric Trait, it's probably an Esoteric Trait. Or, if you prefer, most Esoteric Traits are "gee-whiz" type Traits that the majority of the population are unlikely to comprehend without specialised training.

As always, Gifts are those Traits that can not be measured in Levels. They are the Traits that you either have completely, or you don't have at all. The same can be said for Faults.

3. Do what thou wilt shall be the whole of the law.

Here's another interesting "mechanic" built into the character creation process that can be used in just about any game:

To any Trait a character lists (and thus is above or below average) a "Sign" must be attached. A sign, in this case, is something that is indicative of the Trait that the player can use to describe her character without resorting to metagame language. With it, a player can almost "show" the character rather than "tell about" the character. They are "always" put in (parentheses) after the Trait itself is described and/or listed.

Examples:

Pick-pocket: picking-pockets, lifting objects out of purses without being noticed, slight of hand tricks. (Has exceptionally dextrous looking fingers)

Good Skulker: sneaking about in shadows, moving silently, shadowing people, hiding behind objects. (Always wearing a dark hooded cloak.)

Fault - Paranoid: always afraid that someone is watching or following her due to years of committing theft. (Checks over her shoulder every now and then.)

Brave: difficult to intimidate, willing to go where few would dare, exceptionally confident. (battle-cry: "Death Before Dishonor!")

Such a player could then describe her character, instead of "is a pick-pocket and sneaky rogue who is a little paranoid", as "Sarah is wearing a dark, hooded cloak which she pulls back with slender, dextrous-looking fingers to take a quick look over her shoulder". The latter is much more visual and "realistic" than the former, I think.

I actually do mean everyone's Trait's generally start at Fair, if they don't default to non-existent, and if they spend points on them it puts them at Good or higher.

Now these are for Traits that are common to everyone, like, in "our world", "Sucking Up To The Boss" would default to Fair, but I would hope that I personally would qualify to have mine lowered in exchange for raising a level or two in "Rabble-Rousing Radical".

Less common Traits tend to default to non-existent for a super-lite, non-crunchy system, but there is nothing at all wrong with having them default to Mediocre, Poor, or Terrible, depending on rarity or complexity of the subject. It's likely that most Traits would default to Poor in a game like this, instead of Fair, since "Poor" is between Non-Existent and Fair, so this makes a sensible, and convenient, starting point.

Actually, I run most of my games like that anyway, keeping Traits that default to non-existent limited to extremely esoteric or technical Traits, or Traits just plain ultra-rare in a region.

Traits that I would default to, say, Poor, would be like "Hip Hop Emcee", or "Bare Knuckle Fighter", or "Customer Service Clerk". Traits I'd default to Fair would be Traits such as "Pop-Culture Expert", "Cook", "Car Driver", etc. Traits that would default to Non-existent would be "Magickian" (what real-world sorcerers prefer to call themselves nowadays), "Physicist", "Tai Chi Chuan Artist", or "Acupuncturist".

Sorry about the confusion.

However, in the end, Attributes and Skills are really "just traits", too, in a manner - only they are pre-set, and the players pick from a list, rather than make them up. (But this is what I mean when I say that sometimes skills/attributes are better than just traits, and vice versa).

Basically, the difference between the "just traits" and the standard skills/attributes system is how much control the GM wants to give the players over making their characters - the former allows more freedom than the latter.

I can make a character like thus:

Attributes:
Mind: Fair
Body: Great
Spirit: Good

Skills:
Karate: Great
Pistol: Fair
Katana: Good
Negotiation: Great
Etiquette: Great

or I can make a character like this:

Businessman: Great
Street Samurai: Good
Karate Artist*: Great
Handgun Specialist*: Fair

(* raises at the rate of a skill. All others raise at Attribute Speed.)

Same character, although I would argue that the second "version" of the same character is far more descriptive, and summons up the image of the character much more quickly than the first. Plus, the added bonus is that the players don't have to go through a list of skills, and the GM doesn't have to explain the subtle differences between two different but similar attributes, such as the difference between "Intelligence" and "Wisdom", or between skills and Attributes, like "Athletics" and "Body".

Although, there are times when the GM wants to be very specific about what the characters will turn out like, such as in an all-Sorcerer game. Perhaps this is the time when the Attributes/Skills system shines.

Timeline Based Character Generation
by **Fred Hicks**

When I'm baking up a homemade batch of Fudge, I'm always tempted to tinker with the recipe a little, to find that something extra that can take it from being Good Fudge to Great or even Superb -- to add a little richness to the mix, as it were.

Metaphors aside, I've often struggled with a balance between the structured and the conceptual, particularly with character generation. The subjective character generation method is nice to a point, but ultimately I find I prefer going objective, and letting my players do a lot of the driving there. I'm also interested in providing the players a strong sense of connection and ownership with the campaign setting, a sense of their place in the world, and an idea of how they have come to know one another prior to game start. For that, I've turned to the game world's history to help me out.

By making use of a game world's timeline, splitting that timeline into "phases", and then allowing players to perform only a fraction of the total character generation process in each phase, I've found that the richness and involvement of the characters with each other and the game world is about right. And as a pleasant side-effect, it helps to model age and experience too, while still allowing for characters that are "balanced", in the points.

Come Together

Before we get into the particulars, I want to take a moment to promote the tried and true practice of a character generation session. Get all of your players together, have them all build their characters at the same time.

Since you're going to be doing this in a step by step "phased" approach, the players will be building their characters' histories together in increments, and will get a kind of "fast time" view of their relationships over the years.

When we did this for my Fudge Amber game, the results were staggeringly effective; there was a kind of three-dimensionality and involvement in the characters' relationships even before the game itself actually started, and, to boot, it made sure that people weren't stepping on each others' toes conceptually.

This kind of session is a win, and it's practically a necessity when going for a timelined character generation approach.

Drawing the Line

Deciding on your timeline -- at least as it's relevant to the character generation process -- means that you must at least decide how old you'd like your characters to be. This doesn't necessarily mean your characters will start character generation in the crib, though you can do that if you'd like (as I did with my Fudge Amber game).

Let's suppose a game that's set just after a group of kids have gone through high-school and college, and at game start will be heading out into the "real world", only to discover there are darker powers afoot behind the shadows. Shades of Buffy and Cthulhu, if you like.

This initial pitch suggests that your character generation timeline should cover at least the high school and college years. If you're talking the real world for this timeline, you'll have some specific dates to tie to those years, and some potentially formative events that occurred during that time. (Not that you have to use them; if these kids encountered the supernatural prior to the start of the game, it'd make sense to have those events in the timeline as well).

Once you've got an idea of your timeline, you're ready to divide it up into phases.

Going Through a Phase

In order to decide exactly how to divide your timeline into phases, you need to understand how many phases you want your characters to go through. In order to decide that, you need to set a few "configuration options" for your phase actions.

The idea for a phase is that players decide what their "focus" was for that phase -- either focused around a key event or activity, or the pursuit of a particular goal.

Each character gets a certain number of skill levels for each phase -- that's your first of those options -- and can spend those levels only on skills which naturally follow from their chosen focus. As the GM, you arbitrate what skills are outside of the scope of a given focus.

Next, you should decide if you want any kind of restrictions on how far someone can go with their expenditures in a phase.

For simplicity, I've decided to describe this for skills, though you can work Gifts, Flaws, Attributes, or Aspects into such a system if you wish it. In my tabletop game, I let players either take a level of an Aspect or three skill levels per phase. You could pursue a similar either-or method, an "all things in parallel" method (e.g., every other phase, get an attribute level, with skills proceeding normally), or a mixed method (e.g., you can have one aspect level and one skill level, or three skill levels, per phase).

Getting in Shape

I like to force players to have their skill tree fit a particular "shape" at the end of each phase. There are two (or three) shapes I have in mind:

- Column -- At the end of each phase, each skill of a given level must be "supported" by at least one other skill of one level lower, down to the "default" level for skills (usually Poor). For example, if you had one Great, you'd have to have at least one Good, one Fair, and one Mediocre. This tends to allow people to be exceptional in a few things, while avoiding the "Four Superbs, and the rest are Poor" syndrome; I find it fits cinematic, heroic characters well.
- Pyramid -- This is a bottom-heavy version of the Column shape, and well suited for creating characters that have a more "realistic"-style skill distribution. Mandatory pyramids mean that the number of skills of a given level must be supported by the same number of skills, plus one, of one level lower. For example, if you had one Great, you'd have to have at least two Good, three Fair, and four Mediocres.
- No Shape -- If you don't particularly care for picking a shape, then pick no shape; then, the players can max out a particular skill with no "support" from other skills. This tends to get you characters with Superbs and then a precipitous drop down to their other skills, which can come across as unrealistic or at least distasteful, but might suit you all the same.

Keep in mind, since characters have to fit the "shape" at the end of each phase, what shape you decide on (and what the default skill level is) greatly determines how skilled your characters can become in a single given skill.

For our example, I'll decide on three skill levels per phase. Suppose someone wanted to play a character that was a track athlete in high school. On the "column" shape, they might start out like this, getting to Good in two phases:

- Phase 1: Running - Fair (2 levels), Weightlifting - Mediocre (1).
- Phase 2: Running - Good (+1 level), Weightlifting - Fair (+1), Swimming - Mediocre (+1).

That's a valid column. However, it's not a valid pyramid -- that Fair would have to be supported by two Mediocres. If they wanted a Fair in Running when a "pyramid" shape was called for, it would take two phases:

- Phase 1: Running, Weightlifting, Swimming - Mediocre (1 level each, 3).
- Phase 2: Running - Fair (+1 level), Football, Basketball - Mediocre (1 each, 2), Weightlifting, Swimming - Mediocre (+0). He can't take two skills at Fair this phase, because that would result in two Fair, two Mediocre, which isn't a pyramid. Time to branch out as an athlete.
- Phase 3: Running - Fair (+0 level), Football, Swimming, Basketball, Weightlifting - Mediocre (+0); Biology, Mathematics, Spanish - Mediocre (1 each, 3). He couldn't go up to Good yet, because promoting two other skills to Fair left him only two Mediocres. Time to study.
- Phase 4: Running - Good (+1 level), Football, Weightlifting - Fair (+1 each, +2), Swimming, Basketball, Biology, Mathematics, Spanish - Mediocre (+0). Finally, there's enough skill-tree structure to "support" getting Good at running. Guess all that time as a member of the Football team finally paid off!

The differences in the shapes should be very clear. Pyramid style makes it very difficult to "spike" your skills, creating broad and somewhat diverse skill trees.

Column style lets you spike your skills, but it has breakpoints too -- just at further on up: If our guy wanted to be a Great runner, in column style with three points per phase, he'd need three more phases (he'd need to get another trio of skills at Good, Fair, Mediocre -- two phases -- before he could promote his first Good to Great on the next phase). Broad skill trees are still possible, but it's possible to "go narrow" if so desired, without spiraling up to Superb inside of two phases (which you'd get with no shape).

Time Slice

After you've decided on how many skill levels characters get in a phase, and what shape their tree has to fit each phase (and, implicitly, the starting zero-cost level for any skill, and the breadth or specificity of your skills), you can start to have an idea of where you want your characters to max out skillwise, and how many skills you'd like them to have. See the above examples to get an idea.

Keep in mind, a phase is a period of time in which a character can develop. Each phase doesn't have to be identical in length. If you were doing a game based on Glen Cook's *Black Company* series, you might divide your phases up into military campaigns from the Company's past; if you were doing a game based on *Highlander*, they might be decades or centuries.

In my example game, school is an important, central environment to the characters' pasts. Using school as a mechanism for defining the phases makes good sense, here. I want a sense of things having happened back earlier than high school, though, but at the same time, I don't want pre-high school stuff to dominate.

I've decided on three skill levels per phase, and a pyramid shape, so I know that it takes four phases to get to a Good. I want them to have a shot at getting a Great (four levels above baseline Poor), which takes at minimum eight phases with the pyramid shape. I want to give them a little extra play, though, so I'll set the number of phases at ten. Since pre-highschool is less important to me than highschool on up, I divide the phases up this way:

Phase One	Grade School (up to Grade 5) - 1986-1990
Phase Two	Middle School (Grades 6-8) - 1991-1993
Phase Three	High School: Freshman Year - 1994
Phase Four	High School: Sophomore Year - 1995
Phase Five	High School: Junior Year - 1996
Phase Six	High School: Senior Year - 1997
Phase Seven	College: Freshman Year - 1998
Phase Eight	College: Sophomore Year - 1999
Phase Nine	College: Junior Year - 2000
Phase Ten	College: Senior Year - 2001

Once I have this outline, I can start tying the events of the timeline to the phases. This gives the players an idea of what influences their characters came across as they met in grade school and grew up through the years together.

And that's about it for the "basic" timeline generation system. This being Fudge, however, there's plenty more to go.

Playing the Kid Brother

So far my example has supposed a set of kids born around the same time, going to school in the same grades at the same time, and so on. But timeline-based generation can work for characters that enter into the picture at different starting points, too.

This time we'll suppose a military-themed game, centered on a mercenary company that picks up new members with some or no combat experience at various points along the timeline. In this case, you've got people who are coming in with different levels of experience. You already know you want a six-phase setup, one phase for each major campaign in the Company's past, with the skills set at a column shape and two levels per phase (you've got very broad skills in this setup).

The guy who's playing the Captain joined up at the beginning; the Lieutenant, in phase two; the Sarge, phase three. And your "specialists" came in mean and green at phase four.

This presents an interesting dilemma if you want "balanced-in-the-points" characters, since the Sarge, for example, is only going to be "active" in four of your six phases. The other issue is with creating a sense that the Captain has seen more, done more, and is more experienced and rooted in the world than the greener recruits for the Company. I'll get to that second issue in a bit; the first issue is all about potential.

Fulfilling Your Potential

Whenever a character is unavailable to participate in a phase (due to not being born, or not having joined up yet, what have you), that character accumulates a point of Potential for that phase. Once they become available to participate in the character generation phases, they can start cashing in their potential to play catch-up.

Characters who are built using potential rather than "experience" (a skill-allocating phase) are your prodigies, your wunderkind, your "natural talents" who came along later than the others but dove right in and got up to speed.

On a given experience phase, the player may cash in one or more of their points of potential to get an additional allocation of skill levels equal to what you get for one phase, per point cashed in.

If you're using a skill tree shape, then this influx of extra skill levels has an interesting effect on things -- namely, you can cross some of those hurdles more rapidly because you can outright buy higher level skills without having to pass through multiple phases of fitting the tree-shape.

Let's compare the Captain and the Sarge.

Captain

- Phase 1: Tactics - Mediocre (1 level), Hand-to-Hand - Mediocre (1)
- Phase 2: Hand-to-Hand - Fair (+1 level), Artillery - Mediocre (1), Tactics - Mediocre (+0).
- Phase 3: Tactics - Good (+2 levels), Hand-to-Hand - Fair (0), Artillery - Fair(0)

Sarge

- Phase 1: Not joined up: 1 point of potential accumulated.
- Phase 2: Not joined up: 2 total points of potential accumulated.
- Phase 3: Cash in the potential. 4 skill levels can be allocated. Tactics - Good (3 levels), Hand-to-Hand - Fair (2), Artillery - Mediocre (1).

In two phases, the Sarge has managed to grab the same skill profile as the Captain has in three, despite having seen less duty. He was also able to buy a Good skill outright in a single phase, something a person without potential can't do when you only get two skill levels per phase.

But wait -- assuming that the Sarge is allowed to buy the same skill profile as the Captain, how do you really differentiate the two characters?

Something on the Side

The answer to the differentiation problem is in providing side effects on a phase-by-phase basis. These side-effects can be gifts, attributes, aspects, flaws, what-have-you, but the upshot of it is, characters who have more "experience" phases versus characters built on potential will have more of these side-effects attached to them. They're the benefits of experience and the weight of age. The best side-effects are double-edged in some fashion or another.

In our military example, we might have an attribute called "Rank". Each experience phase that you have gives you a new level in that rank, starting at Terrible (Private) and in six phases potentially hitting Great (Captain). The GM uses this attribute to determine who has to follow whose orders, influence and respect you get from other military organizations, and so on. Your six-experience-phase Captain is going to get more mileage out of his Rank than your four-experience-phase Sarge is. At the same time, a higher rank means greater responsibility; as a military leader of men, the Captain has to be the strong one, to keep the others at a distance, to maintain his authority even when he'd rather not.

Here are a few quick ideas for side effects:

- Connections: Whenever a phase features your character developing with a particular key NPC or organization, the character gets another level of "Connection" with that organization or person. This can be used to rate the character's influence with that entity, but also the character's obligation there. Optionally, if a character pursues an activity that would get a Connection in a later phase, those who already have that Connection can influence what skill development is actually available to that character during that time (though it should incur some other side-effect for the ones doing the influencing, too, like a Rivalry).

- Rivalry: If two characters pursue the same activity on the same phase, they each accumulate a level of Rivalry for each other. If you were using the Aspects system, the GM would be able to invoke this inter-PC rivalry during competitive moments during the game.

- Training: If a little inequality doesn't bother you, offer training options, whereby characters can get an additional skill level in a given phase, in exchange for an obligation (connection) to the trainer -- but look out, because the trainer is going to have some veto power in your skill choices!

- Youth and Maturity: A friend of mine is running a game centered around a family of children based on six phases, three years apiece, with the eldest child still shy of adulthood at 17. She's using Aspects to represent the various benefits and drawbacks of age and youth: those with six experience phases have 'Mature II', five 'Mature I', four no aspect, three 'Young I', two 'Young II', and is disallowing one-phase characters, since three-year-olds don't really work as PC's in this setup.

Baked and Served

While I've called it a system, timeline based character generation is more of a "method" than a hard and fast set of rules. It's a direction to take if it suits you.

I've found that with a sufficiently collaborative set of players and the right side-effects, using this method can produce some surprising results. An alchemy of sorts that gives rich inter-character history, a tie to the setting in the form of the events that people have stepped through in the course of character generation, and a pleasant modeling of the benefits and burdens of age and experience.

Timeline based character generation, together with Aspects and a few other custom tweaks, form the core of my homebaked Fudge implementation called FATE. You can visit FATE's homepage at http://www.evilhat.com/projects/fudge/fate/ and the two current games that use FATE, Harrison House and Born to be Kings, on the Evil Hat games page: http://www.evilhat.com/projects/games/

This Time It's Personal - Character-Guided Goals in Fudge
by **Don Bisdorf** (dbisdorf @ mediaone.net)

The end of an adventure is a joyous time for players and characters alike, as this is the time when the GM normally awards experience points. Experience points are the players' reward for solving a mystery, delivering a precious cargo, or defending a helpless village. With these points, characters can develop new talents, learn new languages, or gain new powers.

However, a well-skilled character is not necessarily a well-developed character. Your computer hacker character may have a Legendary Decryption Skill, but what does he do in his off hours? What are his hobbies? What are his ambitions? Who are the important people in his life?

It is all too easy for a character's life to become focused on "the mission," or the specific tasks that the GM has placed in front of the group. A character may simply walk from hair-raising peril to hair-raising peril, with only enough time in between for a nap and some medical attention. The life of such a character will likely be very interesting, but it will also be very narrow. If the world suddenly became peaceful and orderly, with no dragons to slay or treasures to recover, what would such a character do with his life?

Therefore, instead of merely awarding players on a session-by-session basis, or at the completion of an adventure, the GM might also consider giving small awards for characters who accomplish their own personal goals. These goals should be chosen by the players themselves (with the GM's assistance) and should be based on their specific character concepts. For instance, a grim vigilante might be pursuing the criminal who murdered his wife, while an interplanetary merchant might be trying to raise enough capital to pay off the loan on his spacecraft.

Characters should have the opportunity to pursue their personal goals while still moving through the larger goals shared by the group. For instance, say that Janet Thatcher, renowned archaeologist, is in Egypt with the rest of her adventuring group. The group is currently searching for an ancient relic known as the Staff of Horus, but one of Janet's personal goals is to discover what became of her mentor, Professor Howe, who mysteriously disappeared on an expedition to the Middle East. While Janet is asking the locals for rumors about the staff, she also has the opportunity to locate anyone who might have seen the missing Professor.

Upon accomplishing a personal goal, the character should receive a special experience point award. The GM should determine the amount of this award at the time the player chooses the goal. A goal should be worth from one to four experience points, depending on the difficulty of the goal. Here are a few examples:

Goals for Thardon, the Warrior

One point - he must return a lucky dagger to his friend in the King's Army.

Two points - he must earn a thousand gold pieces in order to afford a cure for his mother's illness.

Three points - he must locate, challenge and defeat the wizard Arrax, who killed the woman he loved.

Four points - he must locate the Sacred Stone of Seriph, as was foretold by a prophet at the time of his birth.

Goals for Cassandra, International Jewel Thief

One point - she must find the rightful owner of a gold locket she stole by mistake, thinking it was a different item entirely.

Two points - she must prove to her former friend, Inspector Wallace, that she did not steal six million dollars worth of art from a charity auction.

Three points - she must get her alter ego, "The Silk Shadow," mentioned on the front page of at least one newspaper in America, England, France, Spain, Russia, and China.

Four points - she must steal the famous diamond necklace known as the Constellation, which her father attempted to steal 20 years ago - and was shot and killed in the attempt.

Goals for Brett Wessner, Superhero (also known as the Blue Knight)

One point - he must convince his elderly aunt to move to the big city so that he can take care of her.

Two points - he must attract the attention of Mary Muldoon, attractive and talented city reporter.

Three points - he must discover the origin of the Azure Medallion, the source of his powers.

Four points - he must bring the criminal mastermind known as The Crystal Skull to justice.

Occasionally, a character's personal goals may come into conflict with the group's larger goals. The GM should not try to find a way to "work around" this, or try to engineer things so that this never occurs. This sort of conflict is the soul of character development, and can make for excellent roleplaying ("The bandit who burned my village to the ground is escaping - but my comrades need my help to defeat the greater enemy, the dread demon Xon!").

GM's should be wary, however, of two players choosing diametrically opposed goals. For instance, if one player chooses the goal "Must reassemble fragments of the Soul Sword to resurrect my murdered husband," but another player chooses "Must destroy fragments of the Soul Sword so that they cannot be reunited and used for evil," then the future of the campaign is going to be very rocky indeed. In this situation, the GM should devise an alternate method for one of the players to achieve his goal. For instance, while questing for the fragments of the Soul Sword, the two characters mentioned above might encounter rumors of a Mirror of Life, which has the power to allow the deceased to return from the Land of the Dead.

A large number of goals may begin to hinder game play. Each goal will distract the player's attention from the goals of the group, and if there are too many personal goals outstanding, none of the players will have time to pursue the true mission. The GM may therefore wish to limit the number of goals any character can have outstanding at one time.

Alternately, if the GM wishes to have a less structured, more player-guided campaign, the GM could choose to have no overall quests or goals whatsoever. In this case, the action would be entirely guided by the characters' own goals. This may give players a greater sense of control over their own destiny, however, it requires the GM to be more flexible, as she must be prepared to run whichever subplot the players wish to pursue at any given time.

In any case, the GM should be prepared for the additional work required to support the goals of the characters. If a player's goal is to find the Hidden Tower of Lanchar, then the GM should at least have a general idea where the Hidden Tower really is, and where clues to its location might be found. This, however, will broaden the game world, adding extra detail and color to the environment as well as to the characters. In the end, the entire game experience may be richer for everyone involved, and this should truly be everyone's goal.

A Hurt by Any Other Name
by John Ughrin (jughrin @ yahoo.com)

Roleplaying games have traditionally reduced wounds to a single notation (either a number or wound track.) While this makes sense in the first approximation, it also loses some of the flavor of reality or different genres. People don't fear fire so much because it is so damaging, but because the wounds are so much more gruesome and difficult to heal. Some damage is more than physical, or at least different. When situations like this arise, Fudge is easily adaptable to cover our bases. I've handled this by adding damage "Types" to my game. These types are noted by changing the letter used to note the wound in the wound track.

The following damage types are typical of the markings we may need. More can be added in a campaign that needs them. Note that this is an extension of the normal Fudge rules.

Physical (S, H, V, or X)

These are just the normal or traditional physical damage. If hit locations are used, the damage may only affect the activities associated with that limb. Otherwise, the effects are considered to affect only physical actions. (At least until you're Incapacitated, and then -- well -- you're out!)

Fatigue (F)

Fatigue damage is usually self-inflicted by extending a character too far. Often fatigue is the result of pushing magical or special abilities. Fatigue damage affects anything the character does.

Mental or Psychic (P - or use the Greek letter

Psi) Most commonly the result of a magical or psychic attack, P damage represents the delusions, phobias, nightmares or whatnot that accompany having your thoughts and memories scrambled. If a character is Incapacitated by P damage, that character is reduced to a semi-vegetative state. Characters that are killed this way die from the inside out. P damage affects all actions a character makes, and doesn?t really need any hit location. As the mood strikes him, the GM may specify the nature of the mental illness inflicted.

Toxin or Disease (T or D)

As with Fatigue or P damage, the character experiences the damage to all actions. Unlike those other types, this can be a progressive effect that is related to hit location. For example, a snake bite in the ankle can slowly incapacitate the rest of the body. Such effects should be noted in the description of the poison or disease.

Magical (M)

Magical damage is harder to pin down. This is not the same damage done by a magical fire blast or lightning bolt, that's just a Burn or Physical. This is damage to the Karmic life force itself. It may include paralysis or other sundry effects. Magical damage might even be inflicted by a curse.

Burn (B)

Burn damage is caused by energy like heat, electricity, cold, or even some chemicals like acids or bases. While Scratches, and usually Hurts heal normally, Very Hurt or worse Burns often leave horrid scars, and they heal very slowly due to the tissue damage. Such wound may impose permanent penalties to the victim's good looks.

Stacking Damages

This is all well and good, but what happens if I have taken two Magical (M) scratches and then take a Burn (B) scratch? It?s simple, there's plenty of room on the wound track, so write Bs or B/S in the Hurt box.

Healing and Recovery

Hopefully, your character will be lucky enough to attempt a recovery from injuries received in the course of duty. Each special damage type carries its own healing concerns. Note that these healing times and methods may vary by genre and adventure.

Recovery by Damage Type

Physical (S, H, V)

Scratch level damage heals automatically within a day. Especially if the character gets rest, this can be erased quickly.

Hurt and worse damage requires a Constitution roll to heal. The difficulty of the roll is determined by the level of the wound. This is conveniently referenced on the Universal Translator Table. Please note that this roll is penalized by the effects of the wounds. Such Constitution rolls occur the day after the wound is received, and every d6 days after that. Each individual wound gets a roll. Successful checks reduce the wound by one step until gone.

All damage types heal according to the wound level as dealt. Hence, a character who is incapacitated from three Hurts, need only beat a Fair Constitution roll three times. A Very Hurt character who has taken four scratches will recover after a day of rest. When a wound is healed, the other wounds 're-stack'. This means that if the character has two Hurts, and the first one makes the roll, the other H, in the Very Hurt box, is reduced to a Hurt wound.

Characters who are Near Death will not generally recover without outside care. This is described in the Medicine skill description.

Fatigue (F)

Fatigue damage heals after a full day of rest, regardless of Constitution or wound penalties. This does not just mean eight hours of sleep. This means a day of sitting and resting and eating and drinking.

Mental or Psychic (P)

After an incident that deals Mental or Psychic Damage, a wounded character makes a Willpower roll to fend off permanent emotional scars. If the roll fails, then the injury is sustained. Mental or Psychic damage can only be healed in two ways. The natural way is that a week of rest can possibly allow the mental phantoms to leave. This rest permits a mental recovery roll, which may be affected by Gifts, but is straight circumstantial roll. If this roll is failed, the damage becomes permanent, and can only be removed by the second recovery method. However, this can be erased from the Wound Track and noted as a fault on the character. For example a Very Hurt P wound could become: Hydrophobia (V, fault) -- The character must make Good Willpower rolls to enter or approach water. Notice how the Universal translator table provides the difficulty of the roll.

A healer with Telepathy or similar powers may also attempt to fix the problem.

The second recovery method is more complicated. A character with the appropriate magical or psychological skills or powers can attempt therapy. The difficulty of such therapy is affected by the extent of the injuries. So a Very Hurt (M) character imposes a -2 to the therapy roll.

Toxin or Disease (T or D)

Wounds caused by Toxins or Disease do not have a general curing method. Indeed, each toxin or disease will have a prescribed treatment or antidote. If such an injury will not heal on its own accord, an herbalist or physician can attempt to remove it through treatment.

Magical (M)

Magical Damage requires use of the Thaumaturgy skill to remove. Alternatively, magical damage will fade with time like a normal wound. The determination is made by the nature of the damage. Damage not initially directed at the character proper, perhaps through an enchanted area or food, fades as normal damage. Damage directed straight at the character, usually through sorcery, requires another wizard to remove it.

Burn (B)

Burn damage is perhaps the worst type of damage available. Burn damage heals at a rate of one Constitution roll every d12 days. There is no roll the morning after. Very Hurt burns are subject to infection or scarring, which might impose permanent penalties to the character in the form of Faults like 'Disfigured Left Arm' or 'Grotesque Scars on Face'

Well, I hope that this offers some ideas for people to use in their games. It adds a bit of depth that players may find interesting. For example, a pyromancer in my campaign recently enchanted a sword so that it does Burn damage instead of normal damage. I have printed a "GM screen" for myself with an abbreviated healing chart on it, and it takes up not one-fourth of a page.

A Non-Linear Wounding System
Saturday, May 01, 2004

by Helge Lund Kolstad (helge @ nvg .org)

Most RPG damage systems have a linear way of regarding wounds, i.e. hit points, a wound track, or a similar mechanism. The idea is that if you sustain enough small wounds, you will eventually die. This is fine for most games, but is nevertheless somewhat unrealistic. I present here an optional damage system, inspired by Fantasy Flight Games' Synergy game system.

The system is based on the assumption that you don't die if you sustain several non-mortal wounds. You might be hindered, feel bad and look unwell, but you won't die from it unless your condition somehow worsens. Likewise, it's fully possible to die from a single wound, no matter how tough you are.

The Health Conditions

The conditions a person can be in is connected to how much damage he has sustained, but there is no direct correlation. You might stumble around and fight back, even if you're spilling entrails and slipping in your own blood. Or you might be concussed and out like a light, but otherwise fine.

Healthy: Pretty self-explanatory. The subject is not hindered by any wounds he might have sustained. Hindered: The subject has sustained some wounds, and is feeling it. An arm might be numb, a blow might have caused dizziness; in any case, this is reflected by a penalty to all rolls one makes. Stunned: The subject is reeling from pain and shock and takes a round of ouch time. This is a temporary condition. While stunned, one might stumble away from immediate danger and dodge a few blows, but is otherwise incapable of coherent action. Defence is at -2. Incapacitated: The subject is out cold, but his or her condition is not life-threatening. No action can be taken. Dying: The subject is down and has sustained serious body trauma. He can take no action and will die unless the injury is treated. How long that takes depends on the injury and how nasty the GM is feeling; however, it is not too late... Dead: But now it is. In a fantasy or science-fiction campaign, it *might* be possible to raise the dead, in which case the body's condition may be a factor.

The Wound Levels

This is of course what it all comes down to. When playing, players might keep track of wounds by keeping differently-coloured counters. For example, the GM might give them a glass bead for each wound, or the player might fasten laquered paper clips to the character sheet.

The wound levels describe:

* The amount of damage sustained from the attack that caused the wound. * The Resistance roll. When a wound is sustained, one rolls against a relevant trait; Damage Capacity, Health, and Resolve are all good choices. The GM decides what he likes best. This roll is not affected by any wound penalties. * The penalty. This how much each wound hinders the subject. All penalties are cumulative, except as noted above.

Type	Dmg.	Nature	Roll	Penalty
Flesh Wound	1-3	This might be a graze, a flesh wound, a sprained ankle, or something similar. The injury is painful and might hinder action, but is not very serious.	No roll is needed for flesh wounds. The subject grunts/screams in pain/does not flinch (whatever is appropriate) and is otherwise unaffected.	The subject receives a -1 penalty for every two of these babies. Only one flesh wound will not hinder one. Much.
Severe Wound	4-8	This is something more noticable - actual fractures, a punctured lung, a concussion, or something similar. The subject is severely hurt and needs medical attention, but the injury is not in itself life-threatening.	If the subject fails the roll, he is **Stunned** for one round. Success means he grits his teeth and fights on. The difficulty is Good.	The subject receives a -1 penalty for *every* severe wound sustained.
Critical Wound	9-14	These are life-threatening injuries, usually because the subject's vital organs have been damaged. His stomach might be cut open and his guts spilling out (always a bad sign).	Failing the roll means the subject is **Dying**. Success means he is still able to act; however, he might be permanently crippled at the GM's discretion. The difficulty is Great.	For sustaining this kind of injury, the subject earns himself a -2 penalty.
Traumatic Wound	15+	This is the kind of damage that can kill you in an instant - standing within the blast range of an exploding bomb, for example. The subject will likely be crippled for the rest of his life, and should count himself lucky to survive. If he can count at all.	Failure means the subject is instantly, messily **Dead**. Even if he succeeds, he will be **Dying** and barely alive. The roll has a Superb difficulty. For every 3 damage above 15, another level is added to difficulty (Legendary at 18, Legendary+1 at 21, and so on).	A traumatic wound incurs a -3 penalty to all rolls.

Infection

Even after the wound is sustained, the danger is not over. For every day spent wounded, there is a risk that the wound might be infected. At the end of each day, the subject rolls against Fair (use Health, Damage Capacity or similar trait. Resolve might not be as relevant here). Failure means the wound has become infected.

The roll is influenced by any first aid administered to the subject. The environment might have adverse effects as well. In a jungle, for example, wounds are likely to fester.

If a wound is infected, its severity goes up by one level, i.e. a flesh wound becomes a severe wound. The subject then has to succeed at a Resistance roll or suffer the consequences of the new wound. It is possible for a wound to be affected by infection more than once as the infection gets worse.

Treating Wounds

Healing

If a wound is allowed to heal normally, its severity will decrease by one level every two weeks. Hospitalisation will reduce this time by half. The Gift Rapid Healing will further reduce it by half. Even an infected wound will get better. Yes, it is unrealistic for a bomb victim to be completely healed after four weeks in hospital, but this is where some realism has to be sacrificed for playability.

First Aid

A subject who is **Dying** will, well, die without immediate medical care. A successful First Aid roll will change the subject's condition to **Incapacitated** and put him out of immediate danger. If he gets sufficient rest, he might wake up and be merely **Hindered**; however, the wound level is not reduced by first aid.

Other Nastiness

Being wounded might have other consequenced than that mentioned above. The subject might be cut by a poisoned blade, creating a seemingly innocuous wound that will not heal and gradually gets worse as per infection. A particularly grievous wound might cause the loss of a limb, an eye, or other body part. This is all up to the GM, but playability should be kept in mind. It might be appropriate for someone who survived a direct hit from a 19th century cannon to lose a leg or an arm, or both, but players might be a bit miffed from losing an hand to a severe wound in a cinematic campaign.

Examples

Ugly Joe is in an old-style Wild West duel with El Hombre. Fingers twitch as the clock atop the church tower approaches 12. The two shots ring as one. Finally, Joe makes a gurgling sound and sinks to his knees.

In this example, Joe gets a Fair Revolver skill result, while El Hombre gets a Superb one. El Hombre's revolver has a damage rating of 7, while Joe's heavy duster gives him 1 armour. Total damage is 9, which is a critical wound. Ugly Joe now has to make a Resolve roll against Great difficulty, but rolls only Good. He falls over and is now dying.

Bad Luck Betty has been in a firefight, and taken three hits. One merely grazed her arm. One passed through her side, but failed to hit any vital organs. The third bullet, however, entered very close to her throat and has shattered her collarbone. Although in pain, she bit the bullet and managed to escape with her life. Bandaging her wounds, she decides to cross the desert and search for help in the first town she can find.

The first two hits are flesh wounds, but the second one is obviously a severe wound. Betty made the Resistance roll, however. Two flesh wounds mean a -1 penalty to all rolls, and the severe wound another -1, for a total of -2. She has made her First Aid roll, but it will have no effect other than lessening the chance of infection.

Jean-Pierre Brisset and his partner Pascal Dufresne are searching the Amazon jungle for the Lost Idol of Quetzalcoatl when they are surprised by hostile natives and forced to flee. Jean-Pierre has taken two massive spear wounds while Pascal has only a relatively innocuous wound from a blowpipe dart. Of course, as seasoned explorers they both know about the danger of poisoned darts, so Jean-Pierre desperately tries to suck the poison out. However brave, the attempt to alleviate Pascal's pain fails, and Jean-Pierre has to watch his partner die only a few hours later. The next day, one of Jean-Pierre's own wounds hurts considerably more and is looking rather worse. He gets a fever and considers his own prospects pretty bleak. However, Lady Luck smiles upon him as he is rescued by a friendly tribe just as he is about to pass out.

In this example, Jean-Pierre has sustained two severe wounds and Pascal only a flesh wound. However, Pascal's wound is poisoned and the GM decides Pascal's player has to make a Health check every hour against Good difficulty. Pascal fails the first roll, which is bad since his next roll will be modified for a severe wound, not a flesh wound. Meanwhile, Jean-Pierre tries to suck out the poison, which the GM rules will be a Medicine roll against Superb difficulty to shake the poison effects of the wound. Jean-Pierre doesn't even have the Medicine skill, so he fails. Although Pascal lasts for a few more hours, he ultimately fails the poisoning roll and the critical wound roll, and Jean-Pierre can only watch his dying partner writhe in agony.

Meanwhile, the day passes and it's time for Jean-Pierre to make his infection roll. He is in a damp jungle environment with lots of insects and bacteria to make his day worse, so the GM decides the roll will have a Superb difficulty. However the wounds have been treated with Pascal's First Aid skill, so the difficulty is lowered to Great. Jean-Pierre is in Good Health; however, his two severe wounds lowers his effective rating to Mediocre. His first two rolls are Great and Fair, which means one wound stays uninfected while an incredibly nasty South American insect lays its eggs in the other. Jean-Pierre now has one severe and one critical wound.

The French explorer shambles along all day and night, and it's time for infection rolls again. This time, his effective skill is Poor (Good -1 for the severe wound, -2 again for the critical one), and the difficulty is still Great. The rolls are Terrible and Fair - not even close. Jean-Pierre now has one critical and one traumatic wound. Although he fails the Resistance roll for the critical wound, he succeeds with the traumatic one, so he doesn't die outright, but passes out as his life slowly seeps away. Fortunately, he is found just in time for treatment.

Ted the ninja trainee has already become legendary for his ineptitude and bad luck. One day during katana practice, he trips and skewers himself on his own sword. His sensei carries him to the hospital, shaking his head. Florence the ninja nurse takes very good care of him, so what seemed at first a rather horrid wound quickly heals. After only two weeks, a rather embarrassed Ted is ready to resume practice. He has, however, fallen in love with Florence, which will cause him no end of trouble.

In this example, Ted first sustains a severe wound from his own sword. He is quickly carried to hospital, so one wound level will be healed every week. He still has to make infection rolls, but in this clean environment the difficulty will be Terrible. Even with Ted's Mediocre Health, he passes with flying colours. After one week, his injury has receded to a flesh wound, and after two, it is completely healed. He *has* acquired heartache, though, which is not covered by this system.

By the cover of night, "Dead Meat" Hamish and the other soldiers wade ashore from the landing boats. They have been making silent progress across the landscape when the soldier next to Hamish suddenly steps on a mine. Hamish is flung 10 metres in the air and lands brutally, alive but not looking it. Groaning painfully, he rolls onto his back - and triggers another mine. Again, he is flung several meters across a ridge and lands in front of an enemy truck. He is then run over. As Hamish is lying there, smeared across the road, He thinks "not again!" as he loses consciousness.

This is an example of multiple wounds. As his mate is killed by a mine, Hamish sustains 16 damage, which is a traumatic wound. Hamish's player rolls Health against Superb difficulty and makes it - the unlucky soldier shielded most of the blast. Then, Hamish is blasted by another mine - a direct hit. This time it's 20 damage and Legendary+1 difficulty. Since Hamish has Great Health, The player wins it again with another lucky roll. The GM rules Hamish hit the trigger with his knee, and his left leg is blasted off. He is then run over by a military truck, crushed for 17 damage by several tonnes of vehicle. His chest and most of his internal organs are crushed, but his heart still lurches on, since the Resistance difficulty is "only" Superb. The player can be glad no wound penalties are applied to the Resistance roll or he would be in trouble. Hamish is still very much dying and in enemy territory, though.

A Treasury of Magical Weapons
Monday, November 07, 2005

by Mike Harvey (gm @ dsl-only .net)

It's Only a +1 Sword...

Many games describe magical effects or items in terms of "plusses" to attack, damage or defense. While this is easy to quantify and requires minimal effort from the GM, it can result in very bland items that mean little to players.

New ***Fudge*** GMs and players often try to do the same thing in their ***Fudge*** games, only to discover that it can throw things way out of balance. In ***Fudge*** even a mere +1 can be very powerful. This can leave people at a loss to convert their favorite adventures or characters, and may even convince them that ***Fudge*** is hopelessly "broken."

I went through this same process in several ***Fudge*** games and learned the same lessons. This set me on a search for alternatives and sparked discussions on the Fudge List discussion group. The result is in this article.

Having cut my teeth on ***D&D***, I am personally fond of random tables and lists of things. Since this article is targeted primarily at other GMs who come from such backgrounds, I have presented it as a set of tables you can roll on or pick from.

Try the Handy Dandy Sword-o-Matic!

For an instant item, roll one or more properties from the following lists, or just pick something that looks like fun. These lists can easily be expanded by looking in your favorite FRPG... especially ***AD&D***.

(You do have a d30, don't you?)

Basic Abilities

1. Magic weapon can strike otherwise invulnerable creatures (JH)
2. Unbreakable artifact
3. Never rusts or becomes dull
4. Grants 1 Fudge Point per combat
5. Grants Great weapon skill (not useful if you are already Superb)
6. Wielder is never affected by wound penalties during a fight
7. Tiebreaker power, ties go to the wielder for one point of damage (JH)
8. Automatically parries one blow per round
9. Silvered weapon, can strike were-creatures (PM)
10. Cold iron weapon, negates magical spells & defenses
11. Glimmers in the presence of specific enemies
12. Intelligent talking weapon
13. Floats on water; handy if you can't swim!
14. Boomerang ability (when thrown)
15. Truthful weapon, wielder can see through lies and illusions
16. Shatters opposing weapon (or shield) on any "tie"
17. Grants two attacks per round; also lets wielder run quickly
18. Grants +1 armor to wielder
19. Grants the ability to see in utter darkness when wielded
20. Holy weapon: wielder must serve a god, but gains the ability to work miracles, possibly other powers. It is not wise to abuse these abilities.
21. Wielder can become invisible by spending one Fudge Point
22. Legendary blade, impresses NPCs who wish to help the wielder
23. Legendary blade, dismays certain foes, causing fear and possibly flight/surrender
24. Holy Blade, wards against evil enchanted creatures
25. Grants Legendary strength to wielder
26. Immunity to fire/acid/cold/whatever (pick ONE)
27. Grants Superb leadership
28. Exudes a palpable sense of dread (Great will to resist, causes -1 morale)
29. Cleaving: no penalty when facing multiple foes

Damage Bonus

1. Grants +*n* advantages; each advantage negates one '-' die (MW)
2. Grants +*n* bonus dice; each bonus die ignores '-' results (B)
3. Grants +*n* re-rolled dice (MW)
4. Roll *n* dice, count only the highest four (E)
5. Has a 1/6 chance to do one bonus point of damage (MW)
6. Grants flat +1 bonus (this is a very rare and powerful weapon)
7. Cleaves through armor like butter.

8. Makes solid blows, all grazes are treated as wounds (JH)
9. Flaming, double damage versus "cold" creatures; also useful as a torch, or for lighting fires
10. Frosty, double damage versus "hot" creatures, grants wielder immunity to temperature extremes
11. Destiny, weapon will **slay** one specific creature with a single strike, but after that becomes non-magical
12. Drinks souls, each five points of damage dealt grants the wielder one Fudge Point
13. Bane, any of the above damage types, but only against a specific class of creatures
14. Scale-piercing, ignore Scale difference, wonderful against dragons and giants
15. Delivers painful wounds, wound penalties are doubled
16. Any natural roll of +4 automatically severs a limb
17. The weapon finds a "chink" in armor and bypasses it on any relative degree of +2 or better.
18. Sunblade, weapon glows so brightly it causes permanent blindness to foes. If they avert their gaze, wielder may strike unopposed at difficulty Poor. Wielder is immune to the light and can see normally.
19. Might, wielder gains +2 scale for the duration of the fight.
20. Peacemaker, weapon causes loss of consciousness on any successful strike (even if it does no damage) as if incapacitated. Unconsciousness lasts one round, plus a number of rounds equal to the relative degree of the hit.
21. Hammering weapon, stuns foes for one round, they can defend but not attack
22. Darkenblade, wounds inflicted never heal
23. Holy blade, double strength bonus against evil enchanted creatures
24. Inflicts disease on any Superb strike (resisted by Health)

Curses

1. Always appears in your hand in a fight, whether you want it or not
2. Constantly sings or murmurs to itself
3. Forces the wielder into battle (Great Will roll to resist)
4. Drives wielder berserk in battle (Great Will roll to resist)
5. Causes hostile reactions in potential foes
6. Destined to betray wielder at inopportune moment
7. Backbiter, on any naturally rolled result of Terrible or worse, weapon strikes wielder with relative degree +2
8. Causes bad luck in non-combat activities
9. Weapon is watched by powerful evil entities
10. Weapon is the "focus" for some evil god, who demands service
11. Weapon has an evil reputation, causing distrust
12. Weapon turns wielder into undead, very slowly
13. Frost weapon, causes wielder to be uncomfortable in warm weather
14. Once taken up, cannot be sheathed until it draws blood
15. Weapon drinks blood, no game effect other than to horrify any onlookers. Bonus: it is self-cleaning.
16. Practical joker weapon sometimes makes embarrassing comments, like "Help, I've been stolen!" or "You're ugly, and stink too."
17. Weapon powers are unreliable, and sometimes they do not function
18. Special powers only work for one hour after weapon has tasted blood, or for one day after killing someone
19. Weapon is very heavy, requiring Great strength to wield (and reducing damage bonus from strength by two points)
20. Weapon is absurdly decorated in gold and jewels, and it seems like people are constantly trying to steal it
21. Owner attracts the attention of members of the opposite sex only when unwanted, but never when desired
22. Weapon merges with the wielder's hand and can never be removed without severing the member
23. Very powerful weapon leaves wielder weak and fainting after being used
24. Destined to slay wielder's beloved
25. Grants wielder an undesired or embarrassing skill at Legendary
26. Wielder takes on appearance of weapon's infamous creator and is fated to fulfill the same destiny; is mistaken by everyone for the original, and even magical creatures are fooled by it
27. Wielder afflicted by seemingly unrelated events; random nosebleeds, attacked by chipmunks, etc.
28. Wielder becomes vulnerable to silver, cold iron, asthma, etc
29. Wielder has -1 on all spell resistance rolls
30. Dancing weapon, forces wielder to dance

Credits

B - Bill E - Eppy JH - Johann Hibschman MW - Mitch Williams PM - Peter Mikelsons

Using a method like this virtually guarantees that no two weapons are alike, so each one should be a rare treasure. Very powerful weapons can be balanced by severe curses. But minor weapons can still be interesting: a magic sword which detects lies and illusions and which glimmers in the presence of enemies is still very useful, especially if that's the only magic weapon the party owns. Also weapons are more interesting if each one follows a "theme" and has assorted minor powers that fit that theme.

Conversion Tips

If you are converting an existing item, the first question to ask is "why am I converting this?" It if is something in a module, consider just tossing it out and creating an entirely new replacement. If an items already has a history in the campaign however, you may need to convert it.

Often in a game supplement, a magic item will have a grandiose name, a cool picture, a vivid history... and then note lamely that, "this is a +2 sword," or, "a staff of striking." In other words, the mechanics often don't fit the description. So toss the mechanics that were a kludge in the first place, go back to the original description and devise something unique and cool. This is ***Fudge***; you are limited only by your imagination. For that matter you may not even need mechanics, just take the plain text description and picture and use that. Undefined and mysterious magic is by far the most intriguing.

For arms and armor, consider how it is used: does the character use it primarily for offense, for defense? Does he use some abilities and ignore others? Does he have a reputation for rolling well or poorly when using it? Does the item tend to play a major decisive role in the game, or is it just another tool? What you want to do is capture the flavor of the item. Give it powers that reflect how it is actually used, and how much difference it makes. A +4 sword sounds powerful, unless the warrior already has +17 in bonuses from other sources, in which case it is almost negligible.

Also consider how the rest of the campaign is converted. How do character abilities and enemies compare to the originals? Have you rebalanced the campaign in any way? Be sure to rebalance any items in the same degree, otherwise a strict power-for-power conversion may be unbalancing.

Finally, in some games characters carry a virtual arsenal of generic, nameless, and often expendable magic items. Consider "thinning" the arsenal to a handful of the most salient items. What is it that identifies the character? That is what you want to focus on.

Once you have decided what to discard and what to keep, and how much it needs to be rebalanced, give it a name, a history, a reputation, a theme, some quirks. Do this before doing any conversion. It needn't be elaborate, a paragraph is fine, but each item should have its own unique personality. Now, keeping in mind the character who wields it, the general power level, how it is used, and the theme/history, give it unique powers that support and reinforce each of these. And as a final touch, throw in a quirk or two, something very minor that doesn't affect combat balance, but that makes it even more unique.

Fudge Abstract Funds
Tuesday, June 01, 2004

by Duke York

Introduction

From its earliest beginnings, roleplaying has been about acquisition. Whether it's a simple lust for gold or a more altruistic desire to fund an escalating campaign against ever more pernicious evils, most great heroes are peddlers at heart, searching their loot for whatever gives the most plusses and trading the rest for gain.

Unfortunately, this horse-trading can slow down the actual business of the game - adventuring. Fudge can offer a quick, easy way to keep things flowing smoothly by assigning Terrible to Superb levels to monetary values. When you expand on this, you can have an entire game where the players never have to write down a single monetary value. Even better, the GM never has to detail how many gold pieces are in the dragon's hoard or how many credits the zaibatsu's secret databanks are worth.

Assets

Everything a character possesses, from a laser-armed space destroyer to an individual copper farthing, is an asset whose value can be found on the following chart:

Fudge Level	Modern U.S. Dollars
Terrible	$1 -- $5
Poor	$6 -- $25
Mediocre	$26 -- $125
Fair	$126 -- $625
Good	$626 -- $3,125
Great	$3,126 -- $15,625
Superb	$15,626 -- $78,125 And so on.

Notice that each level is roughly five times the previous level. This means that five assets of one value are equal in value to one of the next highest level. It also means that most attempts at bargaining under this system are bound to failure; if someone offers you a Good price for a used car (around $2,000), you're not going to be able to haggle them up to a Great price (around $10,000). If you want to trade to fixed-value assets, you'll need to find to assets that both parties agree are in the same price range, or, alternatively, gather more than one asset.

Liquid Assets

Fixed assets (such as pots and horses) have one major disadvantage; they can't be divided into smaller assets without changing them completely. This leads to the absurdities of the barter system (*"your change is three chickens and a duck"*) and huge losses of value (trading a Good value sword for a Mediocre value cart horse because you need to ride). To solve these problems and facilitate trade, societies around the world have invented liquid assets. The most obvious liquid asset is simple cash, but checking accounts, lines of credit and bags of gold dust can be divided and traded in small parts in much the same way. Even silos full of grain or tankers full of oil are liquid assets because their owners can split them into tiny amounts.

Liquid assets have values the same as fixed ones, so a purse full of copper and silver might be a Poor-value liquid asset, while a money-market account might be a Good asset. The advantage of the liquid asset is that you can buy a mug of ale or a laptop and still have value left over.

When you buy a fixed asset with a liquid asset, if the fixed asset is the same value of the liquid one, you get the fixed asset and a liquid asset of one value less. (This is your change; if you use your Good value money market to buy a Good value Laptop, you have a Fair value money market.)

If the fixed asset you're purchasing is of lower value than the liquid asset, then make a check against the value of the fixed asset. If that check is higher than the value of the liquid asset, the liquid asset goes down one level.

Of course, if the liquid asset is of lower value than the fixed one, it's impossible to buy it.

Example:

Cromrad, the Barbarian, is carrying all of his worldly possessions with him, including a purse with a Good amount of cash. Unfortunately, these possessions do not include a sword, which he lost slaying the great Sandbourne Beast. His first stop in the decadent eastern city in which he finds himself is to purchase new arms; one of those strange curved swords everyone here is carrying costs a Good amount; Cromrad's purse has a Fair amount remaining in it.

Next Cromrad spends the night drinking and wenching. Considering the types of taverns that our hero frequents, the GM decides this is costs a Mediocre amount. Cromrad's player (or the GM) rolls a Mediocre versus a difficulty of Fair. When a +2 comes up on the dice, the value of Cromrad's purse drops down to Mediocre and Cromrad needs to find some loot, fast. If you add a liquid asset to one you already have, roll against the value of the liquid asset you're adding. If the result is larger than the old asset, that old asset goes up one level in value. This works the same if you're adding an asset of the same size, as well; you need to roll a +1 when adding together two Fairs to get a Good, for example.

If you somehow manage to find a liquid asset that's larger than your current funds, you can add your current funds to your new amount instead. This is another of the great benefits of liquid assets.

Example:

After a little sword-point negotiating, Cromrad takes the purses off of two low-level thugs. He finds, to his disgust, that they're worse off than he is; they only have Poor assets between them. His player rolls a -1 when he combines their purses; he'd need to roll a +2 (getting degree of Fair) to increase liquid assets from Mediocre to Fair.

He decides to take a bigger risk next; he follows rumors of a lost temple buried in the sand, protected by unspeakable ancient evils. What he finds out in the desert he never says, but he does return with a ruby the size of a polver's egg, which he pawns for a Great amount of money. Since he's combining the two amounts of money, he can roll when he adds his old purse to the new windfall; he lucks out and gets a +4, meaning that the few coppers and silvers he had with him was enough to push the money from the gem up into the Superb range

Conclusion

With these skills, you should be able to do just about every basic economic transaction characters need. You can buy, sell and trade, and never have to write down a number. If you want to stretch yourself, you can find other uses as well. Perhaps you could model experience with a liquid asset, so that when a character performs a heroic feat her player has to roll to see if she learned anything from it. Or, perhaps a wizard's store of magical power is a liquid asset, doled out to work spells with a straight Fudge difficulty. As with Fudge itself, the possibilities are endless.

Building the Better Spaceship
Saturday, May 01, 2004

by Elliot Schutjer

What do you think when you think of the science fiction genre? Do you think of strange alien cultures? Do you think of dashing heroes fighting space pirates? Do you think of wondrous new technology? Well, I do and I also like having these things in my Fudge games.

But, how do we get to these strange new alien cultures and fearsome space pirates? How do we showcase amazing technological achievements? The answer is a staple of science fiction: the spaceship. The spaceship is present in one form or another in almost every popular sci-fi setting, from *Star Wars* to *Transhuman Space*.

You'll notice that I use the phrase Starship, Spaceship, Spacecraft and Ship interchangeably throughout the article; this is done for clarity and adaptability.

What is a Spaceship?

Simply put, a spaceship is a vehicle that lets people traverse the lonely void beyond the sky. This is a rather boring definition, as it is way too broad. Science fiction has been around a long time and so have science fiction roleplaying games, the image conjured up by the word **spaceship** has changed through the years.

In the novel *The War of the Worlds*, H.G Wells envisioned Martians invading the Earth. They came in metal cylinders that fell to earth like meteors. These early spaceships were propelled not by an engine; instead, the cylinders were shot out of a giant Martian cannon, aimed at the earth by some malevolent intelligence.

Of course, this fanciful tale of Martian invasion was written in 1898. Attitudes towards spaceships and space travel have changed a lot in the last century. Early science fiction stories brought people all around the world to sit near to their radios to listen to the exploits of their favorite pulp heroes flying a rocket ship around the solar system. In the middle of the century, attitudes began to shift again; science fiction became more and more popular as the Earth entered its own space age. The rocket ships were replaced by the fanciful starships of *Star Trek* and then the vicious dog-fighting spacecraft of *Star Wars*. As the 20th century came to a close, we no longer have any dominate style. We have rocket ships, we have star cruisers, and we have all this and more.

Attributes for Spaceships

Like the characters that use them, spaceships will be represented with Attributes to measure their capabilities. All starships have 2 primary Attributes, Hull Strength and Scale, although only Hull Strength works the way a normal attribute for a character does.

Hull Strength

This is a measure of the ship's durability, similar to a character's Damage Capacity. Subtract this number from all damage taken or add to the damage suffered if the Trait Level is negative. You may also need to make Hull Strength rolls when encountering dangerous cosmological phenomena or any other time that the ship's structural integrity is being threatened.

Scale

A number between 0 and 10 which represents the size of your ship. Scale is provided in a simplified form over what is discussed in the rules provided in the Fudge rulebook and will be discussed in greater detail below.

Ship Gifts and Flaws

In addition to Attributes, ships will often have Gifts to represent advanced capabilities and Flaws to depict any shortcomings. In general, a Gift should either grant a +1 bonus or a special ability. A Flaw should penalize an action with a -1 penalty or limit the craft in some other way.

Gifts can also represent certain things that are rare in the setting, such as hyperspace drives or other forms of advanced technology. The following is a list of Gift and Flaw examples:

Agile: The spacecraft is more agile then normal; it provides +1 to all evasion rolls or piloting rolls involving quick maneuvering.

Faster-Than-Normal: The spacecraft has better engines and travels faster than most ships of equal mass.

Sharp Sensors: The spacecraft has a superior sensor array and can see things much better. This adds +1 to all sensor and detection rolls.

Heavy Armor: This adds +1 to Hull Strength for the purpose of damage resistance.

Junker: The ship is patched together with different parts and systems. When the ship takes damage a random, minor system may fail.

Unusual Quantum Signature: The ship's quantum hyperspace drive attracts strange aliens that live between the realities of the universe. These strange aliens are a thorn in the side of the characters, a nuisance at best, and a menace at worst.

Spaceship Combat

Spaceship combat is the most rules intensive part of this article and will be detailed in full. This isn't to say that shooting plasma beams at each other is the end-all-be-all of spacecraft, but it does require more rules than fixing the engines, for example.

The basics of ship combat are simple. One spaceship uses one of its weapons to try and hit another ship. The defending ship either evades the shot or is hit and takes damage. Larger ships are generally bulky and so difficult to maneuver they are easily hit by fighters and smaller ships.

Each attack is handled in the following manner:

The attacker's 4dF rolls + Gunnery skill + any other applicable modifiers
vs.
The defender's 4dF roll + Piloting skill + any Scale differences or other modifiers

Now, we should go into what all of those means.

Attacker refers to the person doing the shooting. They may be sitting in an uncomfortable ball turret, directing the gun manually, or they may be sitting in the comfort of the ship's command area, controlling the gun through an advanced targeting computer.

Defender refers to person piloting the other ship. In cases where there are a group of people piloting the spaceship (as may be the case in a huge capital ship), average the piloting skills of the characters involved.

The gunnery and piloting skills refer to a character's skill with spaceship weapons (there may be several skills in your game) and moving the ship in combat, respectively.

But, the most important thing that you must note is Scale. Scale is used a bit differently here than in the standard rules. Here it only refers to the size of the spaceship, but on a much more abstract level than in the standard rules. An exact size is not derived from a Scale rating and these ratings as they may vary from game to game, but a good rule of thumb is that every Scale is about 2 times larger then the Scale that preceded it. So, a Scale 3 corvette is twice as large as a Scale 2 courier spaceship, the corvette is 4 times larger then a Scale 1 heavy fighter and 8 times larger then a light fighter. Note that this breaks down at the higher Scales (near 8, 9 and 10) as spaceships will get extremely massive. I will provide examples for most Scales from popular culture in a minute.

The Scale difference works like this: if your ship has a small Scale and you are shooting at something with a large Scale, your opponent subtracts the difference in Scale ratings from their Dodge rolls. On the other hand, if your ship has a large Scale compared to your opponent's ship, your opponent can add the Scale difference to their dodge rolls. This models smaller ships that are harder to hit than huge, lumbering vessels.

Weapons will have a Scale rating as well. Most large capital ships will have an array of smaller weapons; usually scale 1 or 2, which can be used to target fighters and other smaller craft. In this case, you will use the Scale of a weapon in place of the ship's Scale when determining attack success and damage.

Example Scales

With this Scale system, the bottom end of the range has been set as a small, fighter spaceship.

Scale 0 -- Light Fighter: A small agile fighter with few weapons and even less armor. The A-Wing from Star Wars is a good example, as are the 4 winged fighter ships from Babylon 5. Light fighters are usually piloted by one person, two at the very most.

Scale 1 -- Heavy Fighter or Small Shuttlecraft: Bigger than light fighters but still relatively small. Heavy fighters and shuttlecraft can only hold a few people.

Scale 2 -- Medium-sized Shuttlecraft, Courier or Scout Ship: Now you are getting out of tiny fighter territory and into true spaceships. This a fairly nice ship for a small player group, though it may not last long against much resistance in combat.

Scale 3 -- Corvette or Light Freighter: A true spaceship, the corvette is fairly large, but still not large enough to take on capital ships. The Millennium Falcon of Star wars is a good example of a ship this size. This is a great sized ship for player groups; it is big enough for most adventures, such as the exploration of planets or ferrying cargo, while not overwhelming in size, like a capital ship.

Scale 4 -- Large Corvette: Another good ship for player characters, much like Scale 3 except, well, bigger.

Scale 6 -- Heavy Destroyer or Heavy Freighter: A dedicated capital ship, the heavy destroyer will have multiple weapon systems and will most likely be a difficult opponent in combat. A freighter will have a huge cargo bay in place of weapons.

Scale 8 -- Bulk Freighter or Cruiser: The cruiser is a much bigger version of the destroyer, hosting many weapon systems and even a few fighter craft. Bulk freighters are huge vessels that are most likely the standard cargo carriers in the safe and secure regions of space.

Scale 10 -- Dreadnought: These huge ships form the core of any fleet. Their massive weapon systems, almost impenetrable armor, and their army of soldiers stationed onboard make them a fortress in space.

Scale 11+: Any Scale above 10 should be reserved for one-of-a-kind ships and super powered alien spaceships.

Shooting Example

Danzig, the ruthless space pirate, has cornered a light freighter in his space fighter. Danzig's custom fighter is Scale 0, while the larger and bulkier light freighter is Scale 3. As merciless as his reputation, Danzig shoots his fighter's laser cannon at the freighter. The laser cannon's Scale is the same as the fighter (Scale 0) and Danzig's gunnery skill is Great. On the receiving end of this attack is the crew of the light freighter Acton. Even with their sizable bulk in comparison to the fighter, they hope to avoid the laser with some fancy piloting. The pilot of the vessel has a skill of Good.

Danzig's player rolls and gets a +1 result. He adds his gunnery skill of Great for a final result of +3. The pilot of the Acton tries to dodge, rolling a +3 on his dice, when added with his skill, results in a total of +4. But wait, since the Acton is much larger than Danzig's fighter, the pilot must subtract the Scale difference from his dodge roll. The difference is 3, lowering the Acton's final dodge result to +1. The ruthless Danzig has scored a hit.

Weapons damage

Weapon damage is also handled a bit differently from character combat. Instead of adding a damage bonus to your threshold roll, you simply roll a die and add your skill level. The opponent then subtracts their defenses (armor, hull strength, etc) from the damage and applies the damage to their ship's wound track. Of course, bigger weapons will do more damage to smaller opponents and also do less damage to opponents in even larger ships. As a result, smaller defenders will subtract the Scale difference from their defenses and larger defenders will add the Scale difference to their defenses.

Every weapon in this system will have an assigned die for the purposes of determining damage. Usually weapon ratings will range from 1d4 to 1d12, with 1d4, 1d6 and 1d8 being by far the most common. The specifics of these weapons will vary from setting to setting. In one setting, a laser cannon might do 1d6, while in another, it might be 1d8.

The basic weapon damage roll is this:

Weapon's damage die result + Attacker's gunnery skill
vs.
Defender's Hull Strength + or - any Scale differences

After subtracting the defenders hull strength, Scale differences and any other modifiers, you apply that damage to the ship as if it were a character, using a Wound track. 1-2 is a Scratch on the armor, 3-4 is Damaged and -1 to most ship systems, 5-6 is Very Damaged and -2 to most ship systems, 7-8 Disables the ship until a Superb repair roll can made and finally, a 9+ result usually results in the ship being Destroyed. At this point, the ship may explode in a ball of flame, simply fall apart, or just shut down.

Ships are hardier then characters and can take 4 Scratches, 2 Damaged results, 1 Very Damaged result and one Disabled result before being Destroyed.

1, 2	OOOO	Scratched
3, 4	OO	Damaged (-1)
5, 6	O	Very Damaged (-2)
7, 8	O	Disabled
9+	O	Destroyed

The combat system presented here differs from standard Fudge combat by separating armor and dodging, which the original combat system does not. In the original combat system, a small fighter would easily destroy a larger ship, since the larger ships scale would make it an easy target, giving the small fighter an incredible damage threshold. While you could argue that this is realistic, the system provided here emulates the reality of a large chunk of the science fiction genre.

Damage Example

In the earlier example, the pirate Danzig, piloting a space fighter, had just hit the light freighter Acton with a blast from his laser cannon. To calculate damage, Danzig's player rolls the laser cannon's damage dice (in this case 1d6) and adds Danzig's gunnery skill (+2), resulting in a total of 5 damage, a solid hit.

The Acton has a hull strength of Mediocre, being a non-combat freighter, but it's still much bigger than the fighter. The Acton's hull strength (-1) is added to the Scale difference between the craft (3) for a total of 2 points of damage resistance (any armor plating or other defenses would also modify this number). The 2 pts is then subtracted from the laser cannon's 5 damage, causing 3 damage to the freighter. The freighter is now Damaged, which will cause a -1 penalty to most actions until the damage can be repaired. Things do not look good for the Acton.

Where does this break down?

A simple system like Fudge cannot perfectly model reality, much less the whole range of reality found in science fiction settings. For this reason, starship combat breaks down in three ways. Two of the ways involve Scale and the third applies to almost all spaceship combat systems in almost every role-playing game on the market.

Scale is, in my opinion, the most complicated concept in these rules. You add the difference to your dodge rolls if you're in a smaller ship, subtract it when you're in a larger craft, and then you reverse that mechanism when determining weapon damage. Weapons will sometimes have their own Scale, further complicating things! There are two main rule breaks in this system; the first is the relation between starship scale and character Scale, the second accommodating super massive spacecraft into the Scale system.

Unlike the somewhat exacting Scale found in the Fudge rules which handle character size, the spaceship Scale system is much more abstract and arbitrary. I did this intentionally so that the system could accommodate many different sizes and shapes of spacecraft. But, as a consequence, it then becomes difficult to determine what happens when a spaceship Scale weapon hits a character Scale person or object. Since characters rarely get hit by spaceship weapons, most of the time this isn't a problem. A Game Master could simply count the character as dead or mortally wounded. Or, a Game Master could simply add 4 to the spaceship scale to convert it to character scale.

Scale also becomes an issue when trying to accurately model ships that operate on a truly massive scale, such as a 5 mile long battle-cruiser. Should it be rated as Scale 10, 20, or even 30? If it is determined to be Scale 20 (or around that area), it will be almost completely impervious to damage. To fix this, you might say that any ship approaching the higher levels of the Scale range, such as the 5 mile battle cruiser, is made up of a number of individual sections, all of which are Scale 10. Fighters and other ships would only be able to inflict damage by targeting these smaller sections of the huge vessel.

Lastly, Scale also comes into play when attempting to role-playing starship combat. Simply put, large capital ships are going to have dozens and dozens of weapons, making attack rolls cumbersome and impractical, especially for a system as freeform as Fudge, turning an encounter into a wargrame. When dealing with NPCs, this issue can usually be glossed over, but with PCs thrown into the mix, there will often be more demand for the specific effects of each weapon.

Unfortunately, there aren't many ways of getting around this problem. As a Game Master, you could simply keep such ships out of the hands of the players and limit their appearance as adversaries. Alternatively, you could cut the amount of guns on a capital ship by 4 or more, ruling that the arc of fire on each gun (or turret) limits the total number of weapons that can be brought to bear on any one foe.

Faster-than-light Travel

Do your spaceships have faster-than-light drives; engines which allow them to quickly travel between star systems? Most star spanning games have these technological items in one form or another. The method used for FTL travel and its capabilities and idiosyncracies will most likely alter the entire structure of a universe, so it's important to really understand what sort of FTL travel you wish to have in a campaign and how it will impact the galaxy you have designed. I have a few examples below.

Wormholes

Wormholes are holes in the fabric of space and time that lead to other places. A ship would simply have to go into the wormhole and it would reappear somewhere else. Most wormholes will be static and unchanging, always going to the same place. However, some wormholes could change their openings and closing from time to time. Entire networks of worlds could be bounded together by a web of wormholes.

Using wormholes as the primary FTL in your campaign has several advantages associated with it. A network of worlds connected by wormholes make mapping the campaign universe a lot easier, since you must detail only the worlds included in this network. This also makes it easier for you to restrict the setting by setting boundaries.

Wormholes are a good choice for FTL travel in a hard science fiction setting, since they only *sort of* break the laws of reality.

Of course, using wormholes will also change the structure of a campaign. The wormholes in most systems will be guarded heavily. Don't expect Captain Beef Wallop and his ragtag band to be able to escape the home planet of tyrannical space lizards when those same space lizards have a few dozen capital ships guarding the only way in or out of the system.

Also, having a static network of wormholes, especially a small number, makes the campaign rather closed. This can be a boon for an inexperienced GM, but it can also hinder creativity, as all the planets that can be encountered in the game must be part of a network. There are many ways around this, such as people being able to discover new wormholes, or civilizations possibly learning how to create new wormholes to expand their reach into the stars (this applies to permanent wormholes, ships that simply create their own wormholes should just use the hyperdrive guidelines).

Hyperdrives

This type of faster-than-light travel focuses on engines which enable spaceships to travel faster then the speed of light, either by bending space, tearing a hole in space, or by just bypassing the entire issue of the light barrier by flinging the spaceship into a different dimension. Many popular science fiction settings use these sorts of engines as this design allows for very wide open settings. A ship can get almost anywhere while still maintaining some suspension of disbelief.

There are, however, a few down sides to the hyperdrive and its ilk. The first is the fact that the setting becomes very open, even infinite. It is quite easy for the players to go to unknown and undefined areas, forcing the GM to think on her toes while maintaining the overall feel of her universe. The GM will most likely have to set limits on these kinds of engines to restrain the reach of the players (like fuel, time to operation and other things of that nature).

Old Timey and Miscellaneous Types of FTL

This is a somewhat catchall category for things that simply don't fit in the two categories provided above. The two big ones are simply getting rid of the light barrier and using generational spaceships.

Simply doing away with the "light barrier" is the FTL travel method often overlooked in today's science fiction games. In the olden days of science fiction, many writers didn't see why there had to be a speed limit in space, and so they simply presented their stories without any limits on space travel. Your ship goes as fast you can make it go. I would advise against putting this in anything but an old time space opera game, but it is still a nice change of pace for some games.

A generational spaceship, on the other hand, does not actually travel at faster-than-light speeds. It is simply a huge ship, packed with people (sometimes held in suspended animation), that makes a slow, lonely journey between the stars at slower-than-light speeds. On the other hand, the spaceship could be going faster-than-light, but even traveling at such speeds could seem quite slow depending on the destination of the ship.

What Kind Of Game Do You Want?

In a science fiction adventure, featuring lots of spaceships, it should come as no surprise that those spaceships will help define the setting in the minds of the players. Therefore, it is of the utmost importance that you design the spaceships used in your campaign setting with care.

I will outline three major styles of spaceships and discuss the ways in which their "technology" affects the setting. These three styles only scratch the surface on what is possible; you can mix and match them, create entirely new styles of spaceships, and modify other ideas to fit your own vision of the world of tomorrow. The three styles discussed here are Old Timey, Realistic, and finally, Space Opera.

Old Timey is likely the least realistic of the three styles presented here. Based on the old radio plays and comic books of the 1920s and beyond, spaceships are most often described as actual rockets, flying through space on kerosene or other fuels.

The advantage of this style is that you can throw realism to the wind and concentrate on telling an exciting story. Another advantage is that most of the ships in the Old Timey style are usually about the same size, which will make combat a little easier. Armed with death rays and atomic warp engines, the rocket ships of yesteryear fly into the present.

The Realistic style is quite the opposite of the Old Timey style. The Realistic style strives to emulate what might be, the speculative fiction of the present. The spaceships of the Realistic style are not flashy and they are usually fairly small. Typically, this kind of campaign tone doesn't allow for settings with faster-than-light travel, but if FTL is an option, then it too lacks the flash of the other styles. Combat usually involves long ranged lasers, projectile guns, and guided missiles.

The watchword of the Realistic style is mundane. The main advantage of the style is that is presents a fairly believable universe, populated by fairly believable things. Another advantage is eerily reminiscent of the Old Timey style: most of the ships are relatively small and most of them will be fairly similar in size.

In between these two extremes we find the style used in most popular science fiction: Space Opera. Ships can be of wildly different sizes and science can be stretched as far as you want. A caravan of freighters warping through a nebula, being chased by pirate destroyers, is a good example of the style. Fighters swooping through space and strafing larger ships with their particle blasters are also good examples.

The advantage of this style is that you can include pretty much anything. While a broken down, rusty merchant vessel might be out of place in the Old Timey style, it would fit right into the Space Opera style. While a 300 mile wide alien city ship would completely wreak the mood of a Realistic style game, it would be perfectly at home in the Space Opera style.

Tricks and Tips

Don't be afraid to think really big in regards to spaceships, especially if your characters will never be getting any of the truly huge craft. Want an 800 mile long battle cruiser that patrols the wormhole near the edge of the solar system? There isn't much stopping you if you want to put this big honking ship in your campaign. So, don't be afraid to go overboard, especially if its a cinematic, space opera game.

Space monsters and space storms always spice up a dull voyage when they are used. This one may not work in most Realistic or even some Space Opera games, but it is fun when you can include them without disrupting the mood. You may have asteroid-eating worms the size of cities floating around in the void, or evil, dragon-like abominations that dwell in between reality in hyperspace. Space storms can also work well, although you may have to dress them up a little, calling them tachyon storms or something. These storms might just rock the boat or they could fling the ship into a whole different dimension. Another natural hazard could be black holes, collapsed stars that are so massive that even light cannot escape their grasp. Plus, nothing is stranger than when a lone science outpost radios into headquarters that a strange disc has been ejected by a black hole, then the outpost radio goes dead.

A good name is sometimes worth more then hundreds of words of background. Good names are a must for people, spaceships, guns, engines and planets. Unless your players are more scientifically adept then usual, don't be afraid to simply take some cool sounding word and putting it in. Take the word *ion* for instance; all it means is an atom or a molecule with a net positive or negative charge. Now put it in front of the word *Rifle* and then add the word *Phased* to the mix. You now have a *Phased Ion Rifle,* a name that most likely doesn't mean anything, but it sounds real enough that players can debate the physics of it shortly after using it to blow up the creepy, slime aliens from beyond Jupiter. Try taking a *sciencey* sounding word and putting *drive* or *engine* after it, now you have the name of a spaceship engine. If you're doing a retro style game (such as the Old Timey style mentioned earlier), you may want to customize the names to reflect the time period. If the style and tone has been taken from the 30s, use Kerosene Engines and other things that sound like they may be from that era. If you move up the implied technology into a more 50s and 60s style, put *Nuclear* or *Atomic* in the names. Naming is extremely important and it will convey the feel of the setting just as well as any 600 mile long ship or artificial ring world will do.

Putting it all Together

Cara has been putting off working on her game all week, but the players will be showing up soon and she has to think of a game to run. She knows she will be using the Fudge system and she knows the group wants to play in a space opera setting. For the last few weeks, Cara has run nothing but gritty cyberpunk games, so she has decided that she will run an epic space opera game for the group to mix things up a bit.

She doesn't want to constrain herself with a restrictive setting, so she envisions the characters exploring a small nebula on the edge of known space, most likely in a mid-sized spaceship. She decides that the characters will be working for a far-ranging corporation known as Stella Collegium, but she doesn't have enough time to flesh out the entire corporation, so she will concentrate on the ship.

Cara wants the players' ship to be small enough that will be awed by the wonders of the nebula, while still being big enough that they won't be trampled underfoot by them. She decides that their ship has a Scale of 3, about equal to a medium-sized corvette. She decides to increase the hull strength by 1 level since it is an exploratory ship in uncharted territory. Cara also adds a few gifts to individualize the ship and enforce the idea that it is an exploratory vessel. She adds *Sharp Sensors* and *large amount of supplies*. She also decides that the vessel will use a hyperspace-like engine called a *Warp Shockwave Drive* to propel the starship at faster-than-light speeds.

Name		Type	Explorer Vessel
Hull Strength	Good +1	Gifts	Sharp Sensors
Scale	3		Lots of Supplies Weapons

Next, she gives the exploratory ship a few weapons. She decides that the ship will have a main gun mounted on a turret and 3 smaller weapons for dealing with marauding fighters. She makes up a nice Scale 3 weapon called a *Plasma Ejector* and assigns it a damage dice rating of 1d6. The other three weapons are small laser cannons that are only rated at a Scale of 0 and do 1d4 damage.

Satisfied, Cara is ready to go, letting the players take on the responsibility of naming it. What will her players face tomorrow? Hostile robotic aliens from beyond reality? Nebula monsters lusting greedily after the sweet titanium treat floating through their territory?

Name		Type	Explorer Vessel
Hull Strength	Good +1	Gifts	Sharp Sensors
Scale	3		Lots of Supplies Weapons
		Weapons	Main Plasma Ejector Turret: Scale 3 (1d6)
			3 Small Laser Cannon Turrets: Scale 0 (1d4)

The Brave New World and the Ship of Tomorrow

The Spaceship is a fundamental unit of the space going science fiction genre. It is the boat of tomorrow, the ship that will carry us into strange new lands. It is this exploration that makes the spaceship possible and it is this exploration that fuels us to journey into the brave new world.

Engage Stardrive!
Monday, June 06, 2005

by Helge Lund Kolstad (helge @ nvg .org)

Space is vast. It is in fact so vast that our minds have trouble grasping it.

The nearest star to our own is Proxima Centauri, 4.3 light years away. There are two others, Alpha Centauri A and B, close to it. By astronomical terms, this is actually quite cramped. Nevertheless, it would take a conventional spaceship 80 years or so to get there. Even within our solar system, it takes light 1.3 seconds to reach Luna. The same light could circle Earth 40 times in one second.

Most sci-fi settings solve this problem by having a spaceship engine that cheats conventional physics in some way. You either go very fast while light effects play beside you, or your ship teleports in some fashion. This article is vaguely based on the concept of the Wormhole Induction Propulsion, or WHIP drive, which is a real theory proposed by Dr Eric W Davis of the National Institute for Discovery Science. Basically, the theory states that it's possible to create a stable wormhole and travel through it to another part of the universe.

This article will deviate from the theory in a few important ways, however. Therefore, I will not use the term "WHIP drive," but rather the more conventional "stardrive."

Distances and Scales

Light years are a common way to express distance in space. However, I will use parsecs (pc), which is the SI unit (International System of Units). Besides, it sounds more sciencey. One parsec is 30.857e15 metres, or 3.262 light years.

For in-system distances, I will use astronomical units (AU), which is a measure of the "average" distance between Earth and the sun. One parsec is 206,265 AU. One AU is 149,600,000 km.

For Scale purposes, I will use the Starship Scale introduced in Building the Better Spaceship by Elliot Schutjer. Using human-based scale on spaceships is just silly.

The Principles

There are four principles at work when engaging a stardrive.

a) The drive requires a power source of megalithic proportions to generate the required magnetic field. Therefore, engaging a stardrive is a rather costly affair. An appropriate power source is an anti-matter reactor or an enormous laser array, for instance. The reactor must provide a burst of energy, which will generate an appropriately powerful magnetic field. A high-energy laser creates a massive magnetic field when it passes through a dense plasma, which can be created by the laser itself. Such a power source simply needs an amount of raw material to vaporize into plasma.

b) Upon activating the stardrive, a wormhole throat will appear. This throat can range from small (enough to admit one ship) to gigantic (enough to admit an entire fleet). A larger throat will require more power.

c) When the wormhole exit is placed, the destination point will deviate from the intended target by a proportion of the distance travelled. This means that you can reach your target more or less spot on if travelling only a parsec or two, but will almost certainly end up far away from your destination on an intergalactic jump.

d) The wormhole can only be open for a certain amount of time, depending of the strength of the magnetic field. In general, a small wormhole can be maintained proportionally longer than a larger wormhole on the same power source. When the magnetic field is gone, the wormhole will collapse, and once established, the field cannot be reinforced.

How to apply this in game terms

Fudging a Wormhole

People wanting to use a stardrive will need an Astronavigation: Stardrive Operation skill. This is the ability to find one's way in space and of tuning the stardrive just right for one's purposes.

Wormholes will have a Scale, just as the individual ships do. Ships attempting to enter at the same time cannot have a combined Scale greater than that of the wormhole. For example, if two Scale 2 ships enter a Scale 6 wormhole, they will have plenty of room to spare, but if a Scale 3 corvette wants to join, one of them must wait.

Scale 0 ships are so small that they can slip in between the larger ships, though not in unlimited numbers. The GM should use sense in deciding this.

The wormhole is powered by a magnetic field, which cannot be reinforced once the wormhole is open. What this means is that it can only be maintained for so long. A stardrive will have a Duration trait on a normal Fudge scale. A Duration of Terrible means it can only admit one ship. Poor means it can let through two ships in a row, and so on. Legendary wormgates should be reserved for the crumbing remains of an ancient, yet advanced civilization or the like.

A wormhole's magnetic field will be generated by some sort of power source, which will contain a number of charges. Depending on the type of stardrive, it might or might not have the ability to recharge. If it does, the stats will say how long it takes to recharge the power source for another jump.

Stardrives will also have an Accuracy trait, and this is where the real distinction comes into the picture. Every time a jump is attempted, two rolls must be made: The operator must roll a Stardrive Operation check, and the stardrive an Accuracy check, against the following values:

Distance	Difficulty	Example
Assuming a starting point of Earth		
In-system jump	Poor	Mars, Jupiter, Quaoar
< 10 parsecs	Mediocre	Proxima, Sirius, Spica
10-100 pc	Fair	Arcturus, Capella, Canopus
100-1000 pc	Good	Antares, Rigel, Deneb
Intergalactic	Great	Neighbouring galaxies, LMC
Intergalactic	Superb	Distant galaxies, M81

If both these checks succeed, the ship will emerge at some point not too far away from where the intended destination was (the longer the distance travelled, the greater the deviation). If one fails, it will mean the exit is a fair bit off the mark, and will probably require a second jump to correct it. If both checks fail, either a gross miscalculation or a space-time anomaly has thrown the wormhole exit wildly off the mark, and it will require an Stardrive Operation check even to realize where it is. The distance will be about right, but the ship will have taken a completely different direction at some point. Intergalactic jumps will likely end up in the deep, dead space between galaxies.

Remember that interstellar jumps are very rarely accurate. Depending on the stardrive, it may be necessary with more than one jump to reach the target even on a successful initial jump. For the same reason, it's better to have one large wormhole than several smaller ones when transporting more than one ship. Even the best stardrive operator can't get it exactly right at such distances; the physical limitations on the technology are too great.

Adding a Bit of Crunch

Some GMs might feel that these rules are too abstract for a hard sci-fi setting. For them, I present here a more detailed approach:

Wormholes still have a Scale. Similarly, magnetic fields have one, which tends to be rather larger than that of the wormhole. This is because the wormhole can be maintained for a number of clicks equal to field Scale minus wormhole Scale. One click equals the time it takes to admit one Scale 1 item; a Scale 4 cruiser would spend 4 clicks. Scale 0 ships are so small that they take a negligible amount of time; however, the wormgate must still be open for at least one click. Again, the GM should use common sense.

Power sources will have a capacity and a max field rating. The max field rating signifies how large a magnetic field the source can generate in one go; the capacity shows how much energy can be spent in total before it is depleted. An antimatter reactor with capacity 60 and a max field rating of 10, for instance, will be able to generate six Scale 10 magnetic fields before it has to be be refuelled.

Wormgates and stardrive-equipped ships will have a max wormhole rating as well. This is the maximum Scale of the wormhole generated. A small wormgate equipped with the aforementioned 60/10 reactor might have a max wormhole rating of 6. This will allow it to create a Scale 6 wormhole for 4 clicks, or for instance a Scale 2 wormhole for 8 clicks. It will just barely admit a colossal Scale 5 freighter, but leaves two Scale 3 corvettes plenty of time to pass.

In place of an Accuracy trait, the Stardrive will have a number for this purpose. This is expressed as a negative power: 10e-8, for instance, means that the deviation from the target will be 0.00000001 of the distance travelled. Travelling from the Milky Way to M81 - a distance of approximately 4,000,000,000 pc - will result in an average deviation of 40 parsecs. Closer, but still a considerable distance from the intended destination!

When attempting an in-system jump - that is, from place to place within the same star system - the exit throat will be more or less spot-on if the navigator rolls a Stardrive Operation of Good or better. Even a Terrible result will only lead to perhaps an AU of deviation, which nevertheless is quite a trek on a conventional drive.

For interstellar jumps, a successful roll will place the exit throat at about the expected deviation for that stardrive. A remarkably good roll will place it closer, and a Terrible roll will result in the same as two failed rolls in the simple rules.

Ships and Wormgates

In civilized parts of the universe, most jumps will probably be performed by using wormgates. They are large, stationary installations capable of creating wormholes big enough for several ships. They will almost certainly draw power from a renewable source, and be maintained often, and manned by a skilled crew. Their main advantage is that they can admit several ships at a time. If each of the ships had an individual stardrive, they would likely end up very far from each other.

"Jump-ships" can also be used for this purpose; however, they have the disadvantage that they themselves must go through, and therefore must keep the wormhole stable for longer.

An in-ship stardrive will almost always have just enough of a maximum field rating to transport that particular ship. A Scale 4 ship will have a stardrive capable of generating a Scale 4 wormhole with a Terrible Duration. Power reserves might be enough for more than one jump, but then again might draw from the same source as the conventional drives. The stardrive accuracy will depend on the vessel's purpose: High for an interstellar explorer or capital ship, low for a shuttle or in-system freighter.

Although a stardrive comes in very handy for an independent explorer, it does take up a lot of room. In most explorer vessels, the stardrive takes up more than half the ship.

Examples of Stardrives

Wormgate Drive

These belong to large, stationary facilities that see a lot of use. Size is generally not a factor, but its magnetic field generator needs to be renewable. For this reason, most wormgates use arrays of high-powered laser or maser cannons and solar panels for power.

The gate itself is usually a ring-formed aperture in which the wormhole throat is formed. The ring needs to be large; it varies in size from stupendous to mind-boggling. Just the material technology is a challenge, as large structures tend to wobble and break from the tension.

Single Ship Drive

Ships that travel to other parts of the universe for exploration or military reasons cannot rely on wormgates, but have to have internal stardrives. The up side is that you don't have to take all kinds of ships into consideration, just the one you're travelling in. The down side is that large laser cannon arrays aren't practical anymore, and you have to use more portable, and therefore expensive, methods.

The drive consists of several extensible arms with superconductive coating, a jump core, and some kind of front shielding. When preparing for a jump, the ship extends its arms so they form a ring the size of the wanted wormhole throat. A charge is then detonated in the jump core - basically a shaped nuclear or antimatter blast which provides the needed power burst to form the magnetic field. This is why the front needs to be shielded.

Jump Ship Drive

A jump ship is essentially a portable wormgate. It can allow a lot of other ships to pass through the same wormhole, and is usually only practical in military context. There are three kinds: Ones that build a smaller, but stable wormhole, ones that themselves are built like a ring, and ones that can connect to others of the same kind for a larger aperture.

The first kind are essentially only equipped with a more powerful single ship drive, and larger dimensioning arms. The ship builds a wormhole, passes through itself, and then leaves it open for others to follow. Needless to say, jump ships of this kind tend to be quite large vessels.

A more uncommon kind is the ring-built one. They tend to build larger, less stable wormholes, and can allow other ships to pass through inside itself. These ships tend to have less mass, however, and can therefore not carry as many jump charges. This limiting factor tends to make them less popular. In these cases, setting the Scale of the ships can be a bit tricky. One might be tempted to give them a large Scale, well, because of their large scale, but remember that a) they tend to be flimsy structures, and b) other ships are supposed to pass through their wormholes at the same time.

Those which connect to form larger rings, however, are another story. They typically consist of an oversized laser array, a fusion power plant, and some form of conventional drive. The shape is in most cases slightly curved, and several of these ships interlock to form a wormgate ring. There is a minimum number of ships needed to generate a suitable magnetic field, usually six. Large fleets can make use of twenty ships or more.

51 Pegasi Wormgate

This is an example of a wormgate. The facility is located at the Langragian point L1 relative to the planet orbiting 51 Pegasi, a G5 class star a little more than 15 parsecs from Earth. The planet itself is a gas giant orbiting very close (0.05 AU) to its parent star, and is home to a gas mining company operating under hellish conditions. Gas from the refinery is transported in gigantic Scale 8 tanker ships, mainly to the Lambda Serpentis system.

The wormgate itself is a free-floating installation with a substantial crew. It faces the relentless sun, and so requires heavy shielding to keep from overheating. It activates fairly often, and so has a large solar panel array for recharging the four high-powered maser cannon arrays it uses for generating a strong enough magnetic field. Its batteries can sustain two jumps when fully charged. However, because emergency jumps might be necessary, the batteries are never drained below what takes to power up the wormgate once. Solar panels recharge the batteries at one charge every four Earth days.

The docking ring is capable of handling quite large vessels, but is a far cry from the military wormgates in the Sol system, which can move entire fleets. Its aperture can accommodate Scale 8 wormholes, which is sufficient for the tankers it services.

Crewing the wormgate are 12 experienced stardrive engineers. They have worked together for a long time, and are Good stardrive operators. When attempting a jump to the Lambda Serpentis system, however, they can be trusted to do a Great job. They get a lot of practice traversing that particular distance, after all.

The stardrive aboard the wormgate is somewhat ageing, but nevertheless does the job. It's an old model of Mediocre Accuracy, which, on the 21 pc jump to Lambda Serpentis, will usually place the voyager within a few AU of the destination. The wormgate engineers have petitioned for a Fair upgrade, but so far their request has been denied on grounds of not being able to generate enough immediate returns. There's middle management for you.

Stats Summary - Fudgey	
Power source	2 charges, recharges 1 in 4 days
Aperture	Scale 8
Duration	Poor
Accuracy	Mediocre

Stats Summary - Crunchy	
Power reserves	Scale 35, recharges 4/day
Power source	Scale 16
Aperture	Scale 8
Accuracy	10e-6

Bibliography & Further Reading

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Fudge Computer Security
Monday, October 31, 2005

by Jonathan Benn (jon @ nullnode .com)

Introduction

Fudge Computer Security is a guide to gamemastering roleplaying games in which computer security is featured, as well as a guide to roleplaying a computer cracker or a computer security operative. Adventures can take place in the present or in the future. The projected audience are gamemasters and players that know the basics of computers (e.g. know what files, programs and operating systems are), and want to learn more about how to run (and participate in) plausible computer security adventures.

Readers should be able to use ***Fudge*** Computer Security to learn some new computer security terminology (a glossary is included at the end) and then apply the Basic system to quickly handle security situations. Readers can then pick and choose which Advanced features to use -- if and when they want to use them.

These rules are written in ***Fudge*** terms both for the benefit of the ***Fudge*** community, and so that they can be easily converted into any other game system.

Why Is Computer Security Important?

"An internal IBM study regarding the potential market for a computer called the Tape Processing Machine (a prototype of which had been completed by 1951) estimated that there was a market for no more than 25 machines of its size. Two years later, IBM developed a smaller computer for business use, the Model 650. When it was announced in 1953, those who were backing the project optimistically foresaw a market for 250 machines." [1]

In the early days of computing, computers were toys for universities, the government and large corporations to play around with. Sure, they could be used to help with business data processing, banking, sales, inventory control, etc, but in the 1950s nobody seriously considered that computers would ever amount to anything but a time-saving device. They were sterile, mathematical machines understood by a handful of experts. There simply weren't enough experts to go around, and hence there was a significant practical limit on the number of computers that the world could maintain.

Today, more than fifty years after the dawn of computing, computers and networks are used in the management and operation of *every* part of our countries' infrastructures, including nuclear power plants, dams, electric power grids, air traffic control systems, and stock markets. Computers are critical to the day-to-day functioning of companies, governments, and militaries. They manage payrolls, track inventory and sales, and help with research and development. Computers and networks are used every step of the way in bringing food to your table and electricity to your home. Most people in the developed world use telecommunications (such as the telephone, email, etc) every day, and today these are all enabled by computers.

Without computers life as we know it would grind to a halt. Computer crackers, whether they're hackers, criminals, military adversaries or terrorists, pose a very real threat to society as we know it.

What Can Go Wrong with a Computer?

There are three basic things that can go wrong with a computer system [2]:

1. It can become unavailable or slow, making it impossible for useful work to get done (lack of Availability).
2. It can become corrupted, so that it does the wrong thing or gives the wrong answers (lack of Integrity).
3. It can become leaky, giving access of confidential materials to unauthorized users (lack of Confidentiality). Confidentiality, Integrity and Availability (often abbreviated to CIA) are the three main security requirements. There are two reasons why the CIA requirements might not be met, and why computers might fail:

1. By accident.
2. On purpose.

By far the most dangerous of these two causes is the second. While accidents can cause tremendous damage, it's always limited in scope because it's straight-forward to determine what happened and to fix it. Fixing the damage caused by a lightning strike may be expensive, but it's easy to know what to do (e.g. "We need to replace the server's hard drive because it got fried.") and once you're done you know that everything's okay. On the other hand, deliberate damage *may never even be noticed*, let alone corrected. This is because crackers are devious, while accidents are not.

What Makes Computer Cracking Fundamentally Different from Conventional Crime?

The main difference between computer cracking and conventional crime is **intrusion detection**. In conventional theft, damage is easy to ascertain. For example, in the case of house burglary, perhaps the robber broke your window, kicked down your door, or picked your lock. In any case, even if how he got into your house isn't obvious, it's easy to notice that your television is missing, or that he hurt your pet cat, etc. Computer crime is more like identity theft. You can think your identity is secure, when meanwhile someone in another country is very effectively pretending to be you, potentially accumulating debt or committing crimes in your name.

With computers, you may never know that you've been robbed. Secret files can remain on your hard drive and still have been stolen from you. Someone can crack your computer and not even do anything obvious. Instead, he may leave a back door so that he can more easily break in whenever he feels like it in the future. A cracker may repeatedly make strange attacks against your system that seemingly have no effect, but you can never be sure if he's just trying to rattle you, setting you up for a fall, or *already owns your system*, and he's just sending it commands. An entire country's emergency response system could be compromised *right now* without its security people even knowing it. That's a scary thought, isn't it? You can prove that a system has been cracked, but you can never prove that it *hasn't* been cracked.

White Hat, Black Hat... What's the Difference?

In terms of knowledge and capability, there is very little difference between crackers and security personnel. The only real separation between the opposing sides is intent. The black hat wants to break into a computer system, while the white hat wants to stop him, sometimes by cracking the black hat's system! Both the black hat and the white hat will apply virtually the same knowledge and tools to achieve his goal. This amazing similarity between the two opponents means that switching sides is very easy. The hat metaphor is very appropriate -- becoming a bad guy (or vice versa) is as easy as changing hats. The ease of switching sides has special relevance to the security community, where the threat of an evil insider (a sleeper agent, a mole, etc) is a classic scenario. It's said that one evil insider can do as much damage as 10,000 enemy soldiers, and this may very well be true.

One of the few elements that separates black hats from white hats is that having powerful hardware and software is not a big issue for crackers. Crackers can, and do, perform successful attacks with ordinary home computers using programs they wrote themselves for free, which means that a black hat could potentially be *anyone* with a computer and the knowledge of how to use it. Imagine the consternation of an investigator who has a billion suspects to choose from in a computer crime case. Furthermore, for a computer cracker, one lucky break is all it takes to penetrate a system's security. It doesn't matter if it takes a hundred tries to break into a system (assuming that you don't get caught) -- it's getting in at the end that counts.

In sharp contrast to computer cracking, security is very expensive. A network security officer needs expensive hardware, software and a big paycheck to do his job properly. Without good hardware, a large LAN won't work properly. Good security software makes a security officer's job easier (imagine the difference between a conventional security guard that has a bank of remote camera monitors to look at, and one that doesn't), and also makes a cracker's job more difficult. The harder it is for a cracker to break into a system, the longer it will take him, which gives a security officer a better chance to catch him and stop him. Finally, a poorly payed security person is an unhappy security person, and the last thing a secure network needs is insiders letting in bad guys. Hence, running a secure network is costly. Finally, the stunningly irritating part of being a white hat as that all you need to do is screw up *once* for your system to be compromised. In other words, the white hat needs to be lucky every time, while the black hat only needs to be lucky once. Also, you can never prove that your system has no vulnerabilities, you can only prove that it *does* have them.

Basic Computer Security Rules

In ***Fudge*** Computer Security, there is only one main skill: **Computer Security**. This skill is used by both crackers, to break into systems, and by security analysts, to prevent crackers from breaking into their systems. By default, a person has no ability at Computer Security -- it must be learned to be used, but it can be learned by anyone.

In terms of granularity, the Basic rules will deal with whole computer systems (which could be one or more computers). For example, we could consider attacks against an entire organization's internal network (often called an intranet), an important person's personal computer, or even an attack against the entire Internet.

What Can Get Attacked

In general, any computer system that the cracker can reach can be attacked. This usually means computer systems to which the cracker's computer is connected via a network, but it can also mean any computer the cracker can get physical access to.

Network computers are usually either a client or a server. Servers have open network connections, and await client connections so that they can provide them with content or services, like file downloads, or email. Servers are easy targets. It's like being on the phone all the time, where so long as you're on the phone you're vulnerable to attack! Clients, on the other hand, don't necessarily have an open network connection by default. It's only when they contact a server that they become vulnerable (and hence, to complete the analogy, when they pick up the phone). In peer-to-peer networks, everyone is a server, and thus everyone is vulnerable!

It's very important to note that clients make calls to servers, and **never** the other way around. A pure client computer cannot be called -- and hence cannot be attacked unless it makes itself vulnerable by connecting to a server (and even then it's only vulnerable to that server). Networks like the telephone system are peer-to-peer since everyone can call each other.

Example 1: The cracker Charlie is looking for a victim. He finds Alice's server on the Internet, which she uses to share files with friends. He is able to attack her computer so long as she keeps it on and connected to the Internet.

Example 2: Cyber-police officer Bob is looking for Charlie. Unfortunately, since Charlie is using a pure client computer, he is hard to attack. Bob creates a special server (a *honey pot*, see the glossary) and tries to fool Charlie into attacking it. Charlie takes the bait and attacks Bob's special server -- now Bob can attack Charlie through his server.

How the Attack Is Made

The mechanisms crackers use to break into systems are complex and interesting. However, in the Basic system we will gloss over most of it and simply deal with a few simple elements. In general, attacking a system is a three-step process:

1. Obtain a normal user account on the system
2. Obtain a superuser account on the system
3. Do your evil deed

To attack a system, a cracker makes an unopposed roll of his Computer Security skill, with the difficulty being the defending system's Computer Security level (see following sections for more on this). If the cracker wins this roll he gets a normal user account on the system. If he succeeds by 3 or more then he gets a superuser account right away. If he fails then nothing happens.

Once a cracker has a user account on a system, he can attempt to upgrade it to a superuser account. This requires another Computer Security roll (same difficulty), but this time the cracker gets a +1 bonus (it's easier to upgrade once you're already on the system). Success means the cracker now has a superuser account, while failure means that nothing happens and he keeps his regular account.

Apply the following modifiers to the cracker's Computer Security rolls:

Situation	Description	Modifier
Unfamiliarity	Cracker is unfamiliar with the system and how it works	-1 to -3
User Account	Cracker already has an account on the system and wants to upgrade to superuser	+1
Familiarity	Cracker is familiar with the system and how it works	+1
Insider Knowledge	Cracker is an insider with intimate knowledge of the system	+2
Back Door	Cracker has a back door on the system	+3
Physical Access	Cracker can open the computer case or access its disk drives	+3

In general, for Familiarity, Insider Knowledge or Back Door the cracker can get either a +1, +2 or +3 bonus, but not all three. The Physical Access bonus only counts if the cracker can access the computer case and mess around with it. In the case of physical access to a terminal where only a monitor and keyboard are available, the cracker gets no bonus since it's no better than network access.

What Can Crackers Do Once They're In?

Once the cracker has a superuser account, he can do whatever he wants with the system *that it is capable of doing*. For ordinary actions (that a superuser could normally do on the system) no Computer Security roll is required (although the GM may require rolls against other skills). If the cracker wants to do something fancy that pushes the system's capabilities, require a Computer Security roll at a GM-set difficulty.

For regular computers, ordinary actions might mean reading or modifying files, or formatting the hard drive. Fancy actions requiring a roll might include damaging the operating system (i.e. crashing the system), creating a back-door, etc. Generally speaking, it's not possible to cause physical damage to computer completely through software. The exception is for moving parts like hard drives and CPU fans, which the cracker **may** be able to trick into burning themselves out or turning off.

On more specialized computer systems, especially ones that manage vehicles or facilities, the possibilities are much greater. Depending on what kind of computer the cracker now has control over, he could potentially steal money, steal people's credit card numbers or identities, cause a city-wide blackout, crash a plane, cause a nuclear meltdown, or even start a nuclear war! Needless to say, the computers running critical infrastructures are going to be very secure, and are almost certainly not connected to the Internet, thus requiring the cracker to actually go to the facility in order to compromise it. On the bright side, dangerous systems like nuclear power plants are designed to avoid meltdown, and their security features may make causing one difficult or impossible, requiring a roll at a very high difficulty.

Protecting a System

In general, the best defense for a computer system is to: (1) Not connect to the Internet, (2) Not connect to any other computer at all, (3) Be hidden away under lock and key. Unfortunately, some or all of these options may not be possible, because communication is usually desirable, and often necessary. For example, an online merchant cannot simply choose to disconnect his servers from the Internet in order to protect his customers' credit card data -- if he were to do so he wouldn't have a business anymore!

A System's Security Level

Computer systems have a Computer Security skill rating equal to the average Computer Security skill of the people managing it. Computer systems might come with a built-in minimal level of security, but if it is not kept up to date it is less useful (consider this to be low-quality in the table below). Apply the following modifiers:

Situation	Description	Modifier
Low-Quality	Computer system uses low-quality security software	-1 to -3
Common Software	Computer system uses a very common operating system or network software	-1
High-Quality	Computer system uses high-quality security software	+1
Active Monitoring	Security personnel are actively monitoring system activity	+1
Red Teaming	Computer system regularly undergoes red team attacks	+1

The inherent complexity of cracking into computers means that all systems have a minimum Computer Security level of Poor.

Example 1: David has no computer security skills to speak of. His operating system comes with a Computer Security skill of Mediocre. However, David has never updated his system's security since he bought the computer years ago (-3 penalty), for a total of Terrible-1. Hence, David's computer resists intrusions with a Computer Security skill of Poor (the minimum). Essentially, David's operating system's security is less than useless.

Example 2: An online merchant runs an Internet website (i.e. a server). He has hired several security analysts with an average Computer Security skill of Good. He is using an off-the-shelf security software package that he keeps up to date (no modifier), but is using a very common operating system to run his server (-1 penalty) for a total Computer Security level of Fair.

Example 3: A high-security military facility is running a LAN that is not connected to the Internet. The computer rooms are locked behind steel doors, and their network wires are embedded in thick concrete. The security analysts running the system have Great skill overall, are using high-quality security software (+1), actively monitor the system at all times (+1) and regularly undergo red team attacks and fix any vulnerabilities exposed (+1). Assuming someone could gain access to the computers (a difficult proposition), they would have a Computer Security level of Superb+2 to contend with.

Other Defensive Measures

As previously mentioned (under **How The Attack Is Made**), there are no intrinsic consequences to the cracker when he fails to break into a system. Hence, it's up to the security team to create consequences.

Detection: Ideally, a security team should be able to find out when their system is being attacked. They can either install detection software (less effective, assign it a low Computer Security skill) or try to detect attacks themselves (but only if they're actively working on it). Every time a cracker fails in an attack against the security system, it gives an active defender a chance to detect it. The defender can make a Computer Security roll at a difficulty equal to the cracker's rolled result. Success means that the defender has detected the intrusion attempt and can act appropriately. This might mean shutting down the server, for example, or in the case of a sophisticated defender it could mean running a trace (see below). Detecting attacks (even successful ones) against otherwise unused systems, such as an iron box or a honey pot, is trivially easy.

Tracing: Crackers are not fools and they have a variety of techniques for avoiding traces, including routing their attacks through other computers and even other countries. Running a trace pits the white hat's Computer Security skill in an opposed roll against the cracker. Success means he now knows where the cracker is, failure means he does not. Failing badly (by 3 or more) means getting false information. The security expert should get a bonus to his roll if the cracker fell into an iron box or honey pot (anywhere from +1 to +3 depending on how badly the cracker fell for it).

House cleaning: Regularly looking over communication logs or security cameras is boring and time consuming, but it can also be life-saving. For compromised systems, every once in a while (say, once a week) allow a security analyst dedicating time to house cleaning to make a Computer Security roll at a GM-set difficulty. Success means that a previous intrusion has been discovered, and some idea of what happened has been determined (depending on how well the roll was made). Back doors, once detected, can be closed (or worse, turned into an iron box).

Advanced Computer Security Rules

In this section I will add some advanced, optional rules. They are there mostly to give you additional ideas and things to think about.

In the advanced rules, the GM can put a finer focus on computer cracking, and handle attacks on a computer-by-computer basis if desired, if the extra detail would make events more interesting.

Exploits and Vulnerabilities

This section gives a little more detail on how cracking works, in case you want to add more detail into your games.

A cracker cracks by writing a computer program (exploit) that will take advantage of a security bug (vulnerability) in the target system. Once a vulnerability becomes known, a bug fix (patch) is usually created in order to patch the hole. Of course, there are *always* more bugs in software. Exploits, like vulnerabilities, are very specific to a particular version, or range of versions, of a particular program.

Against targets that take security seriously, an exploit will only work once if the intrusion is detected. If the intrusion isn't detected, then the exploit can be used again. Often, however, this won't be necessary. Once the cracker has gotten into the system once, he can leave a back door and get back into it again much more easily.

On the other hand, an exploit could be used constantly for months against insecure computers -- such as home computers.

How does a cracker find vulnerabilities?

- Script kiddies just download ready-made exploits -- they don't bother finding vulnerabilities.
- Crackers can join cracker communities where they discuss vulnerabilities and broadcast newly found ones.
- If the cracker can obtain one of the security programs used on the target system, then it can be reverse-engineered and analyzed for vulnerabilities. This requires a Computer Security roll at a GM-set difficulty. Success means a vulnerability is found and an exploit written. Failure means the cracker must keep looking or find a different program or target.
- If no copies of the system's security programs can be found, then vulnerabilities can be found by actively testing the system's security. This counts as Unfamiliarity and results in the -1 to -3 attack penalty described under **How The Attack Is Made**. This is the riskiest way to find vulnerabilities.

Local Area Networks

Local area networks are generally built upon the trust model.

Trust is a fundamental question of computer security. Unfortunately for the paranoid, you have to trust *somebody*. Trust is simply too efficient. Take for example the special trade relationship that Canada and the US enjoy: because these two countries are peaceful, trustworthy neighbors they have the luxury of being able to apply very few security controls on their trade. This means that there's tremendously less money and energy wasted on security between the two countries, and consequently there's a significant economic advantage for both countries. Similar parallels can be made for many European countries and lots of other countries across the world.

The trusted country analogy applies very effectively to computer security. When you trust a particular computer or a particular network, it means that you can apply far less security in defending against that trusted entity. Less security means lower cost in terms of time (for the users and the security experts), hassle, and money.

Thus, when creating a secure computer network, it's important to know exactly who you trust and who you don't trust. Trusting nobody or trusting everybody are not viable options. Not trusting someone you should trust wastes valuable money and resources that should be spent elsewhere, and yet at the same time trusting foolishly may lead to disaster.

The point of all this is that internal networks are generally designed with a very secure exterior (e.g. a firewall machine) that protects a trusted interior network (e.g. intranet) from an untrusted exterior network (e.g. the Internet). Assuming that the model works and that a cracker is unable to break past the gate, then the internal network is both convenient and secure. Thus, the trick for the cracker is to break the trust model by compromising the internal, trusted computers.

There are two main ways to break the trust model. The first is by creating a new connection from an internal trusted computer directly to the exterior network, thus entirely bypassing the secure gateway. One technique is to install a modem on an internal computer. The second method of breaking the trust model is to infect an internal computer with a Trojan horse, so that its own trusted users turn the computer against the network security, breaking it down from the inside. One technique for this is to trick a user on the internal network into running a Trojan horse program (e.g. on an innocent-looking music CD) that then can easily attack the internal network gateway from the inside.

Zombies

Once a cracker has control of a system, instead of adding a back door he can instead opt to turn it into a zombie with a successful Computer Security roll. A zombie computer is better than a back door -- the cracker can automatically break into a zombie system (no roll required) whenever desired.

Zombies are often created automatically by viruses or worms, thus helping the cracker quickly amass an army of zombies.

Crackers can use zombies to perform distributed attacks by programming each zombie to attack independently (see **Denial of Service**). He can also use them to create a distributed supercomputer to crack codes and do other fun stuff.

The downside of zombies is that it's impossible to make a computer system that's actively monitored by a security analyst into a zombie -- the attempt is automatically noticed.

Man-in-the-Middle

A man-in-the-middle attack is when a cracker intercepts communications between other computers over a network. For example, Alice and Bob are trying to communicate, and Charlie the cracker gets in the way. Essentially, a man-in-the-middle attack means that Charlie has tricked Alice into thinking he's Bob, and Bob into thinking he's Alice.

Executing a man-in-the-middle attack requires the cracker to make an opposed Computer Security against each of the intercepted people's Computer Security skills. Only if the cracker succeeds against everyone the move a success, otherwise the cracker is discovered.

At its most basic level, this attack can allow the cracker to listen in on communications. Even worse, it can allow the cracker to block or modify communications at his leisure.

Sniffing

This is when a cracker compromises the network backbone (i.e. the computers and machines running the network). Since the cracker has gained control of the devices through which communication is being transferred, the cracker can read, modify or delete these communications.

To execute this attack, the cracker needs to break into the network backbone itself. This requires a Computer Security roll with a high difficulty.

The result of this technique is similar to the man-in-the-middle attack. Except that the more insecure the network is, the easier this attack is to execute relative to man-in-the-middle, and vice versa.

Needless to say, whoever normally controls the network can sniff whatever communications he wants without needing to make a security roll.

Finally, a form of sniffing called *wire tapping* is also possible. This involves adding a small monitored connection to the physical wires of the network. While this method only allows reading of communications, it can be very effective since it's very difficult to detect!

Denial of Service

Denial of Service (DOS) is an attack aimed at swamping a server with garbage communications so that it can no longer do useful work (i.e. so that it can't sort real requests from clever fakes). It specifically attacks the *A* part of CIA: Availability. To accomplish this the cracker makes a Computer Security roll against the Computer Security level of the affected system. Success means that the system has been swamped and is effectively shutdown for a few hours.

A Distributed Denial of Service (DDOS) attack uses an army of zombies to even more effectively swamp a system. These give a +1 to +3 bonus to performing the attack, depending on the number of zombies involved (hundreds, thousands, millions).

On the defense side of things, DOS attacks are automatically detected, but traced normally (i.e. only if the cracker makes a mistake). The defenders can get a +1 to +3 bonus if they have access to configuring the network backbone (i.e. the medium over which the communication takes place), depending on how much control they have.

Sophisticated Superuser Accounts

Most regular operating systems use an all-or-nothing approach to administration. Either you're the administrator or you're not. Either you can do everything (superuser) or you can do almost nothing (user).

Some operating systems use more sophisticated schemes where a certain type of user might have certain administrator privileges but might not have others. What's more, the system can be designed so that *multiple* superusers must work together to make something major happen. This is analogous to the bank vault that requires two keys to be inserted and turned at the same time.

These sorts of precautions will inevitably make cracking the system more difficult, as the cracker must either break into more accounts to control the system, or must call upon the aid of other crackers. However, fancy operating systems like this will never be mainstream -- this is something likely to remain in the domain of governments and huge corporations, at least in the near future.

Worms and Viruses

Worms and viruses are programs that crackers can write to break into systems automatically. Worms and viruses have a *vector* and a *payload*. The vector is the method of transmission, which is some sort of vulnerability (often in email programs or servers). This is what allows the virus or worm to infect the system. The payload is what the virus or worm does, aside from propagating itself. A typical payload is turning the infected computer into a zombie, or installing spyware for detecting what the user is doing and stealing personal information and passwords.

Worms and viruses are hard to create, and even harder to anticipate or control. Creating one requires a Computer Security roll at a -1 penalty for a virus, or a -2 penalty for a worm. Success creates a virus or worm with a skill level equal to the rolled result. Normally viruses and worms are built with a particular purpose in mind, even if it's just mischief. The GM can use the virus' or worm's skill level and his intuition to determine some likely outcomes of the infection.

World Backgrounds

There are a variety of settings where computer security roleplaying may take place. A campaign's setting properties will have a huge impact on computer cracking.

Technology

Contemporary

- The *de facto* worldwide computer network is called the Internet. There are a lot of unofficial names for it too, but we'll stick to the official name to avoid confusion.
- Computers control many systems across the globe, but in a patchwork fashion. The developed world is almost entirely run by computers, whereas so-called third-world countries have very few computers. Human brainpower, unaugmented by computers, is still the tool of choice for many applications.
- Most personal computers and supercomputers are connected to the Internet in some fashion. Most other computer systems are simple and specialized devices that are not connected to the Internet or to each other (e.g. temperature control in your home, a car's onboard computer).
- Many essential communication services (webpages, telephone, military communications, etc) are at least partially routed through the Internet. The collapse of the Internet would cause widespread communication problems, many businesses would go out of business and many hobbyists would be very unhappy, but it wouldn't necessarily prevent society from functioning.

Future

- The worldwide computer network is called Cyberspace. If you prefer to call the worldwide network something else, feel free. Alternate names include the Matrix, the Maze, the Lattice, the Labyrinth, the Environment, the Sphere, etc. Let your imagination be your guide.
- Computers either directly control or are involved in *every* aspect of human endeavor. Embedded systems, computers contained in other objects, are the norm. From computer-controlled houses to computer-controlled clothing, everything a person does, wears or touches involves computers. Wearable computers are extremely common. Expert systems help doctors, lawyers, etc make their daily decisions.
- Nearly all computer systems are constantly connected to Cyberspace and to each other. Your toaster talks to your shoes, who consult with your stock portfolio.
- If Cyberspace ever fell, it would take civilization with it.

Type of Society

Modern (Contemporary or Future Technology)

- Security is not taken seriously.
- Security issues and costs are not well-understood, so it's difficult for companies to know how much money to spend and on what kinds of security. Many organizations don't use the best practices available, meaning that security across a society will be a patchwork of effective and ineffective solutions. This makes attacking the society as a whole relatively easy.
- The fact is that the Internet was originally made by scientists for scientists, all of whom trusted each other. There was no provision for "bad guys" in the protocols that were developed. Hence, the infrastructure of the Internet itself is not very secure, making it easier for crackers to play dirty tricks on their victims.
- Companies regularly hide the fact that they've been successfully attacked, because they don't want public confidence in them to be undermined. This leaves organizations open to blackmail from enterprising crackers. Hiding information also has a much more serious consequence: this prevents

researchers from obtaining accurate statistics on security, thus perpetuating general ignorance of security issues.
- Security on the level of the home-user is poor. Home users and companies are not responsible if their servers/computers are used as go-betweens in an attack.

Ideal (Future Technology)

- Security is taken seriously.
- Security at organizations conforms to the known best practices. This means that a society's security will provide a united front against attackers -- the fact that each potential target is secure will make attacking the society as a whole difficult.
- The Cyberspace infrastructure has had its major security holes fixed. This makes it more difficult for crackers to perform dirty tricks, and consequently makes everyone more secure.
- Like modern airports that always report collisions and near-misses alike, companies will always make successful attacks public (to the relevant agencies, at the very least). Failure to do so can result in the government levying serious penalties against the company. It's thanks to this policy that best practices are well-understood and disseminated across the society, since researchers and policy makers have access to large volumes of accurate information on which to base decisions.
- Software (even user-level software) is relatively secure. Companies and individuals are liable for damages if they were negligent and their computers were used as go-betweens in a crack attempt (i.e. it's criminal negligence to have an insecure computer).

Oppressive (Future Technology)

- Security is only allowed for the elite. This usually means the rich and the powerful, such as the government and corporations.
- Since paranoia is the rule and information sharing is non-existent, corporations have no idea how much money to spend on security. Therefore, they spend as much money as they can afford to on all levels of security, in an attempt to minimize the risk of attack. Society is two-tiered: the weak half is extremely easy to attack, while the strong half is very difficult to attack.
- Corporations *never* let others know when they've been successfully attacked. Not only would this provide free research data to their competition, but it would be showing a sign of weakness that would surely be exploited by their enemies. Best practices are unknown, as each company does its security research independently of everyone else. Thus while security as a whole among the elite is very strong, precise security implementations will vary greatly from organization to organization.
- The average home user has *no* security on his computer. It's illegal for individuals to own, purchase or sell security components. Learning about security and cracking is illegal unless you are one of the elite, or you work for them. In fact, the elite will be able to take over a home computer at *any time* and for *any reason*. Big Brother is most definitely watching you. Obviously, home users are not liable if their computers are used as go-betweens in attacks -- instead, they're liable if their computers *can't* be used as go-betweens!

Glossary of Terms

Please note that the definitions given in this glossary are accurate within the context of computer security. Many of the terms have alternate (but equally valid) meanings. For instance, the term *hacker* originally meant "someone who makes furniture with an axe", and yet *hacker* is used here with a completely different connotation.

Most of these entries were adapted from [3].

Back Door
: A hole in the security of a system deliberately left in place by designers or maintainers. This could be for sinister reasons (e.g. to allow the designer to easily crack the security at a later date) or legitimate ones (e.g. to allow service technicians easy access). A back door can also be created after the fact by a cracker, for later use. A Trojan horse usually serves as a back door into a system.

Black Hat
: A cracker. The term originates from formulaic Westerns where the bad guy always wears a black hat.

Breaking in
: The process by which a cracker gains illicit access to the superuser's account on a computer or network.

CIA
: The three main requirements of computer security: Confidentiality, Integrity, and Availability.

Client
: A computer that connects to a server for the purpose of receiving content or services.

Cracker
: A person that electronically breaks into computer systems. Coined circa 1985 by hackers in defense against the journalistic misuse of the term *hacker*.

Exploit
: A cracker program that takes advantage of a vulnerability.

Firewall
: Either software or hardware whose purpose is to monitor communication channels (both incoming and outgoing), and possibly direct or block traffic if necessary. This is usually a network or computer's first line of defense.

Firewall Machine
: A firewall machine is a dedicated computer (i.e a computer that does nothing else) that combines the concepts of the firewall and the proxy, and is used to service outside network connections. The idea is to protect a cluster of more lightly protected machines, which are hidden behind it, from crackers.

Grey Hat
: Someone with cracker skills that operates within the law. His skills could be used for red teaming, or to crack electronic locks under legal pretense.

Hacker
: 1. A person who enjoys exploring the details of programmable systems and how to stretch their capabilities, as opposed to most users, who prefer to learn only the minimum necessary. 2. A person who enjoys programming, and/or is good at programming quickly.

Honey Pot
: A computer designed to attract crackers so that they can be observed in action. It is usually well isolated from the rest of the network, and carefully monitored. Different from an iron box in that its purpose is to attract, not merely observe.

Intranet
: A large LAN, usually refers to an organization's private, little Internet.

IP Address
: A number that uniquely identifies a particular computer on a network. The "IP" part stands for Internet Protocol, although this is a misnomer, since IP addresses are used on LANs too.

Iron Box
: A special environment set up to trap a cracker logging in over a remote connection long enough to be traced. May include a modified operating system restricting the cracker's movements in obscure ways, and "bait" files designed to keep him interested and logged on.

LAN
: An acronym that stands for Local Area Network. In other words, a collection of interconnected computers which is entirely located in one area (typically a single building). For example, a corporate intranet.

Mockingbird
: Software that intercepts communications (especially login transactions) between users and hosts and provides system-like responses to the users while saving their responses (especially account IDs and passwords). A special case of a man-in-the-middle attack.

Network
: Two or more computers connected together so that they can communicate with each other. This connection is typically made by telephone, network cable, wireless connection (radio), satellite uplink or (less commonly today) fiber optic cable.

Patch
: A temporary addition to a piece of code, usually as a quick-and-dirty remedy to an existing bug. A patch may or may not work, and may or may not eventually be incorporated permanently into the program. Patch can be used as a noun or a verb.

Peer-to-peer
: A communication system in which each participant (a *peer*) acts as both a client and a server.

Phage
: A program that modifies other programs or databases in unauthorized ways; especially one that propagates a virus or Trojan horse. A phage could, for example, modify a police database to remove one particular person's criminal record.

Proxy
: This is the gateway to a network. All communications to and from the network must pass through the proxy. This protects a network by creating only one point of entry that needs to be thoroughly secured. It has a side benefit of making any communications from the inside of the network appear to be coming from the proxy -- thus making it more difficult for crackers on the outside to know which particular internal computer a specific piece of information is coming from.

Red Team
: A group of one or more grey hats whose job is to crack a network's security, with the permission of the network administrator (or his boss). The goal of this is the eventual improvement of the network's security by revealing vulnerabilities.

Script Kiddy
: Someone that does mischief with programs written by others. Script kiddies usually have a minimal impact on secure networks, but given a very effective exploit, a script kiddy could do as much damage as the genius cracker that wrote the exploit.

Server
: A computer that leaves one or more communication channels open, in the hope that clients will connect to it so that it can provide them with content and/or services. Servers are the computers that are the most vulnerable to computer cracking.

Superuser
: The administrator of a computer system. Typically, the superuser has all of the powers of an ordinary user, plus much more. Superusers typically have (at the very least) the ability to create new user accounts and edit or delete their accounts.

Tiger Team
: Similar in concept to a red team. Tiger teaming is when a facility's physical security is tested by a team of good guys.

Trojan Horse

A malicious security-breaking program that is disguised as something benign, such as a screen saver, or a virus scanner.

User

An ordinary user of a system. For example, a person with an email address at yahoo.com, or a website at geocities.com.

Virus

A cracker program that searches out other programs and infects them by embedding a copy of itself in them. When these programs are executed, the embedded virus is executed too, thus allowing the virus to propagate itself. While a virus can be benign, in the sense that all it does is waste system resources by propagating itself, viruses usually carry a payload and transform infected files into Trojan horses. This normally happens invisibly to the user. Unlike a worm, a virus cannot infect other computers without assistance.

Vulnerability

An error in a software's design or implementation, or a failure in a software's operation that can be used for breaking security or otherwise attacking a computer (usually over a network). In other words, a bug that a cracker can take advantage of.

WAN

An acronym that stands for Wide Area Network. In other words, a collection of interconnected computers that spans a large area (such as an entire country or the entire world). For example, the Internet.

White Hat

The opposite (and counterpart) of a cracker. A security operative who aims to protect a network from unauthorized intrusion. The term originates from formulaic Westerns where the good guy always wears a white hat.

Worm

A cracker program that propagates itself over a network, reproducing itself as it goes. Unlike a virus, a worm doesn't need outside assistance to operate. Being autonomous makes a worm much more dangerous, but also much more difficult to control and anticipate. Worms typically crack into low-security computers via a common vulnerability and then turn the computers into zombies.

Zombie

A computer, especially a home PC, that has been cracked and taken over by a cracker "master," who may control hundreds, thousands or more zombies. The image that comes to mind is of a veritable army of zombies mindlessly doing the bidding of a necromancer. Zombies offer computing resources that crackers can take advantage of, such as for performing attacks, or the cracker can simply steal those resources for himself. As a side-benefit, attacking through a zombie helps a cracker mask his identity.

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Fudge Battles
by Helge Lund Kolstad (helge @ nvg.org)

Every now and then, especially in fantasy settings, you might end up tossing your players into a large battle, whether as generals, officers, common soldiers or simply because they were in the wrong place at the wrong time. You now have the choice between deciding beforehand how the battle will take its course (and hope the players won't mess it up), and to actually play it out. The second way is generally more desirable, only that very few GMs actually have any idea of how to do this in any remotely realistic way.

What to Choose?

The first problem is striking the balance between sufficient realism and ease of use. While we might make detailed rules based on historical examples, they will most likely be useless for any other purpose than exactly that region at exactly that period in time - we want to make such rules portable, too.

In designing a battle system, remember above all that Fudge is a roleplaying game, not a wargame. Inventing a light framework will take the GM's mind off that particular task, but complex and realistic rules are more than likely to bog down play and draw focus away from what we're really after - roleplaying.

A Short History of Warfare

The goal of this article is the describe the field battle, i.e. where both agree on a time and a place and line up to face each other. This type of warfare was the norm, in one form or another, from ancient times until the American Civil War. It was only in World War I, when one first experimented with machine guns, chemical warfare, and other nasty business, that its role had finally been played out.

Although this was true for both Europe, Asia, and North Africa, I'll focus on Europe in this article.

Medieval Armies

In medieval days, you tended to have armies no larger than about 15,000 warriors. When I say warriors, I mean the the armies would number around three times that, but only about a third would be the actual fighting force. The rest would be wives, cooks, whores, and cleaning-women. That last group usually consisted of old women who had nothing to do at home and so joined the army. Indeed they were an important part of any army, for they kept hygiene at acceptable levels, cleaning clothes and scrubbing pots.

Armies were centered around the elite warriors, the knights, with additional forces being more or less haphazardly recruited. Common practice during times of war was to rally the peasantry, equip them with weapons, and direct them towards the front. Training was rarely given to anyone but knights and heavy infantry.

In medieval times, stamina was more important than keen tactics; courage and ferocity were the prime qualities. You needed leaders who would be an example to his soldiers, who would stay with them on the front line and ride boldly with them into battle.

Age of Reason

The Renaissance saw a shift towards more uniform armies, with more centralized support staff and better training. Uniforms, which previously had been at most tabards with the lord's coat of arms, now became whole outfits. One began to think in terms of standardized equipment.

New inventions, like firearms, required a new type of officer. One now needed generals and officers who could keep a more level head in battle. Leaders no longer rode in the front line with their knights, they stayed at the rear where they could monitor more of the battle.

Note that until now, there had been very few actual battles. Those that were fought were mainly because of some mistake on one of the sides (oops - the enemy!). Armies were used more for raiding enemy territories than fighting the enemy's soldiers. Plundering and pillaging were more preferable because:

1. It was easier and less dangerous to remove the enemy's basis for army upkeep than fighting his soldiers. You need luck to win a battle, but only a measure of nastiness to burn a field. No one likes being killed, and professional soldiers are no exception.
2. It was expensive to keep an army; even peasants need to be paid. Plundering enemy villages was an easy method of payment.
3. To supply an army in friendly territory, you would need to buy food from the local farmers. Nothing raised food prices as much as an army passing through.

Napoleon's New Era

Along came a short Corsican who changed all that. Napoleon invented a whole range of new tricks to keep the edge in warfare. First and foremost, he broke with the chess-like thinking by forcing the enemy to do battle. Armies also started becoming much larger than before, numbering half a million where twenty thousand was earlier thought to be the upper limit.

The reason he was able to keep such large armies was that he was the first to get the idea of supply lines. If you kept a steady line of depots and supply trains going between them, you could supply your army from friendly territory without having to worry about paying the local farmers.

Although armies would not for a long time be as large as Napoleon's, his thinking left its indelible marks on the minds of Europe's military thinkers.

However different the periods might have been, they all shared some common traits. The unquestionably most important one would probably even hold true today, even though I'm no expert on modern warfare: How one counted victory in a battle.

How to Win

Too many people think medieval battles were all about eradicating the enemy. This is a misconception. Throughout history, very few battles have ended with one side being completely wiped out. You have won a battle when the enemy has **stopped fighting.** This can generally be achieved in three ways. Ranked from more to less common:

1. Breaking the enemy's morale,
2. Getting them to surrender, or
3. Wiping them out.

As one can see, the two most common ways to win a battle both have to do with morale.

Army Traits

The simplest way to describe an army is to give it a single Trait, Morale. An army with Poor Morale might be for example a poorly trained column of peasants with pikes and spontoons, a band of marauders, or a group of desert nomads. They might be more or less ferocious, but will all flee quite early in battle - victory means relatively little to them. How to treat casualties is entirely up to the GM in this variant - the numbers could be fudged or just left out entirely. Remember, the point is just to create a backdrop for roleplaying!

If you feel up to the task of adding a bit more crunch, though, you might jot down:

Training	Fair
Morale	Poor
Ferocity	Great
Offensive Factor	+2 (modified for Ferocity)
Defensive Factor	-2 (modified for Morale)

In this case you would roll against Training and let the other two modify the success (or failure).

Remember that until mid-Renaissance, armies did not have standard equipment. In Norway, each community was required to provide and equip one fully armed soldier each. This practice lasted well into the 18th century. Therefore, when you assign these numbers to an historical army, think more of general prowess than equipment stats. In a fantasy setting, of course, you have more freedom deciding. Fantasy usually leans towards more modern army configurations.

Tactics

Experience

How experienced an army is certainly is a factor. Veteran troops have much higher survival rate. As a matter of fact, if you survive your first battle, your chance of surviving the next goes up by 25%. Therefore, an army with less than half veteran soldiers has -1 Morale. This goes up to -2 for less than one quarter veteran soldiers.

Sieges

Historically, sieges rarely ended with battle. More often than not, they ended with an agreement being reached through negotiations, as either the besieged or (most often) the besieger ran out of food. Not very heroic, although it could be used as a plot hook.

Terrain

For moving armies, speed and supply cost is modified by terrain and infrastructure. How to apply these modifiers I leave up to the individual GM, but here are some suggested scores:

River (in direction of travel)	Good^
Lake	Good^
Sea	Fair^
Forest	Mediocre
Plains	Fair
Road	Good
Hills	Poor
Marshland	Terrible
Mountains	...let's go home.
^Assumes some form of transportation across the water.	

Bridges are also important strategic points. Even a narrow bridge is better than nothing. You can always find some means to get one person across, or ten, or fifty, but 20,000 heavily equipped people is quite another matter. A Roman legion once spent the better part of summer building a sufficiently large bridge across the Rhine. This is a situation where a character with Engineering or Bridge Construction skill could be invaluable...

Rolling the Dice

How you resolve the actual combat depends entirely on the amount of realism you want in your game. You might make only a die roll for Morale or another Trait, or you might make several, adjusting each as appropriate for whatever actions the players take. Whatever system you choose, remember to be consistent when balancing casualties and loss of morale. A cinematic campaign might put more emphasis on casualties and less on morale, and a horror campaign might lean more than usual towards spirits breaking quickly, with the characters usually being on the receiving end.

Simple Action Resolution

For a simple yet elegant way of deciding the outcome of a battle, you could assign each side a Morale Trait. Then, as combat starts, make opposed Morale rolls, and find the winning side's measure of success. Compare the measure of success to this slightly modified wounding table, and check off the loser's boxes accordingly:

[ ][ ][ ]	Standoff (1-2)
[ ]	Rattled (3-4)
[ ]	Shaken (5-6)
[ ]	Cornered (7-8)
[ ]	Broken (9+)

Keep rolling at regular intervals, modifying results for whatever madness the players might attempt, until one side is reduced to Broken. At that time, they flee, and the winner is free to do something glorious (whatever fits the story).

|Example: The characters are having an audience with King Auberon of Faerie when his castle suddenly is attacked by fierce goblins. The King's Guard of warrior sidhe rush to the defence. At this time, the GM decides that Auberon's warriors are nearly fearless (Great Morale) while the goblins have a Mediocre Morale score. Initially, Auberon rolls +, +, 0, and -, while the goblins roll +, 0, 0, and -. The sidhe win by 4, which is a Rattled result. The goblins' Rattled box is checked off. The players then decide to storm the enemy lines to try to kill the goblin leader. This might give the sidhe a bonus in the next round, as well as winning the players enough favour from Auberon to grant them what they wanted from him in the first place..._

Remember always that if you give away too much detail, the scene will quickly turn into a wargame. You should

only recount as much as the characters can see. This is how the above example might be played out:

GM: (rolling Superb for the sidhe and Mediocre for the goblins) The goblin leader sounds a rusty horn, and the vast army starts pouring towards the castle gates. The sidhe seem undaunted, though.

Player: Ack! Are we outnumbered?

GM: A paltry five to one. Hah. Child's play for sidhe warriors, wouldn't you say?

Player: More ack! OK, here's what we do. We'll try to outflank the enemy and kill the goblin leader to confuse them. That might just do the trick.

GM: (grinning evilly) Perhaps. The sidhe archers are firing now. Some of the goblins fall screaming to the ground.

Player: OK, errr... Wait! There's a sortie gate! I remember seeing it on the way in. We'll make for it.

GM: As you wind your way down to the sortie gate, you hear the din of the battle outside. The guttural screams of dying goblins seem louder somehow. You finally reach the gate, and as you open it, you see there's a good fifty paces to the front ranks. There's a clump of forest beside the great army, about sixty paces away from you.

Player: Eureka! We'll make for it.

GM: OK... (rolling Perception for the goblins) A small group of goblins spot you. They're running towards you.

Player: Oh boy. We'll run for the forest and hope to defeat them there.

GM: Very well. Some more goblins join those chasing you. The initial onslaught seems to be over now, by the way. The goblins are falling back and regrouping. There's still lots of them.

If the players can dispose of the pursuers and kill the goblin king quickly enough, the sidhe will roll at +1 the next round. If they are too slow, the invaders will have finished regrouping before the kill will have any effect on that roll. However, the GM might modify the **next** roll.

These rules should provide a guideline for bringing the sense of mass-combat to your games without changing Fudge into a war game.

Roleplaying Large Scale Battles
Monday, September 26, 2005

by Mark Cunningham (mark.cunningham @ gmail .com)

Have you ever imagined what it would be like to be in the middle of a huge battle?

The tension as the armies face each other for the first time, the clash of calvary on the soldiers lances, the whiz of arrows overhead, seeing friends and fellow warriors fall to the sword, facing off against your arch-nemesis in the chaos of the battle, bloodshed filling every sense, the battle on the brink of defeat...

Have you ever imagined trying to roleplaying it?

While how to run small pitch battles and skirmishes is commonly described with a myriad of rules and advice in as many RPG rulebooks as you can find, similar advice and rules on running a large scale battle in a roleplaying game are rare. I'm not talking about the PCs playing the generals of an army, but the PCs embroiled in the conflict as soldiers on the ground, as defenders on the wall, or as champions riding out to face the hordes. Of course, you can always grab a set of miniatures, buy a complex rulebook and play it out that way. Although this method is probably by far the most exact simulation, you lose the experience, drama and fun of roleplaying a character.

The Way of the Solider

It doesn't really matter if the battle is set on a medieval fantasy world with elves and giants, or on a planet far, far away with drones and genetically modified beasties, much (if not all) of this advice still hold true. The **secret** is the same for running anything. A battle is just another *story* and so you should focus on your PCs, what happens to them and their impact (if any) on the overall battle. Treat it as a complete self-contained story; it is a series of events, has a beginning, middle and end, but can sidetrack just as easily as any other roleplaying adventure.

An event as large as a battle should be a major denouement in your chronicle. It is not something that happens every other week. If it happens too often, you'll not just wear out your PCs, but also the players. and that is something you really don't want. Big battles should be tense, dramatic affairs with the real possibility of death for the PCs (and any NPCs that are involved).

90% of War is Logistics

Plan your battle before you run it. Decide the outcome and how it should progress *before* running it. Don't try to *fudge it*. A battle often appears chaotic on the ground, but it is not. Various plots and events do happen without any PC interaction with them. If the PCs can affect everything that happens then it is actually a skirmish (regardless of the number of foes) and the normal advice found in the majority of roleplaying books for running combat holds true instead.

As with planning any story, consider your PC's specialties. If not all your PCs are warriors, make sure there is something for the others to do during the battle: a healer might have to save many wounded even as the castle walls crumble around him, a wizard may have to face his own battle on the magical plane or what have you, or the socialite may discover the king has betrayed his people at the worst moment.

When designing the battle, don't ever make the opposing force a pushover. If one of the PCs can take on the entire enemy army and defeat them easily, it is just slaughter. The enemy should be more powerful (even if the battle is 'equal', the enemy should still seem as if they have the upper hand). You can always make the enemy appear weaker initially, and then dramatically reveal their real strength. This can give a desperate feel to the fight.

There are many other factors you can include when planning: morale of the warriors (what happens when their king is killed, or their greatest warrior falls?), varying strategies of the armies (an army of supernatural demons would have very different tactics than an army of noble, mortal knights), the nature and appearance of the warriors (monsters would have a powerful fear factor), the weapons (modern warfare is very different from medieval, and supernatural weapons might be very exotic indeed), natural and manmade defenses, and what the battle is over (holding the castle, defending innocents or even resisting an invasion).

The PCs can have an influence on any of these factors, such as taking up the mantle of the fallen King, planning some unorthodox but clever strategies, or getting to choose where the battle will happen. How much PCs can swing the battle is a very powerful influence on the feel of the event. The more heroic you want it, the more impact the PCs can have on the outcome. If you want dark and gritty, then the PCs should have little impact on the outcome and be just trying to survive. If you want the type of mythological heroism, the very presence and actions of the PCs should swing the battle at the last moment.

In the Heat of Battle

Battle never lets up, so the pacing should be relentless regardless of where the PCs are in the battle. There is little chance for rest in the heat of battle.

Therefore, all extended movement during a battle is dangerous, be it running down a street in the besieged castle, or attempting to dash across the battlefield to defend your king. In such cases, it would get a bit weighty if you went into a full contested combat with each attack that flies at you. You can treat these *minor* attacks as static obstacles (i.e. uncontested rolls). However that doesn't mean they can't harm, maim or even kill the PCs.

In general there are two approaches to take when running (and planning) a large-scale battle.

The Open-Ended Approach

My favored approach would be to plan the general progress of the battle and then just dump the PCs in the middle of it and focus the narrative entirely on them. Give them a goal; do they hold the bridge or defend the civilians? What can they see, what are their orders, do they see their friends chopped down, do they try to save them, etc. Set things up and then see what happens.

War of the Dark and Light

In this example, the PCs are warriors of the Gods of Light. The Dark Gods have gathered a large army and intend to stomp all over the PCs' home, but unbeknownst to the players, the GM has planned a surprise. The Dark Gods have managed to create a "tear" and plan to bring forth terrible monsters during the battle.

The feel of the campaign is mythic heroic, with the PCs pulling off legendary feats regularly. The PCs are the champions of a medium-sized army and are expected to lead the charge to stop this invasion. If any of the PCs are magically inclined, there is room for attempting to close the tear and banishing the monsters.

This is how the GM would plan to run it:

1. The armies face each across the battlefield. This is meant to set the tension as the armies evaluate each other.
2. The champions of both armies ride forth to meet each other. This is an opportunity for some roleplaying.
3. At an unspoken command, the infantry of both armies rush out and clash, led by their champions.
4. The PCs' army will gain the upper hand yet, quite obviously, the leader of the Dark Gods' army does not engage in the battle.
5. The wizards of the Dark Gods open the tear and huge black dragons rage onto the battlefield, followed by the leader of the Dark God's army. It will be a devastating blow to the PC's army, destroying their morale even more so than men could.

In the normal course of events, the Dark God's army would win, but the GM wants to leave the window open for the PCs to swing the battle. Some possible ways they could swing the battle are:

- The PCs take down one or two of the dragons and bring back morale to their army.
- The PCs manage to maim or kill all the enemies' champions or their leader and so break the Dark Gods' army's morale.
- The PCs manage to close the tear and so send the dragons back to the darkness.

The Scripted Approach

The open-ended approach may not suit everyone's style. A more static method is to create a list of events and associated possible encounters.

For each key event, the GM should generate a list of possible encounters. These encounters may also have a list of even more possible encounters.

The Last Stand

In this example, the PCs are mortal warriors and members of a Celtic tribe. The campaign has only a slight supernatural tint that is more for flavor than any sort of practicality. The PCs' tribe has been at war with an enemy tribe for most of the campaign. This enemy tribe is dark and exotic, and does not fight like the Celts; they are able to fight at night as if it is day.

In a previous adventure the PCs managed a secret raid and killed the enemy leader (but failed to kill their morbid oracle). This has given their enemy a powerful rage, but their direction is erratic. It is obvious that the assassination will drive the enemy to a full attack on the PCs' fort.

In the previous adventure,, the players spent the session discussing and organizing tactics. They plan a range of different traps to slow and harass the enemy. The GM considers these traps the PCs' saving grace. The enemy tribe has overwhelming numbers, but has decided that the preparations by the PCs will be enough to reduce the threat so that the Celtic tribe will survive and even triumph in the end.

In essence, the PCs must just survive to the end.

1. Key Event: The enemy runs into the elaborate traps
    - Encounter: Shooting arrows at oncoming enemies
2. Key Event: The enemy swamps the walls
    - Encounter: Direct charging attack
    - Encounter: Saving friend NPCs
3. Key Event: The Celtic Chief is killed
    - Encounter: Defeating the enemy who killed the Chief
    - Encounter: Defending the body of the Chief from being stolen
    - Encounter: Rally the warriors
4. Key Event: The enemy breaks the walls
    - Encounter: Chasing runaway enemy warriors through the fort
    - Encounter: Defending/Saving the non-fighting NPCs
5. Key Event: Cleaning out the enemy survivors
    - Encounter: Taking down their surviving warriors
    - Encounter: Surprise enemy pretending to be dead

You can't have a fight in a vacuum!

A large-scale battle will work best if there is a build up to it over the course of a few sessions. If you plan to have a battle as the climax in your campaign, make sure you include it in all your plans, possibly foreshadowing it quite early.

If the battles are part of an ongoing war, you want to have the feel of the background of war in your campaign. Like a battle, a war progresses with and without the PCs interaction. The PCs at least should pick up news of how the war is going elsewhere. Resources, trade, and law in any land will be influenced by war.

Like in battles, how much influence the PCs exert on the war affects the feel of your campaign. But also how much involvement they have in the war, be it as agents, spies or just civilians.

Arch-nemeses make perfect NPCs in battles; with the real possibility of PC and NPC, death they give an edge to the drama. But like the device of war, they have to have had more than a few run-ins with the PCs previously so that the players know how frustrating and "bad" they are.

The Commandments of Battle

While it may seem like a daunting task to GM a big battle, if you remember some key points, it can make things easier or at least give you some grip on it:

- Remember it's a story like every other.
- Focus on what the PCs do.
- Plan and decide the outcome of the battle before running it.
- Try to build up to it in previous sessions.

Large-scale battles are a wonderful climax to any heroic chronicle. PCs can face heroic deaths, overcome old enemies and find hope in the very face of despair. I hope this article provides you with enough to plan and run your own dramatic battles.

Naval Combat in Fudge
Monday, September 05, 2005

by Richard Morton (rm75 @ evansville .edu)

Whether you're a pirate looking for fame and glory on the high seas, or a merchant looking to make an easy profit, combat on the high seas during the Age of Exploration was a fact of life. These rules provide a quick and entertaining resolution to any naval combat.

Building a Ship

Before you can engage in naval combat, you have to have a ship. A ship can be built roughly the same way a character is, with a set of Attributes, and even Gifts and Faults. There are 5 main Attributes for a ship as listed below.

- **Hull**: The strength and size of a ship's Hull. A better Hull can both carry more cargo and is more resilient to damage. If a Hull's level is ever brought below Terrible, the ship is sunk.
- **Guns**: The number of cannons that can be fired at an opponent. For simplicities sake all cannons are assumed to have enough gunpowder and shot.
- **Speed**: How fast the ship can go. This is an abstract Attribute, and cannot be converted directly to knots.
- **Maneuverability**: How effective the ship is at changing direction. This Attribute goes hand in hand with Speed most of the time. A more maneuverable ship is a more dangerous one.
- **Crew**: The quality of the people manning the ship. Used to determine the fighting strength of a boarding action and effectiveness at making repairs.

Based on your assessment of a ship's Attributes, you can call the ship what you will. A ship with high levels of Speed and Maneuverability could be called a Sloop. Ships with Great Hull and Guns could be called a Galleon, it's up to you to decide how descriptive you want to be.

The Combat

The ship is built and ready for some combat. Naval combat can be broken into three distinct aspects: rounds, turns, and actions. Each round is the time it takes for every ship to have at least one turn. During each turn a ship can perform a certain number of actions. Once those actions are complete the turn for that ship is over and it's the opponent's turn. Once every ship's turn is over, that is the end of that round, and a new round begins.

Pre-turn Information

Weather gauge

According to the dictionary, the weather gauge is, "The position of a ship to the windward of another. (b) Fig.: A position of advantage or superiority; advantage in position." At the beginning of every other round, or less often depending on the whims of the wind, roll 4dF. If the end result is negative, the enemies have the weather gauge; if positive, the PC's ship has the weather gauge. This advantage increases the ship's speed rating by one level.

Tactics Check

At the beginning of every round the captain of each vessel makes an opposed Tactics roll, the winner of this roll gets to take the first turn this round.

During the Turn

Performing Actions

Every turn allows for at least one action. However skilled captains can increase the number of actions he can take by two or even three. Before making any actions, the captain of a ship can decide to risk doing multiple actions during his turn. The captain needs to make a successful roll against Tactics, Captaining, or similar. If the result is Great, he can make two actions in the turn. If the result is Legendary he can make three actions. However if the

result is Mediocre or worse, the captain made an error in judgment and loses all actions for his turn. So trying to take more actions is risky, but may be worth it.

Actions

- **Move**: You can either move away from your opponent or towards her. If the opponent doesn't want you to move, you must make an opposed Speed roll, with the winner getting her way. For simplicities sake, there are three ranges in this type of combat: "out of cannon range", "within cannon range", and "within boarding range." A successful Speed roll will allow you to move from one range to the adjacent one. A ship can move from "within cannon range" into either "boarding range" or "out of cannon range", but a ship that is currently "out off cannon range" cannot move directly into "boarding range" in a single action. Regardless of how many actions a ship can take it can only move one range increment per turn.
- **Sailing Away**: Very rarely will you find two naval combatants willing to fight each other until both ships are destroyed; often one ship will try to make a run for it. In order to successfully flee naval combat, a ship has to stay out of cannon range for three consecutive rounds. For every full turn that a ship stays out of cannon range that ship gains a temporary +1 level to its Speed Attribute. After three turns it is assumed that the fleeing ship made it over the horizon. It can still be tracked, but for the time being the combat is over.
- **Maneuver**: Make an opposed Maneuverability roll, with the faster ship getting a +1 bonus. The victor of this roll was able to out maneuver his opponent, allowing for a bonus on the victor's next action. This bonus equals the Relative Degree of the opposed Maneuverability roll.
- **Attack**: You attack your opponent, if you are within cannon range. You can choose to target a part of the ship in an effort to disable that part. For example, targeting the sails of a ship will decrease its Speed. Your Guns roll must be equal to the Hull level of your target, and for every level beyond that you can take another level off of targeted Attribute. If the Hull ever drops to below Terrible, the ship is sunk. If the Crew is reduced to below Terrible, the entire crew is either dead or wounded, and will no longer be able to resist.
  If you want a little more randomness in this system instead of allowing a captain to target certain aspects of the ship roll 1d6 and use the resulting number as the area of the ship that was hit,
  1- Hull
  2 - Guns
  3 - Speed
  4 - Maneuverability
  5 - Crew
  6 - attacking captain's choice
- **Barrage**: A barrage is a special type of attack. You can only perform a barrage when you can take multiple actions during the turn. By giving up the multiple actions, you get to add a +1 bonus for each action you could have taken to your Guns roll for this turn only.
- **Boarding**: Many ship battles end with a boarding party trying to take over the other ship. In order to board a ship, the ships must be within boarding range. Make an opposed Crew roll, with the winning ship landing her crew onto the opponent's ship. If the roll is a tie, the assault was repelled and can be tried again next turn. Once the boarding party is on board, normal ***Fudge*** combat rules take over.
- **Make Repairs**: The crew of a ship can make quick repairs on parts of the ship during battle. Make an unopposed Crew roll of Great or better to repair one Attribute of the ship, aside from the Crew itself. Each successful roll will repair one level of the Attribute; however these repairs can only bring up an Attribute one less its original. For full repairs a ship has to go to the docks.

PCs in Naval Combat

It is assumed that all PCs and important NPCs survive the naval combat, no one gets killed by incoming cannon fire, and if the ship happens to be sunk, all the PCs miraculously end up clinging to the same part of the broken ship.

Naval combat may not be very much fun for most PCs. Aside from giving advice to the captain, there isn't much that the heroes can do. However there is a risky alternative, each PC can choose a part of the ship to assist, any of the ships Attributes can be aided. At the beginning of each turn, the PCs that want to help can choose an Attribute to aid. Whenever a roll is needed from that Attribute the player can make another roll, and the better roll is taken. A bonus can be added for PCs that have skills relating to the area that they are helping in, for example someone with Great Leadership may warrant a bonus when working with the Crew. However there is some risk to this assistance. Anytime that part of the ship is attacked, the PC must make a Good or better survival roll against Fortitude, Health, Luck or similar. Failure means that the PC is knocked out for the rest of the combat, or possibly mortally wounded.

Deciding victory

A ship is considered victorious when the enemy ship is sunk, its crew is incapacitated, or they surrender. An optional rule to consider when plundering ships is to take into account how much damage was dealt. If a ship's

Hull was reduced to Terrible, that probably means a lot of the cargo was destroyed, so many pirates use the threat of violence instead of actually destroying their opponents. It's much more profitable that way.

Conclusion

Now you are ready to sail the high seas looking for adventure using ***Fudge***. As with ***Fudge*** itself, there are numerous options that can be added on. With a little modification, this system could be used for space opera combat. I will, however, leave those modifications as an exercise for the reader.

Fudge Social Combat
Monday, November 28, 2005

by Douglas Weber (infornific @ aol .com)

Standard ***Fudge*** rules allow for detailed outcomes from physical combat - Skill, Strength, armor and chance all play into a well-defined outcome. Social skills on the other hand are not so well detailed. Often players and gamemasters choose to simply act out social interactions, but this can handicap shy players. If a slow, clumsy player can play a lightning-quick, expert swordsman, why can't a shy player run a charming con artist? Fortunately, the standard ***Fudge*** combat system can be adapted for social interaction. For the purpose of this system, I'm going to define three attributes, but other attributes may be substituted to suit the gamemaster's tastes.

- **Wit** - A measure of mental agility and speed
- **Confidence** - Presence and mental force
- **Ego** - Mental and emotional toughness

Social skills as you might expect replace combat skills. The above Attributes are used as Offensive and Defensive Damage Factors (ODF and DDF). The various injury outcomes -- Scratch, Hurt, Very Hurt, Incapacitated -- have different definitions depending on what the character is attempting to do -- Bluff, Charm, Impress, Intimidate, or Persuade. The different social techniques include suggested Skills. Players should be encouraged to come up with creative uses for Skills, as long as they can describe a plausible effort. Alternately, the GM may simply use Bluff, Charm, Impress, Intimidate and Persuade as Skills. Choose an appropriate defensive skill based on the attack skill. For example, an attempt to Intimidate using Sword skill might be resisted by a Sword or other weapon skill. If there seems to be no appropriate Skill, simply set difficulty at Fair. As with combat, clever tactics and roleplaying should be rewarded with bonuses. To successfully use a social technique, the attacker must roll higher than the defender, just as in regular combat. In addition, the attacker must roll at least a Poor result. A failed attempt with a social technique doesn't necessarily have negative consequences. However, a roll of Terrible or worse should have repercussions. An effort to Charm offends, an effort to Impress does the opposite, etc. A failed effort to Intimidate always causes a hostile reaction. Add degree of success to ODF, and subtract DDF. If the result is positive, calculate the standard ***Fudge*** damage (Scratch, Hurt, etc) and check against the specific technique for the result.

Social Techniques

Bluff

As the name suggests, a Bluff is an effort to fake something, carried out through sheer force of will. While Persuasion may depend on logic or cunning, Bluff relies on confidence and chutzpah. Outcome depends in part on how plausible the bluff is and in part on how much risk the target takes in believing the bluff. Bluffing your way into a high-security base is difficult in part because the guards will face severe penalties for letting someone through unauthorized.

- Skill: Acting is appropriate for pretending to be someone. Courtly Manners or similar skill for pretending to be a noble, appropriate academic skills for pretending to be a professor, etc.
- ODF: Confidence
- DDF: Wit
- Scratch - The target will believe a plausible bluff, if there is no risk to the target.
- Hurt - The target will believe the character's implausible bluff if no risk is involved or a plausible bluff if minor risk is involved.
- Very Hurt - The target will believe a plausible bluff even at major risk, an implausible bluff at minor risk, or an absurd one at no risk.
- Incapacitated - The target will believe a plausible bluff at severe risk (life and limb), an implausible bluff at major risk or an absurd one at minor risk.
- Near Death - The target will believe an utterly ludicrous bluff.

Example: Jolene the Fair attempts to crash a noble's party by pretending to be an aristocrat. Met at the gate, she haughtily declares a noble title and demands to be introduced. Jolene is well-dressed and has a noble's manners, so the bluff is plausible. However, the doorman is at some risk in accepting Jolene's word, so the gamemaster decides a Hurt result is needed for success. Jolene has Courtly Manners at Great, while the doorman has the same skill at Mediocre. Jolene's Confidence is Great, the doorman's Wit is Good. Unfortunately, Jolene rolls a -1 and the doorman gets a +1. This gives Jolene a Scratch result - the doorman thinks she's a noble but insists on getting confirmation.

Charm

Charm means an effort to make someone like you. It can be helpful in avoiding trouble or helping set up a roll to persuade. An effort to Charm is likely to take some time, unlike other social techniques.

- Skill: Seduction or similar skills are appropriate for romantic efforts. Carousing is appropriate for parties, Courtier for high society, and so on.
- ODF: Confidence
- DDF: Wit
- Scratch - Target will be mildly more congenial. Efforts to Persuade are at +1.
- Hurt - Target will be significantly friendlier than before. Efforts to Persuade are at +2.
- Very Hurt - Target is likely to be friendly, even if initially hostile to the character. Efforts to Persuade are at +3.
- Incapacitated - Target will be (temporarily) friendly even if the character is normally an enemy. Efforts to Persuade are at +4.
- Near Death - Target is putty in the character's hands. Efforts to Persuade are at +5.

Example: Buddy the Cat is trying to convince his human owner to give him some food. He decides to use his Purring skill to Charm his owner first before making the attempt to Persuade. Buddy has Good Purring and Great Confidence. The owner has Mediocre Animal Handling and Good Wit. Buddy rolls, -2 for a Mediocre Purring Effort. Fortunately, his owner rolls -1 for a Poor Animal Handling result, and Buddy just barely succeeds. Adding his Great Confidence and subtracting his owner's Good Wit, Buddy gets a Scratch result, giving him a +1 to Persuade the owner to hand over people food.

Impress

Impress is an effort to awe or inspire someone. This could be dramatic oratory, a command in battle or any other similar effort.

- Skill: Oratory for speeches, Leadership for commands. Other skills may be used to impress in limited contexts -- a minstrel might use skill with a harp to Impress a potential employer.
- ODF: Confidence
- DDF: The best of Wit or Confidence
- Scratch - The target is mildly impressed.
- Hurt - The target is moderately impressed.
- Very Hurt - The target is very impressed with the character's abilities.
- Incapacitated - The target is awestruck.
- Near Death - The target is struck speechless with awe at the character's prowess.

Impress can be used as a complementary technique to Charm or Persuade, as described below. For dramatic speeches, check Persuade for results.

Example: Joe meets Jane at the high school prom and tries to Impress her with his Dance skill. Unfortunately, Joe has only Mediocre Dance skill, but Good Confidence. Jane has Good Wit. The gamemaster sets the difficulty of the attempt at Fair. Joe rolls a +1 for a Fair result -- not quite good enough to get a positive result, but at least he hasn't made a fool of himself.

Intimidate

An effort to Intimidate is like an effort to Impress, but with the deliberate attempt to frighten an opponent. If successful, it may handicap the opponent in combat. Unsuccessful efforts will lead to hostile reactions. This is the preferred social technique of tough guys and angsty superheroes dressed in black.

- Skill: Anything that can be used to threaten. Weapon skills could be used to display combat prowess, Courtly Manners to imply you have powerful social connections, Streetwise to suggest friends in low places, etc.
- ODF: Confidence
- DDF: The best of Confidence or Ego

A character with a significant and obvious combat advantage should get a +1 to Skill, +2 for a Large advantage (for example, ogre vs. normal human). Likewise, a character at a significant seeming disadvantage should receive a -1 or more(a halfling attempting to intimidate a human for example). The advantage or disadvantage must be obvious to the defender.

- Scratch - Target is mildly unnerved and will hesitate. If attacked, he will fight normally, but if attacking first, will be at -1 for the first round.
- Hurt - Target is frightened and will be reluctant to attack. He will be at -1 in combat.
- Very Hurt - Target is very frightened and will not attack first. He will be at -2 in combat.
- Incapacitated - Target is terrified and will be at -3 in combat.
- Near Death - Target is completely cowed and will either surrender or flee.

If using Intimidate to interrogate, check Persuade for likely results.

Example: Old West gunslinger Deadeye Crane finds himself confronting the self-named El Paso Kid, son of a man Deadeye killed many years ago. Deadeye doesn't want to kill the Kid, so instead tries to Intimidate him with a display of marksmanship. He points to a distant apple tree, draws his pistol and shoots away the stems of two apples. The GM decides that Gun skill is used for both attack and defense skill. Deadeye has Legendary skill (that's why they call him Deadeye) and Great Confidence, for an ODF of +2. The Kid has Good Gun skill, Good Confidence and Fair Ego. Since his Confidence is higher than his Ego, the Kid uses his Confidence for a DDF of +1. Deadeye's RDF is +1. Deadeye rolls a +1, giving him a result of Legendary+1. The Kid rolls 0, for a result of Good. Deadeye's degree of success is 4, +1 for his RDF, gives a result of +5 or Very Hurt. The Kid is badly shaken by Deadeye's display and will be at -2 in any combat.

Persuade

An effort to Persuade involves coming up with a logical, pseudo-logical, or otherwise cunning argument to convince the target to provide information or follow a certain course of action.

- Skill: Diplomacy and Fast Talk are both appropriate. Other Skills may be used depending on the player's imagination and gamemaster's discretion.
- ODF: Wit
- DDF: Wit. However, if the attempt to Persuade goes against the character's principles, use the best of Ego or Wit.
- Scratch - Target is willing to cooperate, if it's something he's likely to do anyway
- Hurt - Target will cooperate with suggestions that involve no significant costs or risks, or actions he wouldn't mind doing.
- Very Hurt - Target will cooperate with suggestions that may put him at minor risk, involve minor cost, or that he would normally be opposed to doing.
- Incapacitated - Target will cooperate with suggestions that may put him at major risk or involve major cost, or that he is strongly opposed to doing.
- Near Death - Target is completely bamboozled and will cooperate with truly ludicrous suggestions.

Example: Ragnar the Reckless is trying to talk a town watchman into letting him go after he was caught out after the city curfew. Ragnar hints that he is willing to pay a bribe to get out of trouble. The gamemaster decides this makes the suggestion one that the watchman is inclined to follow, and so Ragnar only needs a Scratch result. Ragnar has Fair Fast Talk and Great Wit. The Watchman has Fair Guile (used to resist Fast Talk) and Fair Wit. Ragnar gets a +1 and the watchman rolls a -1, giving Ragnar a result of Very Hurt. Ragnar gets away with breaking curfew, at a reasonable price.

Repeated Effort and Complementary Techniques

A player may attempt the same technique on the same target, but at a cumulative -1 per effort. Alternately, a player may follow up one technique with a different one. If the first technique is successful, the player might get a bonus to the second technique as follows:

- Scratch: +1
- Hurt: +2
- Very Hurt: +3
- Incapacitated: +4
- Near Death: +5

For example, if a player gets a Hurt result using Charm, he may follow it with an attempt to Persuade at +2. In the example above from Impress, if Joe had gotten a Scratch result he would have been at +1 to Charm Jane. It is up to the gamemaster to decide whether a given technique is complementary. On the other hand, a failed attempt gives a -1 penalty to a complementary technique. With these rules, social combat can be as detailed as physical combat. Why let the sword swingers and gunmen get all the screen time? This system certainly isn't necessary for ***Fudge***, but can add a lot of detail for diplomats and con artists.

Active/Reactive Conflict Description
Monday, June 27, 2005

by Oliver Granger (oliver @ watergoesred .net)

ARC is an opposed action resolution system based around the Fudge system of simultaneous combat rounds. It is designed for the simulation of any conflict situation, for those who don't mind their Fudge a little crunchy. Indeed, the spirit of ARC may be harnessed by those who have a taste for less rules in their descriptions, but I'm not going to explore that possibility here.

The way most combat systems deal with initiative is as a randomising factor at the beginning of each round. Sometimes initiative is set at the beginning of a combat and the same value carried on through consecutive rounds. Nonetheless, most initiative results have dramatically little effect on a conflict situation and the few that do their effects appear random and unrelated to the events of the conflict. This is, to my mind at least, unlike real conflict where getting the initiative through planning or skill is as much a part of winning a conflict as sheer luck.

I like the Fudge system for simultaneous combat because of its simplicity. It has a neat solution to the initiative dilemma: solve the action of opponents simultaneously. A successful action for one combatant means a successful offense and defense for them and a simultaneous failure in defense and offense for their opponent. At first I thought that had to be the best solution, no place and no need for a clunky initiative randomizer. Yet I was not satisfied.

I wanted to integrate the notion of initiative into the heart of conflict, to use initiative not as a randomizer but as another way of describing conflict. So I made ARC for those who want a little more strategy in their conflict resolution and who don't mind a bit of crunchiness getting it.

Offensive/Defensive Stances

Fudge presents offensive/defensive tactics in which each opponent chooses a stance before the start of a round: a normal stance, an offensive stance, or a defensive stance. An offensive or defensive stance increases a conflict skill in one aspect (offense or defense) and decreases the same skill by an equal amount in the other aspect. The five basic options for stances are:

- +2 to offense, -2 to defense
- +1 to offense, -1 to defense
- Normal offense and defense
- -1 to offense, +1 to defense
- -2 to offense, +2 to defense

The choice of stance is decided on and then each combatant makes a single Opposed action roll. The rolled result is then modified for both offense and defense accordingly. The offensive result of each combatant is then compared to the defensive result of their opponent.

Active/Reactive Opposition

My idea for opposition came from the thought that, typically, at any one moment in a conflict, someone has the advantage, the upper hand, the initiative. Having the upper hand means that a combatant is not hindered or limited much by their opponent. This generally means they are capable of successfully initiating action as well as of resisting the actions of their opponent. That is, they can be on the offensive and the defensive simultaneously. Obviously, this is the way they should be: working at their best.

Unfortunately, combatants do get caught on the back foot. And this equates to being hindered or limited in some way by one's opponent. And this means that a combatant can only do one thing properly at a time, usually defend themselves, unless they are particularly tough or foolhardy and forgo any defense for an all-out attack.

ARC introduces a new tactic: active/reactive opposition. Unlike offensive/defensive stances, a combatant cannot directly choose whether they are actively or reactively opposing (active or reactive for short). Instead their opposition is decided by the success of their opposed action. If a combatant is successful in an opposed action (+1 or higher) then they will become or remain in active opposition (getting or keeping the upper hand). Likewise if they fail an opposed action (-1 or lower) they will become or remain reactive (getting or staying caught on the back foot). If an opposed action is a stand-off (a 0 result) then the status quo continues and so the combatant remains in their current opposition.

Opposition affects which offensive/defensive stances a combatant has available to choose. That is, combatants cannot always choose the offensive/defensive stance they want.

When in active opposition a combatant can choose any of the five Fudge options (though some claim the extreme ±2 stances produce results too wild to be credible). However, when in reactive opposition a combatant cannot choose any of the five Fudge options. Rather the reactive combatant can only choose to be in one of the two following reactive stances:

- normal offense, -2 defense
- normal defense, -2 offense

Note that active opposition is determined by successful opposed action. Potentially, any opposed action in a conflict could determine opposition, including actions that are not directly offensive or defensive. What other actions are possible I leave open but as an example an active combatant might be able to perform an action (like a strategic maneuver) by dropping their offense yet still maintaining their defense. Such capacity, however, would not be available to a reactive combatant who might have to give up both offense and defense to perform a non-conflict action (like running away).

The Circumstances of Conflict

When one combatant is active the other need not necessarily be reactive or when one is reactive the other need not necessarily be active. That is, both combatants can be simultaneously active or simultaneously reactive. For Fudge offensive/defensive stances allow for both combatants to be offensively or defensively successful simultaneously. And it is through the success or failure of their actions that combatants become active or reactive.

If both combatants are simultaneously successful in offense or simultaneously in defense should both attain active opposition? Or rather, because both also failed simultaneously, should they both attain reactive opposition?

To answer this we should look at the circumstances of the conflict. At the start of a conflict the opposition of each combatant must be decided. Whereas once the conflict is in motion the combatants opposition is decided by their actions, before it starts their opposition must be decided by other means.

Take two equal combatants on equal ground, both with the intention to fight the other. An example of this could be two equally matched boxers in a boxing ring at the start of a prizefight. Both boxers might be considered to have active opposition because of the circumstances of the conflict.

Here are some questions that could be asked about the circumstances of a conflict.

- Position
    - Where is the conflict?
    - Is one combatant in a better position for offense or defense?
    - Is one in their natural environment or in their hometown?
    - Does the environment hinder or help either combatant?
- Intention
    - Why is there a conflict?
    - Are both aware they will fight right now?
    - Is one currently occupied with something important?
    - Is one better prepared?
- Perception
    - How does a combatant perceive their opponent?
    - What knowledge do they have of them and what misconceptions?
    - What emotions do their opponent stir?
    - How do they perceive the conflict should end?

These questions of the circumstances of a conflict are just a few possible examples. What is important to note is that what they are all aimed at is a question of control: Is one combatant in more control of the conflict and its circumstances? This is essentially what active/reactive opposition attempts to describe. If one combatant has something over the other, has the upper hand, then the advantaged combatant might start the conflict in active opposition and their opponent in reactive.

So back to our original question: because simultaneously successful combatants have both gained some success neither has gained more control of the conflict and its circumstances. So if both combatants simultaneously succeed in offense or simultaneously in defense then their opposition will not have changed and the status quo, their current opposition status, will continue.

Another use for the conflict circumstances is for allowing combatants to indirectly change their opposition status. Changes in the positions of combatant, their intentions to fight, or their perception of their opponent could change the circumstance of the conflict and thus change the combatant's opposition. This lets strategic maneuvering, careful dropping of gossip, or the discovery of an opponent's weakness have the potential to directly affect the conflict. The possibility of gaining a tangible advantage in a conflict by means other than offensive action should allow a conflict to be less of a slugfest and more of a dynamic and sprawling grasp for control.

Opposition Modifiers

As often is the case, a simple dualism like active/reactive, is not fine-grained enough. So a way to fine-tune differences in opposition is to modify when opposition changes.

Opposition modifiers could be used in place of modifiers for skill or used in place of deciding different initial opposition for combatants. The giving of an opposition modifier might be decided by contesting a trait of each combatant that is relevant to the conflict. Or an opposition modifier could be given by looking at what the circumstances of the conflict offer each combatant.

An opposition modifier can give a combatant an advantage (or disadvantage) that is not as overwhelming as giving them active opposition over their opponent or as powerful as other combat bonuses like a permanent +1 to offense. Here are two methods for opposition modification.

Utility Modifiers

The first method is to modify where opposition changes and where it remains the same. I called it the Utility Modifier because it changes how effectively combatants utilise the results of their actions.

Normally +1 action result is needed to become active, -1 to become reactive, and 0 for the current status quo to remain. This could be changed, for example, by removing the point of status quo so 0 result would be either an active or a reactive. Here are some examples:

Modifier	active	status quo	reactive	effect
Standard Utility	← +1	0	-1 →	
Half Utility	← +2	+1 ↔ -1	-2 →	opposition change harder
Active Utility	← 0		-1 →	easier to become active, no status quo
Active Half Utility	← +1	0 ↔ -1	-2 →	harder to become reactive
Reactive Utility	← +1		0 →	easier to become reactive, no status quo
Reactive Half Utility	← +2	+1 ↔ 0	-1 →	harder to become active

Utility modifiers are useful for longer-term and larger scale advantages, better for describing differences in combatant's skills and traits. For example, a utility modifier is well suited for major differences in combatant speed, where the faster combatant might be given active utility and their slower opponent reactive utility.

Advantage Modifiers

The second method involves moving the transition point of opposition.

Normally the transition point for opposition is 0; above or below that point opposition changes. An advantage modifier essentially moves that point up or down, thus making it easier to become either reactive or active.

An advantage modifier works by adding the modifier to an action result but only for the purpose of deciding whether that action will change the combatant's opposition; it does not actually affect the success or failure of the action result. For example, if a combatant has an advantage of +2, and an action result of -1, the +2 advantage is added to -1 action result to give +1. The combatant's action result remains -1 but their advantage modifier virtually increases that to +1. So instead of their action result making them reactive, with their advantage modifier they become or remain active. If the same combatant then had an action result of -2 that would, with their +2 advantage, result in their remaining active because their advantage modifier would virtually increase their action result to 0.

An advantage modifier is slightly different from a utility modifier, for whereas a utility modifier effectively expands or contracts the field of opposition transition, an advantage modifier simply slides it up or down. In some ways this makes advantage modifiers easier to implement quickly, well suited for describing sudden changes in the conflict's circumstances. For example, an advantage modifier is well suited for describing a combatant being on higher ground than their opponent, providing +1 advantage.

Tactical Rewards

A more radical use for opposition modifiers is as a tactical reward for successful opposed action.

A successful offensive action is typically rewarded by a certain level and type of damage inflicted upon one's opponent and a successful defensive action by the thwarting of an opponent's offense and the deflection of damage. ARC also rewards a successful action with active opposition and a failing action with reactive opposition.

Still, no matter how successful a defender is the best they can attain from successful defensive action is to not get damaged, to remain active, and to keep their opponent reactive. And a successful offender can, at best, hope to inflict damage (possibly of lethal quantity), to remain active, and to keep their opponent reactive. Therefore, in the spirit of expanding the strategic options of conflict, perhaps a highly successful action could be rewarded with an opposition modifier.

First, to be tactically rewarded a combatant must be successful in their opposed action. Tactical rewarding may require a success of at least +2 or +3 (I'm not entirely sure how high a level of success will work).

Second, the tactical stance of the combatant determines the tactical reward:

- A highly successful defense while in a defensive stance rewards the combatant with a +1 advantage modifier.

- A highly successful offense while in an offensive or normal stance rewards the combatant's opponent with a -1 advantage if the successful offender foregoes inflicting damage. (Whether all damage should be foregone or just a level or two of damage is a question requiring experimentation. Some may not agree with any forgoing of damage but I think damage should not have to always be the result of an offense. The offender should be given a choice of strategies. And heaping more punishment on a failed defense by inflicting damage and -1 advantage also seems unfair and unnecessary.)

In this way, tactical rewards combine action result, opposition modification, and tactical stance. One consequence is it provides a reason for broader tactical use of defensive and offensive stances. Importantly, it also prevents combatant's actions from being rewarded dual success, that is simultaneous offensive and defensive success, and thus from them accumulating dual advantage.

Another interesting effect is if two opponents achieve successful actions simultaneously, one of the combatants could still indirectly gain more control over the conflict by gaining a tactical reward for their greater success in action and their fortuitous choice in stance.

Ultimately though, what tactical rewards mean is that success in a conflict has as much to do with strategies for gaining control of the conflict and its circumstances as it does with inflicting or deflecting damage. Of course, the inflicting or deflecting of damage involves some measure of control over a conflict but this control is at best simplistic and brutish. Focusing on controlling conflict only through damage can result in a lack of finesse, where tough skin and a bloody attitude are the only things that can amount to anything.

And the Winner is...

ARC is designed to use initiative as another way of describing conflict. That is, using initiative not merely as a randomizer but as another means of describing and resolving conflict. Indeed, hopefully this additional description will encourage more detailed conflict and provide a broader range of ways of resolving conflicts. Hopefully, ARC will provide more incentive for creative involvement in conflict resolution by providing an extra level of strategy. Players will no longer be able to simply fall back on the abilities of their characters to resolve conflicts, when tangible advantages can be gained through the strategic manipulation of the circumstances of conflict.

Using the Circularity of Fudge
by Steven Michael Graham (malpanda @ midmaine.com)

The beauty of Fudge's action resolution mechanic is its circularity. The rank of the trait being used, the difficulty of the task, and the result of the action (the rolled degree) are all measured on the same Terrible to Superb scale, and this has intrinsic advantages. When a Fudge character ties a knot, you almost automatically know how good a knot it is. The rolled degree of that character's Knot-Tying roll can become the Difficulty level of another character's attempt to untie it. The same principle can apply to anything a character creates, solid or ethereal, permanent or ephemeral, from conjuring a magical barrier to directing a movie.

Example: Granny Smith is a Great cook, as demonstrated by her Great apple pies.Under normal conditions (proper equipment, ample time, and no extraordinary distractions) there would be little randomness to the process, and therefore no Cooking roll. Great skill yields Great results. However, if President Roosevelt is coming to dinner, the nerves and self-consciousness that would accompany such a distinct honor may introduce randomness to her cooking process. In trying to make her meal Superb, she runs the risk of it being merely Good or Fair.

Obviously, some things that characters create are going to be more dangerous than pies, but there are many ways for GMs to more tightly control the circularity effect. For the sake of brevity in the rest of this article, any object to be created (or made by transforming a pre-existing thing with different properties into a new form) or summoned, or otherwise 'brought into play' by the effort of a character, regardless of the particular traits employed to do so or the form the object takes, will be referred to as a "construct".

If the construct will have the benefits of greater Size or Mass scale, then assign proportionate penalties to the roll. The characters can offset these penalties by spending extra time or working cooperatively to spread out the extra work entailed. No one expects something like building a starship to be a small job.

If the construct is intended to have many different features or functions, then it's okay to ask for separate rolls to install or imbue each one. It's more realistic for large or complex things (Catmobiles, Gubernatorial campaigns...) to have both stronger and weaker points. Although, of course, relatively insignificant features (like Catperson's am/fm car radio) can be glossed over, requiring time (for the character, not the player) but no rolls.

If the construct should only be available at certain higher ranks or exists only in varieties that possess high ranked traits, then be sure to set the difficulty level of the rolls to acquire these things accordingly. Conversely, the GM may set a ceiling on how powerful a given item can be. No matter how Superbly engineered, paper airplanes can only fly so far and withstand so much impact.

If the construct is of a sort where a few levels will have a lot of effect (dangerous permanent things like weapons), then subtract the difficulty level from the rolled degree and make that the rank of the construct's dangerous trait. That way, it's still worthwhile for characters to have high ranks in skills like Weaponsmithing, but they can't arm the whole village with +3 swords ...unless they plan really far ahead and put in lots of work. ("Miyaki! You just melted down a perfectly Good sword!" "Sorry, but orcs are bound to attack the village eventually, and when they do, I want everyone hefting the best swords I can make!")

Indeed, constructs can be even more abstract, the fleeting aftereffect of a single action or assumed set of behaviors. A single roll can be used as a Construct in situations where lots of similar rolls are called for, all in an infeasibly short span of time. For example, a character might have an attack that for whatever reason affects multiple separate targets almost simultaneously (like autofire guns or certain bouncing round metal objects). Instead of rolling separately to hit each target, the attacker can roll once, and that rolled degree can be compared to the Difficulty of hitting each target in turn. If that's too cinematic, the GM can subtract a bit from the rolled degree for each target before the one being currently compared (or for each successfully struck target before this one, to allow for how much of the attack they've already soaked up).

One more example: Say there's a GM who loves to see if characters notice little details all the time, or a GM that doesn't want the players to know when they've all failed their perception checks. Each player can roll once per scene to determine their current 'Alertness', and the GM can compare those standing Alertness degrees to the Difficulty of noticing various details (or anything a Perception check would be used for) as the opportunity to notice arises. No one has to wear out the corners on their dice rolling scads of Perception checks, and no player has to know how many times their perception was checked. Obviously, this sort of 'Standing Roll' can only last for a short time, or the potential for abuse becomes too great, but if these rolls are re-done every round, or even just once per scene, (depending on how vital the trait in question is) the rolls will even out over time, just like normal ones do.

Lord of the Dice: A Fudge GM's Toolbox
by Paul Tarussov (paul.tarussov @ mail.mcgill.ca)

Fudge, as a roleplaying system, offers its fans and adherents a remarkable degree of freedom in creating the sort of game they want to play. Indeed, the flexibility of Fudge is so great that it cannot be rated on the Fudge scale -- in other words, it can only be considered a Gift.

However, many GMs find themselves in a bind when it comes to handing out modifiers. A +1 or -1, in the spirit of most other RPGs, is a huge leap in Fudge, and there seems to be no way for a GM to affect the dice in a more subtle fashion. This article will explore the properties of Fudge dice, and how a GM can use these properties to influence the outcome of any roll.

The basic dice mechanic of Fudge (4dF) is unique *(or at least highly unusual)* in several ways. The results it generates can be separated into three categories: positive, negative, or zero. Moreover, each die itself generates a result that can be classified into each of these categories. Since each die returns an average result of zero, we can always add or subtract a die from a roll without shifting the centre of the probability curve.

A d20 roll, for example, can only be adjusted with the addition or subtraction of a numeric modifier *(such as a -4 for a difficult task, for example)*. In Fudge, however, all these factors conspire to allow a GM to manipulate the outcome of the dice in many different ways. Here are the methods I have come up with, along with examples of suitable contexts. This is certainly not an exhaustive list, and I would love to hear about any other ideas from fellow **Fudge Factor** readers.

Please note that all the probabilities listed in this article are approximations, NOT exact percentages. They are included in some of the examples below to give the reader a rough idea of how a particular method will affect the probability curve.

Numeric Modifiers: +X/-X

This type of modifier, the direct addition or subtraction of a number of levels, has been well used by many roleplaying systems. Numeric modifiers also work well in Fudge, as long as the GM is aware that they can very quickly take you outside the realm of the Fudge scale. Many Fudge GMs find numeric modifiers to be an awkward tool, and try to use them sparingly.

A numeric modifier has exactly the same effect as shifting the character's trait up or down the same number of levels -- it does not change the probability of rolling any given result on the dice.

Example:

There are many examples of numeric modifiers within the standard Fudge rules. A Hurt character, for instance, suffers a -1 penalty to his roll on any action that would be hampered by his wounds.

Virtual Plusses and Minuses

Sometimes characters operate under circumstances that limit their chances of achieving unusual success without affecting the probability of failure *(or vice-versa)*. Using a virtual plus or minus can help handle such a situation without changing a character's skill as drastically as a +1 or -1.

A virtual plus or minus is applied after the roll is made, and can only be used to bring the result closer to 0. The virtual sign can only be used to cancel out an opposite sign -- never to add to a result. In other words, a virtual plus is only used if the Fudge dice roll a negative total, and a virtual minus only comes into play if the outcome of the 4dF roll is positive.

For example, if a player is making a roll with a virtual plus, and he rolls a 0 or a positive result, there is no change. However, if he rolls a negative result, he may count his virtual plus to cancel out one minus, bringing him one step closer to a 0. Thus, if he were to roll a -3, the virtual plus would raise his final result to -2, while if he rolled a +1, it would not take effect at all.

Note: In all cases, it is important that the virtual plus or minus is only taken into effect after the total of the 4dF roll is calculated *(i.e., all pairs of plusses and minuses have been removed)*. If you allow a player to use a virtual plus to cancel a minus rolled by any of the dice *(before pairs are cancelled out),* the effects will be much more powerful. For example, if a roll results in three plusses and one minus {+,+,+,-}, a virtual plus used to cancel out the die that rolled a minus would raise the final result from a +2 to a +3! Using virtual modifiers in this manner could also be a useful tool, but their effect will be much more drastic -- almost as much as that of a full +1 or -1.

Example:

Three unaccomplished climbers are attempting to scale a cliff. However, they were smart enough to bring along a rope and have tied themselves together. The GM decides that the rope won't make the climb any easier, but will make it less likely that any given character actually falls of the cliff. She allows the climbers to make their rolls with a virtual plus. The climbers are no more likely to succeed, but the virtual plus will "buffer" any negative roll, making them much less likely to experience serious failure.

Other examples:

Modern software, or computer programs from science fiction, may be designed to look for errors in a human user's work and to correct them. A spell checker won't make you a better writer, and a de-bugging script won't make you a better programmer, but they can certainly make it easier to avoid mistakes. The GM can hand out a virtual plus or two to simulate their effect.

On the other hand, low-grade equipment could be represented by a virtual minus. A master musician trying to play a student-quality instrument won't suddenly become a bad musician, but he may find it difficult or impossible to produce an extraordinary performance. Likewise, a character operating technology from a less advanced era may be able to keep up with competitors whose gear is up-to-date, but may be held back when attempting really difficult tasks.

Virtual plusses and minuses also offer the Fudge GM an easy-to-remember way to handle "thirds". A character with a trait that is rated with a plus *(ex: "Good+")* makes all rolls with a virtual plus *(thus failing less often than a character who is just "Good"),* and a character whose trait is rated with a minus (ex: "Superb-") makes all rolls with a virtual minus *(thus achieving results that are only occasionally inferior to someone who is actually Superb).*

A roll made with both a virtual plus and a virtual minus is equivalent to a padded roll *(see next section)*.

Padded Rolls

A padded roll is desirable when the GM feels that the outcome should not vary as much as that of a normal roll. While a straight 4dF roll produces unpredictable results suitable to a high adventure genre, a padded roll rarely produces outcomes greater than a +1 or a -1, and is more suitable to a "realistic" situation, such as a character using his skills under routine circumstances. Its distribution is a rough approximation of a median roll *(e.g. making three rolls and throwing away the highest and lowest result).* A padded roll will most often result in a "0", and will never create a result greater than +3 or -3.

To make a padded roll, you roll 4dF as usual and then shift the result one step towards zero. Thus, a +2 becomes +1, a -4 becomes a -3, and a +1 becomes a 0. For example, a character who has a skill at a "Good" level would need a +2 to achieve a "Great" result. As mentioned earlier, this is exactly like making a roll with both a virtual plus and a virtual minus.

Probabilities for a Padded Roll:

-3	-2	-1	0	+1	+2	+3
1%	5%	12%	64%	12%	5%	1%

Example:

A powerful queen is traveling through the wilderness with her retinue, which includes a famous chef *(William, a PC with Superb cooking skill).* One morning, the queen demands that William bake her a cake by nightfall. William has all day to create an appropriate confectionary delight, the guards have brought along all the equipment he could possibly need, and the situation is not overly stressful *(the PC can take his time).* However, William only has enough ingredients for one attempt. The GM considers the circumstances, and, deciding that the quality of the cake is highly relevant to winning the queen's favor, tells the player to make a padded roll.

An Alternative Padded Roll:

If you feel that the standard padded roll results in a "0" too often, you can try this slightly less intuitive method. It can be easily memorized if it is often used in a game, but may confuse players if it is only used occasionally. As the table below shows, it is like a normal 4dF roll except that outcomes of+/-2 are ignored (same as a "0" result), and outcomes of +/-3 or +/-4 are "padded", or nudged one step closer to zero.

-4	-3	-2	-1	0	+1	+2	+3	+4
-3	-2	0	-1	0	+1	0	+2	+3

Example:

This method could be used as an optional damage roll, rating each weapon on a damage scale, as shown below. A +1 moves the effective damage of the weapon up one level, a +2 up two levels, and so on.

None -- Scratched -- Hurt -- Very Hurt -- Incapacitated -- Near Death

A knife's damage might be based on the "Hurt" level. Whenever a character is hit by a knife, the alternative padded roll is made to find the final damage level. Under this system, the probabilities for the various possible levels of damage of a knife strike would look like this:

None	6%
Scratched	20%
Hurt	48%
Very Hurt	20%
Incapacitated	5%
Near Death	1%

Setting the Dice

This method allows either the GM or the players to "preset" one or more dice before the roll is actually made. If you see the 4dF roll as representative of all the random factors that can affect a character's performance, it makes sense that if some of those conditions were known, not all the dice would need to be rolled! One way of thinking about it is that some of the dice represent variations in the character's natural abilities while the rest represent the current circumstances.

A GM might decide, for instance, that two of the dice represent the current conditions.When the GM is unsure, he can ask the player to roll the dice as usual. However, if it is pretty clear in the GM's mind that the situation is decidedly advantageous or disadvantageous, she can ask the player to "set" one or more dice instead of applying a bonus or penalty to the roll. On the other hand, sometimes the GM may allow the player to choose whether or not to "set" one or more dice.

Examples:

If a character can control their circumstances to some extent, the GM can allow the player to "set" a number of dice to "0" before rolling the rest. This is exactly like allowing the player to decide how many dice he or she wants to roll. Some may decide to roll 4dF or more, perhaps hoping for unusual success. Others may state that their characters are trying to perform as consistently as possible and "set" several of the dice to "0" before rolling, leaving little up to chance.

The GM, on the other hand, can ask her players to "set" a die as a "+" or a "-" instead of the usual +1 or -1. The difference is essentially that while a numeric modifier keeps the spread of 4dF *(only adjusting the basic trait level),* a preset die also limits the possible range of outcomes. A character rolling 4dF with one die set to a "+" is essentially rolling 3dF with a +1 modifier. Some GMs may find this to be a more realistic means of handling modifiers because the range of results will not change as significantly. If you find it logical that a character working under specifically advantageous or disadvantageous conditions will find his or her performance to be more consistent *(consistently good or bad, that is),* this method is a good way of representing that effect in your game.

For instance, under normal circumstances, a Mediocre character will never achieve anything better than a Superb result. Rolling with a bonus, the same character could easily achieve results outside the range of the Fudge scale. However, while dice preset to "+" results will make it easier to reach a Superb performance, they will never allow the Mediocre character to surpass Superb. For instance, rolling 4dF with two dice set to "+", the Mediocre character's roll can only generate a result between Mediocre and Superb. If the same character was rolling at +2, the final outcome could range from Terrible to Superb+2!

In other words, this method draws a subtle distinction between a character with Good skill and another character with Mediocre skill and a bonus of +2. The standard Fudge rules make no distinction; there may be times when you find one method more appropriate than the other.

Here's how it might look in a game: Andrea, a soldier in a futuristic anti-tank brigade, is defending her home town against impending invasion. She has the "Gunnery" skill at a Good level. Her squad has set up their artillery on a ridge overlooking the narrow canyon where the enemy is expected to appear. The GM decides that this advantage is sufficient to allow each gunner in the brigade to set one die to a "+" result before making their roll. In addition, Andrea's player informs the GM that she will be firing at the center of each target instead of trying to strike vital areas, which might have been more difficult but potentially more devastating. The GM interprets this as an attempt on Andrea's part to keep her performance more predictable, and allows the player to set one die to a "0".

Finally, Andrea's player has two dice already on the table: one shows a "+" and one shows a "0". When it is time for her to fire, the player will roll the two remaining dice, generating a result somewhere between Fair and Superb+1.

Into the Realm of Arithmetic

Sometimes, the simple application of basic arithmetic can be enough to achieve the desired effect. By deciding whether the positive or the negative is to be modified, these different effects can be tailored to the needs of your game. You may want to alter the final result of the 4dF roll or surgically correct the outcomes of individual dice *(see "Another Example").* This method can allow the GM to introduce some interesting modifications into his Fudge recipe.

Examples:

A futuristic battleship mounts laser cannon turrets to defend it from smaller threats. The turrets, while operated by humans, also possess a sophisticated target tracking system. The GM does not want computers to replace humans in her game, but she does want to model the fact that a human aided by such a system is much less likely to miss. The GM decides to simulate this effect by ruling that any negative result rolled by a gunner firing such a cannon is divided by a factor of two *(bringing it closer to zero).*

The same GM also runs a fantasy game where magic is a powerful but dangerous force, and any magic user is always at risk of terrible failure. She decides to set up her magic system so that any negative result rolled when casting a spell is doubled! This means that even a Legendary spell-caster, while he might usually be formidable, could roll a -4, which, doubled to -8, resulting in Abysmal failure!

Another Example:

In an earlier Fudge Factor article, ***"Solving the +1 Dilemma",*** Steven Hammond suggests assigning coloured dice as modifiers. The smallest bonus that can be granted to a character under the suggested system is achieved by replacing a normal Fudge die with a green die. The green die is treated like any other Fudge die, except that

any "-" results that come up are ignored. The next step up is a purple die, which effectively has two "+" sides as well as a side that reads "0". The former example is exactly like adding one to any negative roll on a single dF, whereas the latter is equivalent to adding one any time that die rolls anything but a "+".

Re-rolling

Sometimes a character will have a chance to approach a problem from a slightly different angle, or to touch up a job he has already completed. A character in this situation could easily improve on a job badly done, but the chances of improvement upon an unusual success result should be much lower. If the dice are still on the table, the GM may offer the player to re-roll one of them.

This will not always be possible, but a GM who likes this method could write down the results of important actions *(instead of just writing down "Bob - Camouflage result Great", you would add "+,+,0,-" or however the dice had come up)*. If you are not in the habit of keeping track of such minutiae, you could adopt a rule of thumb instead: if the outcome was equal to or lower than the character's trait, it is assumed that a die showing a minus may be re-rolled. On an outcome one, two, or three levels higher, the dice being re-rolled defaults to a "0" *(so that the action has an equal chance of improving or damaging the final result)*. On a roll of +4, there is not much point in using this option, but if the character is unaware that he had succeeded so dramatically *(for instance, the character suffers from amnesia),* he could be re-rolling a "+"!

You might find circumstances where a different character could use this method, substituting his trait for the original *(see the second example)*!

Example:

A Mediocre film director is trying to shoot a groundbreaking thriller. The player had rolled {+,0,-,-}, for a total of -1. The GM informs the player that the film was up to the character's expectations, except for the last scene, which really didn't turn out well. The director decides to re-shoot the scene in hopes of improving the movie's pacing. The player is going to re-roll one of the dice that showed a "-". He or she rolls 1dF: on a result of "-", the movie will remain of Poor quality; however, on a "0" the new scene will improve the movie sufficiently to make it Mediocre, and a "+" could make all the difference, raising the film's quality to Fair.

Second Example:

Leila, a daring space hero, wants to escape her pursuers by using the prototype warp drive aboard her vessel. Unfortunately, her astronavigational skills are Terrible. During their last *(and highly successful)* warp-speed voyage, the navigational computer had been set by a friend of hers. Leila decides that, rather than risking a failure due to her own incompetence, she will use most of the old settings, only adjusting a few appropriate dials.

What Leila doesn't know is that her companion also didn't know what he was doing. Her friend had been operating at a default skill of Abysmal and only managed to get the craft to safety by sheer luck, rolling a +4 on the dice. Leila's relative expertise will help her a little, but she can only make things worse by fiddling with the controls. The GM tells her player to roll 1dF, and will base the final result on Fair *(the outcome of her friend's lucky roll)*. However, because her friend had rolled a +4, Leila can only achieve a Fair by rolling a "+". A "0" will create a Mediocre result, and a "-" could mean disaster -- it is better not to find out what happens when an experimental warp drive is operated at a Poor level.

One at a Time

If a character has a chance of undertaking a task in a leisurely and methodical manner it can be simulated by allowing his or her player to roll 1dF at a time. This method is favorable to the player *(and character)* because he or she has more control over the outcome than in a straight-up 4dF roll *(Most specifically, GMs should be aware that high-skill characters will probably choose to stop after rolling one die, knowing they cannot fare any worse than a -1)*. The presumed situation is that the character is capable of continuously assessing his or her success and may choose to stop at any time. Alternatively, the GM can roll the dice instead of the player, giving hints about the outcome of each roll, until the player is ready to stop and see the final result.

Examples:

A sculptor is chiseling away at a block of marble, attempting to "free" the beautiful shape she envisions inside. The sculptor's player rolls 1dF, representing the first stage of her labors. If the character is satisfied with the rough shape she has hewn so far, the player can decide to keep the result. The sculptor would now switch to a finer chisel and add the details of the sculpture. However, if the artist felt that she could do better, her player might elect to roll another die. Taking off some more stone could improve the sculpture, but she would risk marring the shape she has carved out so far.

This method could also be used to model a master painter restoring an ancient fresco, a frightened hobbit seeking a safe hiding place by a roadside as time runs short, or a gambler who must decide how far to push his of her luck. Each die rolled represents a stage of the work or game, and is followed by a moment where the character may decide to be satisfied with the results so far or to keep trying.

The *dF Roll

The *dF method is basically an open-ended roll made with 1dF. It generates a distribution similar to 4d6.1, and can be used as a substitute for 4d6.1 by Fudge gamers that are so committed that they no longer carry anything but Fudge dice. Its results are less variable than 4dF *(being somewhere between a straight 4dF roll and a padded roll),* and have the feature of being open-ended.

To make a *dF roll, you roll one Fudge die. If your result is a +1 or a -1, you roll another dF. If the second die comes up with the same sign as the first die, you add it to the total and roll a third time. You continue in this fashion until your luck runs out. It is important to note that you only count matching results -- any other result is simply ignored. If you have rolled two plusses and your third die comes up with a minus, your total is +2, and not +1 *(which you could come up with if you counted the two plusses and then subtracted one for the minus on the third die)*.

Example:

The GM of a modern-day Fudge game wants characters in her game to perform more predictably than in her last campaign *(which was highly cinematic),* where the group used a normal 4dF roll. She decides to use the *dF roll for most actions, the padded roll for routine operations, and reserves the 4dF roll for highly stressful situations.

Bill, a character in this game, is trying to shoot a fleeing assassin. His Firearms skill is Fair and the target is already far away. The GM sets the difficulty for the shot at Good. Bill's player rolls one die, and it comes up with a "0" -- Bill has just made a Fair shot. Having just barely missed the assassin, Bill reloads and fires again. This time, the GM rules that the difficulty is raised to Superb, as the target has just run behind some partial cover.

The first roll is a "+" -- so far, so good! Bill's player rolls a second die, and it also comes up with a "+". Now his total is a +2, almost enough to hit the assassin. The third roll, miraculously, is also a "+"! The total is already a +3, enough for success. Bill's player, however, is hoping to deliver as serious a wound as he can. He rolls a fourth die. It comes up showing a "-", so it is ignored. Bill's final result is a +3 -- a Superb shot. The bullet hits the assassin, but without enough relative degree to be anything but a graze.

Probabilities for *dF:

...	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	...
...	0.8%	2.5%	7.5%	22%	33%	22%	7.5%	2.5%	0.8%	0.3%	0.1%	...

Since all the brain has to do is match "+" signs or "-" signs, it is very quick in practice. Also, as you rarely see results outside the +2/-2 range, you will seldom ever roll more than two or three dF's.

A coincidental benefit of using this method is that if you use it exclusively, you'll only need one dF per player!

Ignoring Penalties

A useful method of representing a slight edge over the competition, this approach is often forgotten by GMs. A character who has a slim lead over another can be difficult to model in Fudge. Allowing the advantaged character to ignore occasional penalties can resolve this dilemma, as long as the exemptions are applied judiciously -- this requires careful judgement on the part of the GM.

Example:

Two age-old rivals crash-land their spaceships on a distant planet and are captured by a barbaric tribe. The barbarian chief decides to amuse his clan by forcing the spacemen to fight in an arena. The longtime enemies square off in the ring. Both have been trained in hand-to-hand combat with a variety of arms, but neither is familiar with the rather unusual ceremonial weaponry used on this planet. The GM rules that both will have to apply a -1 to their skill rolls in combat. However, one of these characters is an amateur anthropologist and has taken the time to handle many exotic weapons from many cultures over the course of his travels. Taking this into account, the GM decides to lessen the second character's penalty from a full -1 to a virtual minus.

Conclusion

Do not be afraid to experiment by thinking outside the box. Fudge may be highly granular, but its unusual dice mechanics allow a GM to tinker with the system in many ways. There are options available to a Fudge GM that most other games' dice mechanics would not allow. While most Fudge players exercise little restraint in modifying the underlying system before and after actual play, it is all to easy to forget that it is also possible to fine-tune Fudge in the heat of the gaming session.

Fudge Dungeon Crawl
Monday, May 02, 2005

by Tim Huntley

Introduction

Remember the days when a night of good RPG fun meant sitting around in a tavern until you were approached by a strange old man who needed the monsters cleared out of the dungeon just outside of town? Or, when the highlight of the game was defeating the dragon who claimed the 15th level of the dungeon as his lair?

Well, those days are back! Welcome to Fudge Dungeon Crawl!

Characters

Fudge Dungeon Crawl characters have 6 attributes: Strength, Intelligence, Wisdom, Dexterity, Constitution, and Charisma. Players should roll 4dF to randomly determine the trait level for each attribute; Legendary and Abysmal are not allowed and should be rerolled! However, should a character come out unplayable in the player's eyes, there is always a convenient volcano just outside of town for the character to jump into, allowing the player to roll up a new character.

Each player should pick a race for his character. The player's choice of race will confer certain skills and abilities onto the character. The available races are Human, Dwarf, Elf, and Halfling.

Each player should also pick one (or more) class(es) for his character. Classes are like archetypes or clichés that grant certain skills and abilities to each character. The classes are Figher, Magic-User, Cleric, and Thief. It is recommended that the character meet a certain attribute requirement for each class as shown in the table below:

Class	Attribute Requirement
Fighter	Strength: Good
Magic-User	Intelligence: Good
Cleric	Wisdom: Good
Thief	Dexterity: Good

A character can specialize in two classes if the Attribute Requirements for each class are met. A human character may even take three classes if the character's Attributes support them. When a character takes on more than one class and the two classes have similar benefits, the character receives the better of the benefits, not the sum of the benefits.

Races

Human : Humans are the base race from which all others are derived. Therefore, humans have no additional bonuses or penalties, aside of their unique ability to take on three classes if their attributes support them.

Dwarf : Dwarves are short, stout demi-humans with full beards and little to no sense of humor. Dwarves can see in the dark via the infrared spectrum, and can resist poisons or Magic with a situational roll of Great or better. Dwarven characters can detect slanting passages, traps, shifting walls, and new construction underground with a situational roll of Good or better. Dwarves automatically get +1 to their Constitution attribute, but take a -1 penalty to Charisma. Dwarves generally do not get along well with elves.

Elf : Elves are lithe demi-humans with beautiful features and pointed ears. As with dwarves, elves can see in the dark via the infrared spectrum. Elf characters ignore one minus ("-") result when rolling to attack using a long sword or long bow. Any secret or concealed door can be automatically detected by an elf with a situational roll of Good or better. Elven characters receive a +1 bonus to rolled Dexterity Attributes, but suffer a -1 penalty to Constitution. Elves generally do not get along well with dwarves.

Halfling : Halflings are small, good-natured demi-humans who tend to get along with everyone. Due to their small stature, halfling characters can gain surprise on a situational roll of Great or better and they can resist Magic with a situational roll of Great or better. Further, halflings ignore one minus ("-") result when rolling to attack using a missile weapon. Halfling characters receive a +1 bonus to their Dexterity, but suffer a -1 penalty to their Strength.

Classes

Fighter : A fighter gets two free Skill Levels to spend on any four weapon skills that the player wants. Fighter weapon skills default to Fair. A fighter can wear any armor and use any shield. In addition, a fighter only suffers a -1 penalty when using a weapon that is not one of the four weapon skills chosen during character creation.

Magic-User : A magic-user can take one weapon skill at Mediocre. A magic-user suffers a -3 penalty when using a weapon other than his or her chosen weapon. A magic-user can wear no armor and cannot use a shield in combat. However, a magic-user does begin play with four magic spells in his or her spell book, chosen from the list in the Magic section.

Cleric : A cleric gets one free Skill Level to spend on any two non-edged weapon skills that the player wants. Cleric weapon skills default to Mediocre. A cleric can wear any armor and use any type of shield. Clerics suffer a -2 penalty when using a weapon that is not one of the character's chosen weapons. A cleric can cast one cleric spell per day, chosen from the list in the Magic section, and can "turn," or rebuke, undead creatures with a situational roll of at least Great.

Thief : A thief gets one free Skill Level to spend on any two weapon skills that the player wants. Thief weapon skills default to Mediocre. A thief can wear any light armor. Thieves also get three free Skill Levels to spend on the Pick Pockets, Open Locks, Find/Remove Traps, Move Silently, and Hide in Shadows skills, which otherwise default to Fair.

Magic

Magic-Users and Clerics can both use Magic. For Magic-Users, it is their constant study of formulae and arcane texts that give them the power to affect reality. Clerics exercise their magic ability by working miracles in their god's name.

A Magic-User character starts play with a spell book containing the player's choice of four of the Magic-User spells listed below. One spell can be memorized at a time, and casting the spell erases it from the Magic-User's memory. At that time, the character must return to his spell book and memorize another (or the same) spell before it can be cast again. A Magic-User with enough preparatory time can create scrolls containing a spell in his spell book, so that when the scroll is read aloud, the spell is cast. The scroll is destroyed in the process. Casting a spell from a scroll takes twice as long as casting it from memory.

A Cleric can cast one spell from the Cleric spells listed below per day. Each morning, the Cleric must pray to his or her god and petition for the spell desired.

Unless stated otherwise, spells take one combat round to cast, and last 6 + 4dF combat rounds. It takes 4 times as long for a magic-user to memorize a spell as it does to cast it. Magic-users may not memorize spells from a scroll.

Magic-User Spells

Cast Illusions : This spell allows the magic-user to create an illusion in an area no bigger than a 30' diameter. The illusions created by this spell disappear when touched.

Charm : The target of this spell will be completely under the influence of the magic-user unless he or she can make a Great Intelligence roll.

Create Light : This spell lights a circular area with an approximate 30' diameter. If cast on an item, that item can be carried and the light will move with it.

Invisibility : This spell will render the magic-user (or another target chosen by the magic-user) completely invisible.

Levitate : This spell allows the magic-user to move up or down in the air without any support.

Mage Wagon : This spell creates an invisible disk floating at the magic-user's waist height, that can carry about 500 pounds of stuff. The disk will follow the magic-user as he or she walks around.

Mystic Armor : This spell encircles the magic-user with a protective barrier, providing +4 DDF vs. ranged attacks and +2 DDF vs. melee attacks.

Mystic Bolt : This spell launches a missile of glowing magical energy at a target chosen by the magic user. It has an ODF of +4 and magically strikes true.

Protection from Monsters : This spell encircles the magic-user with a protective barrier that gives the magic-user +1 DDF vs. monsters, and makes the monsters -1 ODF vs. the magic-user (in other words, the magic-user receives a +2 DDF).

Read Languages : This spell allows the magic-user to read (but not speak) any language.

See Invisible : This spell allows the magic-user to detect any object cloaked with an Invisibility spell in his or her immediate vicinity.

Sense Magic : This spell will alert the magic-user if a spell has been cast on a person, place, or thing in his or her immediate vicinity.

Sleep : This spell puts 4 + 4dF creatures chosen by the caster to sleep.

Ventriloquism : This spell allows the magic-user to cause his or her voice to come from somewhere else.

Wizard's Key : This spell cancels a Hold Portal spell.

Wizard's Lock : This spell magically holds a door shut.

Cleric Spells

Calming Touch : This spell calms the recipient and remove all fear from him or her.

Create Light : As per the magic-user spell of the same name.

Healing Hands : This spell allows the cleric to heal all Scratches.

Holy Warmth : This spell allows the recipient to ignore the effects of cold.

Protection from Evil : This spell encircles the magic-user with a protective barrier that gives the magic-user +1 DDF vs. inherently evil people or monsters, and makes the inherently evil people or monsters -1 ODF vs. the magic-user.

Purify : This spell will make poisoned water and food usable.

Sense Evil : This spell allows the cleric to detect any inherently evil person or creature in his or her immediate vicinity.

Sense Magic : As per the magic-user spell of the same name.

Equipment

It is assumed at the start of any Fudge Dungeon Crawl game that the characters are already in possession of all of their equipment. Players should equip their characters using items from the following list, persuant to their classes (i.e. a magic-user would most likely not wield a two-handed sword, and a fighter would most likely not use a staff).

Weapons

Two-hand battle axe (ODF +4), hand axe (ODF +3), crossbow & 30 quarrels (ODF +3), long bow & 20 arrows (ODF +3), short bow & 20 arrows (ODF +3), dagger (ODF +2), short sword (ODF +3), normal sword (ODF +4), long sword (ODF +4), two-hand sword (ODF +5), mace (ODF +3), club (ODF +2), pole arm (ODF +5), sling & 30 stones (ODF +2), spear (ODF +3), war hammer (ODF +3)

Armor

Leather armor (DDF +2), leather armor & shield (DDF +3), chain mail (DDF +4), chain mail & shield (DDF +5), plate mail (DDF +6), plate mail & shield (DDF +7)

Gear

Backpack, flask of oil, small hammer, holy symbol, vial of holy water, 12 iron spikes, lantern, hand-sized mirror, rations, 50' rope, small sack, large sack, thieves' tools, tinder box, torches, waterskin, wine, wolfsbane, 10' wooden pole

Combat

Fudge Dungeon Crawl is not too different from normal Fudge combat. Each 10-second combat round begins with the rolling of Initiative. Initiative consists of a situational roll, high roll going first, and proceeding downwards in order. The character or monster who has initiative selects a target and makes his or her attack roll: their weapon skill + 4dF. This is compared against the defense of the target: their Dexterity + 4dF. If the attack is higher than the defense, the attack is successful and damage is calculated: the relative degree of success, plus the attacker's Strength (for melee attacks) + the ODF of their weapon, minus the DDF of the target's armor, and minus the target's Constitution.

Example: Bilmgi, the dwarf fighter, is taking on an orc. Bilmgi's player rolls 4dF for initiative and gets a result of Good. The GM rolls the orc's initiative, and gets a Poor. Bilmgi gets to attack first, swinging his battle axe at the orc's neck. His player rolls 4dF using Bilmgi's Battle Axe skill of Good, and gets a Great result. The orc has a Great (+2) Dexterity, and the GM rolls a -1 on its defense roll for a total of +1, or Good. Bilmgi is successful and damage is calculated. The relative degree of +1 is added to Bilmgi's Strength (which is Good, or +1) and his Battle Axe's ODF of +4 for a total of +6. The orc's leather armor provides a DDF of +2, and his Good constitution a further +1, for a total of +3. The orc takes 3 points of damage (+6 minus +3), a Hurt result - Bilmgi's axe cleaves into the orc's shoulder.

Monsters

Most dungeons are home to several different types of monsters. These are the most common. Unless noted otherwise, all monsters have attributes of Fair for determination of attack and defense rolls.

Giant Lizard : Five foot long nocturnal reptiles, giant lizards hunt by climbing steep walls with their specially adapted feed, and dropping on their prey to attack. Their scaled skin gives them a DDF of +2, and their bite has an ODF of +4.

Giant Snake : Another reptile about five foot in length, the main difference between the giant snake and the giant lizard is the lack of legs and a poisonous bite. Giant snakes have scaled skin which provides a DDF of +2, and their bite has an ODF of +2 -- although any attack which causes damage will inject a paralyzing poison. The victim must make a Great Constitution roll or be completely paralyzed for 24 hours.

Giant Spider : Giant spiders are meat-eaters that attack their victims by clinging to walls or ceilings and dropping onto them. When hidden in dark ceilings, the only signs of their presence are the collections of webs and

cocooned prey. Giant spiders have tough skin which provides a DDF of +1 and their bite has an ODF of +2. Any successful giant spider bite carries a weak poison -- the character must make a Mediocre Constitution roll or die within 24 hours.

Goblin : Small and incredibly ugly, goblins are humanoids with chalky tan or grey skin, and eyes that glow red in the dark. Goblins can see in the dark as can dwarves and elves, using infravision. Goblins usually wear leather armor (DDF +2) and wield short swords (ODF +3).

Green Slime : Green slime looks, strangely enough, like green, oozing slime. It can only be damaged by fire. It dissolves wood and metal, and turns flesh into more green slime. The only cure is to burn the green slime and cauterize the wounds it creates.

Kobold : Kobolds are small, evil dog-men with scaly, rust-brown skin and no hair. As with goblins, they have well-developed infravision which allows them to see in the dark. Kobolds usually wear no armor and wield clubs (ODF +2) or small spears (ODF +2, due to size).

Orc : Orcs are ugly humanoids that look like a combination of animals and men. Thoroughly evil, they usually kill everything they meet, except for goblins who they frequently enslave. Orcs are commonly found wearing leather armor and carrying shields (ODF +3). They use just about any weapon they can find.

Zombie : The undead and reanimated body of an previous adventurer who died in the dungeon and was left by his companions, never to have a proper burial. Generally mindless and slow, zombies hate the living and will attack them on site. Their rotting flesh is easy to damage, having no additional DDF, but zombies are not "dead" until their brains are destroyed requiring decapitation, a mace to the noggin doing at least a Very Hurt result, etc. Zombies strike with their bludgeoning fists, having an ODF of +2.

Treasure

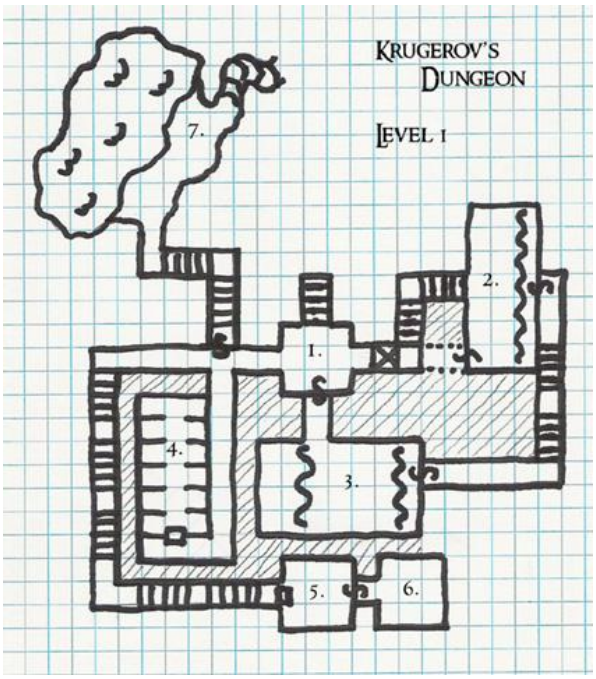
What is a good dungeon crawl without treasure? Most monsters (even unintelligent ones like zombies and giant snakes) will be guarding treasure chests containing hundreds of gold or silver coins or the occasional gemstone. Sometimes the chests are locked or trapped, requiring a thief character to use his or her Open Locks and Find/Remove Traps skills.

The greatest treasures, however, are magic items -- weapons that ignore one or more minuses ("-") on the attack rolls, armor or shields that ignore one or more minuses on the defense rolls, scrolls with new spells for magic-users, enchanted rings or necklaces that provide additional DDF or can cast the magic-user spell Sheild at will, bracers that provide additional Strength or Dexterity (or ignore one or more minuses on Strength or Dexterity rolls), etc.

Krugerov's Dungeon

A sample dungeon for Fudge Dungeon Crawl

As the characters are adventuring in a distant land, they hear the tale of an evil warlord named Krugerov who ruled with an iron fist until his subjects rebelled against him and razed his castle to the ground, killing him and his wizard advisor in the process. Rumors of vast dungeons filled with treasure assault their adventurous ears, and it is because of those rumors that we find the characters standing amidst the ruins of Castle Krugerov, staring down a forboding set of stairs leading down into the ground.



Key to the map

Please note - one square on the map equals approximately 10 feet. North points towards the top of the map.

1. As the characters descend into this room, it seems to quickly swallow up the light streaming in from the top of the stairs. By the time they reach the bottom of the seemingly endless stairs, they can barely see the other side of the 30' by 30' room without using torchlight. Once a light source is established, they will notice that the room is very dirty and cluttered with chunks of rock from the destruction of the castle above. The statue of a large man stands in the south-east corner, most likely Krugerov himself. Any character making a Good Wisdom check will notice that the ceiling of the room is swathed with spider webs and will not be surprised when the Giant Spider (DDF +1, ODF +2; Mediocre Constitution roll or die in 24 hours) hiding therein drops on a random character. In the middle of the south wall is a secret door leading to area #3, and just past the entry into the hallway on the east is a pit trap - the first character to step on it will fall and take damage (treat as an ODF +4 attack). Please note that there is a 1' ridge between the north wall and the pit trap that the characters can use to safely bypass the pit if it is found.

2. After clearing the pit trap and walking down two flights of stairs, the characters will find themselves in what was at one time a fairly heinous torture chamber. All the implements are here - iron maidens, racks, etc. - most have rotted due to age and will collapse if jostled too much, awakening the Giant Snake (DDF +2, ODF +2; Great Constitution roll or paralyzed for 24 hours) sleeping in the iron maiden. A moldy tapestry depicting scenes of torture hangs on the east wall, hiding a secret door leading to area #3. A second secret door on the south side of the west wall leads to the bottom of the pit trap just outside of area #1.

3. The first thing the characters will notice upon entering this room is the horrible smell of rotting flesh. A dilapidated bed is against the south wall and moldy tapestries line the east and west walls. The eastern tapestry hides a secret door leading to area #2, and the western tapestry hides an alcove where a treasure chest and an armoire filled with rotting clothes can be found. As the characters approach the bed, they will notice a figure laying in it, coming to life as they approach... a zombie (DDF 0, ODF +2)! The treasure chest is trapped with a needle that will do one scratch of damage directly if not found -- the poison evaporated long ago. The chest contains 100 gold coins, 50 silver coins, a large ruby worth 500 gold coins, and a magic dagger. For each killing blow that the dagger lands (a "Near Death" damage result), it ignores one minus result ("-") on any follwoing attack rolls. This effect is cumulative, but has a maximum of -4. Every morning at dawn, the dagger "resets."

4. The door to this room is unlocked, and appears to be used frequently as it swings open easily and without too much creaking. This room appears to have at one point been a prison, although the doors to all of the cells have been removed. Great Wisdom rolls will reveal the sounds of heavy breathing or light snoring coming from the room. Evidently, a group of goblins (DDF +2, ODF +3) have taken up residence here, as they all wake up when the characters enter! The number of goblins in the room depends on the number and type of player-characters: there are two goblins for each fighter and one for each other type of character. The goblins have nothing of value, save their somewhat rusty short swords and their ill-maintained leather armor.

5. As the characters descend several flights of stairs, the air gets more stale and damp, before they finally come to a door which appears to be locked. A thief can pick the lock and gain access with a Good Open Locks roll, or any character can break it down with a Great Strength roll. The room appears to be a wizard's laboratory, as there is a desk on the north wall and a workbench covered with dirty, slimy beakers on the south wall. Most of the beakers are covered with Green Slime! If anyone investigates the workbench they will have to make a Great Wisdom roll to notice the quivering of the slime as they approach. A secret door on the east wall leads to area #6.

6. This appears to be a wizard's private study. The walls are lined with musty, moldy books. Most disintegrate upon being touched, but a thorough search should turn up usable scrolls of Charm and Cast Illusions.

7. As the characters open the secret door and descend the stairs leading to this area, they will be assaulted by the scent of stagnant water and dead fish. The entryway opens up into a natural cave dominated by a decent sized underwater pond. Characters who look into the pond will see skeltons strewn about, as if they had been thrown into the pool, with white, albino lobsters and crabs crawling over the bones. The north-east section of this room opens up to a natural stairway leading down into the second level of Krugerov's Dungeon, which you can create and populate yourself!

Will the players discover the legendary king and his sorcerer alive in the halls below? Or, is there some other, unseen monster, guarding their bones? That's up to you to decide as the players continue in their quest for treasure.