

The basics of
FFRE
 Free Fudge-light Roleplaying gaming Engine
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Character Creation

Goodie Points

To create a character in FFRE, you must first know how many Goodie Points you are allowed for the creation process.

This is normally decided by the players, who discuss the issue among themselves, trying to reach a consensus on the GP amount, but some groups may prefer to let the GM decide instead. Also if the players are unable to achieve consensus, the GM must decide upon the amount of GPs (which will be easier for him if he was present while the players debated, but some groups may prefer to discuss the issue away from their GM).

Goodie Points measure general competence. Two characters of the same GP value may be very different, in terms of what abilities they have spent their points on. One character can be a superb warrior but socially inept, whereas the other can be clumsy and inelegant with weapons but a silver-tongued diplomat. This means that one cannot say that for an adventuring party of four 80 GP characters, a single enemy worth 120 GP would be a great challenge - because the members of the party may have put most of their points into martial prowess, whereas their 120 GP enemy is a master of stealth, assassination and wilderness skills, so that if they confront each other in direct combat, the four-man party will win easily, whereas if the enemy gets the chance to attack them covertly, perhaps sneaking into their camp at night, he will eliminate them effortlessly.

Furthermore is it possible to spend one's points unwisely, such that one gets reduced benefit from them, due to the synergies that exist between many abilities, for instance between Attributes and Skills. One cannot therefore say that all 100 GP characters are of equal competence. Some may have been created inefficiently. On the other hand, the system is constructed such that abusive degrees of optimization cannot be achieved. This removes the need for the GM to have the power to reject player-created characters "because they were optimized". One *can* (and often should) optimize for something in particular, so as to build a character who excels at something that one thinks it might be fun to excel at, but the rules makes it impossible to build a high-powered generalist. Any given GP sum that allows the creation of a high-powered *generalist* allows the creation of a much more high-powered *specialist*.

It is often overlooked, but the real purpose of point-based character creation is to provide *equal opportunity*. If one player can create a given character, then *all* other players can create one who is *exactly* alike, rather than being at the mercy of dice, or having to go into a complex negotiation process with the GM, from which some players may emerge with better deals than others, due to possessing superior GM manipulation skills or by exploiting a decade-spanning friendship with the GM.

GP Values

40 GPs is sufficient to create an ordinary person. It allows the creation of a character with average attributes, skills sufficient to hold a job, get along in daily life (Drive, Cooking,

Reading) and have a hobby or two, and also buy some personal possessions, a Home and a Job (a source of Regular monetary Income that is reduced in cost by the attachment of a skill roll requirement and a time requirement).

Perhaps 67% of the entire population has a GP value between 35 and 45. Modern setting characters tend towards being worth a few GPs more, on average, because of higher Strength and Size (due to better diet, in terms of regularity and protein content) and generally greater wealth (larger and better Home; more Equipment; more likely to have a regular Job).

30 GPs would be a markedly inferior person, perhaps someone who has a handicap and is otherwise average (check out two of my characters, Klaus Uldtmann and Asbrand the Stutterer, for examples of handicapped characters who are *very far* from being average), or just a person with little education and very limited finances.

20 GPs is for creating a *very* miserable person.

60 GPs creates a Competent Normal, he's somewhat similar to the 40 GP character, but his skills will tend to be higher, or he will be richer and have more things or other social/external benefits, or he may have generally higher attributes, or one or two special innate abilities.

80 GPs creates a "Junior" Adventurer or a Very Competent Normal. 80 Goodie Points are enough for quite a lot, and some groups may find that they prefer PCs with this relatively low level of power. There are certainly enough points to differentiate the characters *strongly* from each other, but 80 GP adventurers must be careful about what challenges they take on, they can easily bite off more than they can chew, even if working as a group, even if cooperating perfectly.

100 GPs is the generally recommended starting value for a party of PC adventurers (although 80 and 120 GPs, also potentially a lot of fun, are also on the "recommended" list). 100 GPs creates highly competent characters, and even a small party composed of such people is a force to be reckoned with, especially if the party is versatile, with a character for every type of conflict (combat, stealth, magic, social - although medicine and healing may be very useful as a fifth type).

120 GPs creates "Experienced" adventurers or very competent and powerful settled individuals. At this starting point value, it begins to become quite viable to run solo campaigns, i.e. one player and one GM, but a party of 120 GP characters can also be fun, if the players are mature enough to give the characters backgrounds and personal ambitions.

140, 160 and 180 GPs represent higher and higher degrees of competence. It should be pointed out that as the GP value of a character goes up, his competence, his general power, goes up *quickly*. In many worlds, the most powerful individual, even if he is the

supreme dictator of an entire planet, might be easily creatable with a budget as low as 220 GPs, mostly spent on social powers. If such an individual costs more than 220 GPs, it will probably be because he has very strong magical or psionic powers, in addition to his social powers.

Although the recommendation is 80, 100 or 120 GP PCs, it is possible to have fun, long-lasting campaigns even with PCs of much higher GP values. FFRE is designed so that high-point characters avoid the tendency to look alike, or grow alike, as seen in so many other systems. But it does require some maturity of the players, to handle 140 or 160 GP PCs.

GP Distribution

To actually create the character, you distribute your Goodie Points between four categories: Attributes, Advantages, Perks and Skills. You start out by deciding on a preliminary distribution, but as you start using the character creation spreadsheet, spending your points, you will almost always find that your preliminary distribution was slightly wrong, and then you will wish to go back and re-allocate your points, e.g. shifting 2 or 3 points from Advantages to Skills. Unspent Goodie Points are lost.

GPs are converted into the four sub-point types according to non-linear formulae. This means that if one wishes to create a skill-heavy, or attribute-heavy character, then one can seriously "pump" up that one category. The four sub-point type categories are APs (Attribute Points), DPs (Advantage Points - or aDvantage Points), PPs (Perk Points) and SPs (Skill Points).

Here are some excerpts from the "GP to sub points" document, utilizing the current conversion formulae.

GP	AP	DP	PP	SP
0	0	0	0	0
5	2	3	6	350
10	6	8	16	1'070
15	12	17	31	2'310
20	20	29	52	4'200
25	30	46	81	6'840
30	42	66	118	10'320
35	56	91	165	14'710
40	72	121	221	20'100
45	90	155	288	26'550

GP	AP	DP	PP	SP
50	110	194	366	34'120
55	132	239	456	42'880
60	156	288	559	52'880
65	182	343	674	64'180
70	210	402	803	76'840
75	240	468	946	90'890
80	272	539	1'104	106'400
85	306	615	1'277	123'410
90	342	697	1'465	141'960
95	380	785	1'669	162'110

It is generally not allowed to spend more than 50% of the GPs on Attributes or Advantages, or more than 60% of the GPs on Skills, or more than 70% of the GPs on Perks. This prohibition goes for *both* PCs and NPCs, in fact it is a general principle of FFRE that NPCs are subject to the exact same rules and limitations as the PCs are.

Note that the GP->DP formula is scheduled to be revised, so that it matches the GP->AP formula, making the AP and DP columns identical.

Attribute Points are used to purchase the 12 primary attributes. Advantage Points are used to buy intrinsic Advantages, and sub-attributes are raised with Advantages Points, not Attribute Points. Perk Points are used to buy social advantages, also called extrinsic advantages. Skill Points are used to purchase skill-like acquirable traits.

Basic character types

In any given campaign world, there will be three basic categories of characters, although hybrids also exist.

Adventurers

Most players will create adventurer characters (warriors, courtesans, priests, bards, wizards), as opposed to everyday people (bakers, town council members, labour slaves). For adventurers, one should put few points into Perks, since one can always later try to win wealth and lands through high-risk adventuring. Just get enough Perk Points to buy the adventuring equipment you need. When starting the campaign, owning lots of land, or a large home, or tonnes of furniture and slaves, is just a burden anyway... This means that adventurers will have most of their GPs spent on Attributes, Advantages and Skills.

Everyday people

These characters, usually built on 30-50 GPs, have few points in Attributes (so that their attribute values are normal, or very close to normal) and Advantages (because they are rarely intrinsically unusual in any way), but have most of their points spent on Skills and Perks, usually shared evenly between the two, or mostly evenly. As the GP value goes up, Everyday people begin to be suitable for adventuring, and some groups may enjoy a campaign with 60 or 70 GP everyday people, just to try something different, but everyday people built on 30-50 GPs will pretty much exclusively be NPCs.

Politicians, Nobles and Merchants

These are characters heavy in Skills and *very* heavy in Perks, often built on 60, 80, 100 or even more Goodie Points. It may be a good idea to give a Politician type character an "edge" in the form of a very high Attribute (Intelligence or Charisma are the most common, although any one attribute can help), or two or three high ones (Will would be a good third choice), or give him some useful Advantage, in addition to lots of Perks and Skills, to justify his position and also help him hold on to it. These character types are rarely created by players (but they are often fun, useful and important NPCs), although for some groups it may be fun to try a political campaign instead of an adventuring campaign. Also some players may wish to create adventurers with a Perk-component, for instance a knight is a Noble, rich with high social status and a feudal holding, but he may also go adventuring. Think of this as a hybrid character type.

GP distribution example

A player might wish to create a knight. He decides that the concept is someone who has a small amount of social powers, albeit still more than the average adventurer, and is also very highly trained both in combat, in officer-type military skills and in the courtly arts, and who has reasonably good attributes, reflecting coming from a healthy genetic stock (i.e. not too inbred) and having eaten a regular and protein-rich diet as a child. The player group have agreed on 100 GPs per character, so this player decides to put 10 GPs into Perks, 6 GP into Advantages, 34 GP into Attributes and 50 SP into skills. That yields 53 Attribute Points, 4 Advantage Points, 16 Perk Points and 34'120 Skill Points.

While creating the character, the player finds out that 16 Perk Points is too little to get all the expensive equipment, and the ready cash which his character concept needs, so he moves 5 GP from Attributes to Perks, so that he now has 39 Attribute Points and 31 Perk Points. Later again he finds that he needs a bit more attribute points, and that he is willing to reduce some skills, so he moves 5 GPs from Skills to Attributes, so that he now is back at 53 Attribute Points and has 26'550 Skill Points.

A General principle

FFRE tends towards splitting things up. Many abilities do not *always* come together, exist together, become acquired together. For these types of abilities, it should be possible for a character to have one without being forced to have (i.e. pay for) the other. One example is that it is possible to have a great vocabulary in a foreign language while still speaking it with a very thick, noticeable accent, whereas the opposite is also possible: Having a very limited vocabulary in a foreign language, but being able to pronounce the words as perfectly as a native speaker would. A second example is charisma and physical beauty. Some people have one but not the other. A third example is a beautiful appearance vs a sexy appearance - some characters have one, some have the other. A lucky few have both, but most people have neither (they are *average*). Or take the split between Agility and Dexterity - many other RPG rules systems lump them together, causing all sorts of problems.

People reading about FFRE, or using FFRE, should keep this very much in mind. Just because most RPG systems lump together all sorts of abilities, one should not assume that FFRE does the same.

Attributes

This is the first of the four categories. FFRE has 12 Attributes; they are abilities which are very basic, very general. Fundamental abilities. Except for Strength, they are all 100% genetic, meaning that they are immutable, they cannot be trained. Once a character has matured, his attributes are as they are, and the only change possible is downward (either temporary or permanent), due to disease, injury, curses and similar.

The 12 Attributes are divided into four groups, solely as a convenience. They are:

Athletic. Strength, Dexterity, Agility

Toughness. Size, Constitution, Hardiness

Intellectual. Perception, Intelligence, Will.

Spiritual. Charisma, Faith, Psyche

Strength. The general muscle strength of the character. Unlike the other attributes, Strength is trainable.

Dexterity. The hand-eye (and foot-eye) coordination of the character. How precise his movements are when interacting with external objects, like using weapons or tools. Also includes fine control of the facial musculature (to feign or conceal emotions) and the vocal apparatus (to precisely control and shape uttered sounds).

Agility. The grace and precision of the character when he moves his entire body, e.g. while dancing or using a martial arts skill, or dodging an attack.

Size. The genetic size of the character, i.e. his bone thickness and density and his frame size. Size is only one component of a character's Mass; the others are Musculature (derived from Strength) and the Fat modifier (usually zero, representing a normal amount of bodily fat). The Size component of a character's Mass includes all organs except muscles, and an average amount of fatty tissue.

Constitution. The stamina and resistance of the character.

Hardiness. The damage-resistance of the character's body. Hardiness cannot vary as much from the norm as the other attributes.

Perception. How aware the character's *mind* is of its surroundings. This does *not* include sensory acuity.

Intelligence. How smart the character is, how fast he learns intellectual skills, how fast he thinks and how well he remembers. It corresponds quite well to the score generated by education-neutral and culture-neutral intelligence tests, the ones that best measure the so-called "g-factor".

Will. The character's self-control and stubbornness.

Charisma. How charming the character is. His ability to make a good impression and manipulate others. Also his potential for learning social skills. Charisma is normally used to manipulate people into *liking* oneself, but it is equally useful when one wishes to induce other emotions, such as fear or awe.

Note that Charisma does not include beauty, nor bodily sexiness.

Faith. The character's connection to divine and semi-divine powers (high Faith can also represent a connection with evil powers, such as demons or evil gods - there is nothing particularly "good" about a high Faith value), although a general high optimism and very positive outlook on life can justify a Faith rating of 4, in an atheist, maybe even a 5. Faith forms the basis for the derived statistic Luck, meaning that believers tend to be lucky more often than non-believers.

Psyche. The character's affinity for the non-Divine supernatural forces, such as personal magic, psionics, or just general sixth sense-type abilities.

Attribute values

The values of most of the attributes in FFRE are demographically quantified, meaning that it is stated explicitly how common they are in the general population. The suchly quantified attributes are Dexterity, Agility, Constitution, Perception, Intelligence, Will, Charisma, Faith and Psyche.

From the FFRE-Discussion mailing list, in the Files Area, MS Word 2000 documents can be downloaded that shows the attribute distribution for a "random sample" of 30'000 individuals, for any one of the attributes mentioned above. Look in "Files/Other", then download the "random distribution" document. Among those 30'000 numbers there is one 7. Can you find it? That document is a powerful example of how extremely rare 7's are.

Strength is not quantified both because it is sex-dependent (male Humans have a higher average than female Humans) and because it is trainable. Size is not quantified because it is dependent both on the sex of the character and on the childhood diet. Hardiness is not quantified because the variety is low - people tend to strongly cluster around the average, much more so than with the other attributes.

Value	Definition	Frequency	Attribute Point Cost (APs)	Value
0	Very Low	0.0003% (or 1 in 300'000)	-36	0
1	Low	0.41% (or 1 in 700)	-12	1
2	Below Average	6.7% (or 1 in 15)	-3	2
3	Average	75% (or 3 in 4)	0	3
4	Good	15.8% (or 1 in 6)	4	4
5	High	2.2% (or 1 in 44)	16	5
6	Very high	0.14% (or 1 in 700)	36	6
7	Extremely High	0.003% (or 1 in 30'000)	64	7
8	Human maximum	0.000029% (or 1 in 3.5 million)	100	8
9	SuperHuman	none	does not exist	9

Values lower than 0 are possible, but represent seriously debilitating handicaps. Values higher than 8 should not exist at all in the population of a realistic world, without the intervention of strong magic, cybernetic implants or genetic engineering. They are not needed - one can make a perfectly perceptive Sherlock Holmes by giving him Perception 8, and Leonardo da Vinci does not need more than Intelligence 8. It is only for unrealistic characters that one needs to go into 9's in attribute values.

Strength and Size is prized differently for male Humans and female Humans, and Hardiness has a price all of its own. The maxima for Strength and Size also depend on the sex of the character.

Value	male Human		female Human		both Human sexes Hardiness	Value
	Strength	Size	Strength	Size		
0	-27	-18	-36	-27	-81	0
1	-8	-4	-12	-8	-32	1
2	-2	-1	-3	-2	-8	2
3	0	0	0	0	0	3
4	3	2	4	3	9	4
5	12	8	16	12	36	5

6	27	18	36	27	-	6
7	48	32	64	-	-	7
8	75	50	100	-	-	8
9	108	-	-	-	-	9

It is hopefully evident, from the above tables, that FFRE empowers the players to create distinctly non-average characters.

On the first page of the "Price List" document is a huge table listing costs for Attributes, and also for Sub-Attributes. Later in that document one can find costs for other Advantages, and also for Perks.

When one creates an FFRE character, all attributes automatically start at a value of 3, thus one only has to do something if one wishes to change a value. Raising an attribute to above 3 costs you Attribute Points, whereas lowering an attribute to below 3 gives you more Attribute Points to spend elsewhere.

This (second) concept is often referred to as "compensatory points" - you get *compensation* for reducing or removing an ability from your character, because it is assumed that if no compensation was given, very few players would voluntarily choose to weaken their characters - FFRE is not designed for *ideal* players, but for *real* players.

Differences between the Human sexes - Attributes

As shown in the table above, Female Humans must pay a bit more to raise Strength and Size, but they also get more compensatory points for lowering Strength and Size, relative to Human males. This encourages players *slightly* towards creating female Human characters who, on average, have a lower Strength and Size than male characters, without outright preventing the creation of quite strong and large female Humans.

There are also limits on how high Strength and Size may be. Male Humans may have Strength as high as 9 and Size as high as 8, whereas female Humans are limited to Strength 8 and Size 6 (Strength is the only attribute that can be higher than 8, in a realistic world).

It may look as if female Humans are inferior to male Humans, but one should keep in mind that FFRE is not a system intended for combat-heavy campaigns - or indeed for campaigns heavy in any one type of conflict - it is taken for granted that the PCs will naturally get involved in a variety of conflict types, so that no one type of ability ever gets to be the most useful and desirable.

It is therefore in no way the case that FFRE makes female Humans unworkable as PCs in a low-tech or fantasy genre campaign. In fact, Size is, by far, the least useful of the 12 attributes, and Strength is a very good candidate for the second least useful.

Sub-Attributes

Under some of the Attributes there are a number of sub-attributes. These are bought with Advantage Points (DPs) rather than Attribute points. A Sub-Attribute is equal to the "parent" Attribute unless the player takes steps to change the value (buy it up, or sell it down). Sub-Attribute values that differ from the value of the "parent" Attribute are *unusual*, that's why they are bought with Advantage Points instead of Attribute Points.

Strength is divided into two sub-attributes, Leg Strength and Arm Strength (in many places, these are called Upper Body Strength and Lower Body Strength, but that is a mistake and all instances of this will be corrected eventually), and both can be trained. Parent Strength (i.e. neither) may be interpreted as the strength of the character's abdominal musculature.

Dexterity is divided up into Combat Dexterity (for melee, ranged and unarmed combat skills), Manual Dexterity (for using tools, and for manual thief-type skills), Facial Dexterity and Oral Dexterity (representing fine control of the facial musculature or the vocal apparatus, respectively).

Size has one true sub-attribute: Leg Length. Its sole use is to modify the character's speed, the longer legs the faster the character can move. Earlier, a character's Pace was derived simply from Size (and from Agility), as it was assumed that there was a perfect correlation between a character's Size and the length of his or her legs.

In addition to Leg Length, one may give the character some degree of Overweight or Underweight, representing an excess of bodily fat, or an amount of bodily fat smaller than the usual (even to the point of making the character be Severely Anorexic). That is not, strictly speaking, a Sub-Attribute, however.

Constitution has several Sub-Attributes. Resist Poison, Resist Disease, Recovery and Fitness. Recovery represents the body's ability to heal itself of hitpoint loss and Wounds, the higher Recovery the faster you recover from injuries. Fitness has only one purpose, to determine the Stamina of your character, Stamina is equal to your Fitness cubed, then modified for high or low Will (+/- 10% per point Will is higher or lower than 3). Fitness is one of a very few that sub-attribute that can be trained, i.e. through regular physical exertion, almost all the others are 100% fixed, once the character reached maturity.

Perception has two kinds of sub-traits. One is a *sort* of Sub-Attribute, because it modifies Perception only for a single Sense, or for a group of Senses. Using that rule, one can lower or raise Perception-for-one-Sense by as much as 2 points relative to the base Perception value. It represents a character who pays an inordinate amount of attention to the stimuli picked up by one particular sense, or a particular sense group, e.g. a Blind person who notices everything he hears and smells. This is called Sensory Focus.

The other is sensory acuity. One can purchase sharper or duller senses for one's character. There is no limit downwards, one can even sell away a Sense entirely, i.e. create a Deaf or Blind character, but if creating an adventurer it is advised to confine oneself to a small reduction, representing a character with mildly impaired vision, hearing, sense of taste and smell, or sense of touch, to avoid making an unplayable character. On the other hand, FFRE's iconic character, a completely Blind genius called Klaus Uldtmann, could be a lot of fun in the hands of a mature player.

Upwards, Humans may not have senses more than 2 levels sharper than the Human norm. Sharper senses than that are reserved for animals.

Intelligence has many sub-attributes. They are: **Animal** (the potential for learning how to understand animals, i.e. low-intelligence creatures), **Interpersonal** (the potential for learning how to understand other people's emotional states and ambitions - this would include intelligent non-Human species, e.g. yeti, or space aliens, or Elves), **Linguistic** (the potential to comprehend and internalize language-like structures), **Logical** (the potential to learn and understand mathematics and other logical structures), **Mnemonic** (the ability to internalize facts-heavy bodies of knowledge, such as Biology and History - this does not represent Photographic Memory or the ability of an Idiot Savant, or mnemotechniques or rote learning, but rather actual understanding), **Musical** (the potential to appreciate and perform music), **Mystical** (the potential to understand and manipulate supernatural forces such as magic), **Spatial** (the potential to analyze, visualize and comprehend spatial relationships, useful when learning chess, physics, tactics and strategy), **Thinking Speed** (how fast you think - each two points of Thinking Speed above average lets you think twice as fast. Thinking Speed represents only how *fast* the character reaches a conclusion, the *quality* of the conclusion depends on his skills, or on his base Intelligence or on some relevant Sub-Attribute of Intelligence).

Will has four sub-attributes, Resist Fear, Resist Pain, Resist Manipulation and Resist Control. The last two are resistance towards social manipulation (bribery, seduction, et cetera) and against supernatural forms of mind control, such as psionics and magic.

Agility, Hardiness, Charisma, Faith and Psyche have no Sub-Attributes.

All true sub-attributes, except Fitness, follow one of a small number of "cost schemes".

New	-4	-3	-2	-1	+0	+1	+2	+3	+4	+5
Very Cheap	-2	-1.5	-1	-0.5	0	1	3	10	30	100
Cheap	-3	-2.5	-1.5	-1	0	1.5	4.5	15	45	150
Normal	-4	-3	-2	-1	0	2	6	20	60	200
Costly	-6	-4.5	-3	-1.5	0	3	10	30	100	300
Expensive	-8	-6	-4	-2	0	4	12	40	120	400

Combat Dexterity and Recovery from Constitution are bought up and sold down according to the Expensive row.

Resist Poison and Resist Disease, all the four subs of Will, Leg Length, Leg Strength, and Manual Dexterity, are all bought according to the Normal row.

Facial Dexterity and Vocal Dexterity are bought according to the Cheap row.

Animal, Mnemonic, Musical and Mystical Intelligence, and Thinking Speed (also under Intelligence), are bought according to the Very Cheap row.

Sensory Focus, Sensory Acuity and Fitness are bought after other cost tables, which can be found in the Price List document.

The cost of raising or lowering Interpersonal, Linguistic, Logical and Spatial Intelligence, and Arm Strength, depends on the sex of the character.

Differences between male Humans and female Humans - sub-attributes

When it comes to Sub-Attributes, Logical Intelligence and Spatial Intelligence is slightly more expensive for female Humans than for male Humans, whereas they get more compensatory points if they sell it down. For male Humans, Linguistic Intelligence and Interpersonal Intelligence is slightly more expensive to buy up, compared to male Humans, and they get more compensatory points for selling it down.

Upper Body Strength, like base Strength, is more expensive for female humans to buy up than it is for male Humans, and they also get more compensatory points for selling it down, but Lower Body Strength costs the same for both sexes, because the "30% stronger" difference lies in the arm strength.

For male Humans, Logical Intelligence and Spatial Intelligence are bought according to the Very Cheap row, Interpersonal Intelligence and Linguistic Intelligence are bought according to the Cheap row, and Arm Strength is bought according to the Normal row.

For female Humans, Interpersonal Intelligence and Linguistic Intelligence are bought according to the Very Cheap row, Logical Intelligence and Spatial Intelligence are bought according to the Cheap row, and Arm Strength is bought according to the Costly row (it is the only sub-attribute that utilizes this row).

Creativity, Reflexes and Balance.

These three are not sub-attributes, but rather derived stats. The base value for Creativity is the lowest of the character's Psyche and his base Intelligence. This base value can then be sold up or down, using the "Normal" cost row from the sub-attribute table. The final value indicates how effectively creative the character is. Creativity can be said to consist of two components, Psyche is the "wild idea generator", and Intelligence is the "moderator" which analyzes the "wild ideas" and finds flaws in the flawed ones, passing through only those that make sense. The end product is a character's effective Creativity, and therefore a character with high Psyche can be roleplayed as wildly imaginative, but if his Intelligence is low (and he has no bought up Creativity) then his ideas will be impractical, often flawed.

There are two derived stats for reflexes. One is Reflexes (Body), it is the lowest of Combat Dexterity and Perception. The other is Reflexes (Mind), and it is the lowest of Thinking Speed and Perception. They are collectively bought up and sold down according to the "Normal" cost row from the sub-attribute table, e.g. if the player buys a +1 bonus, then it applies to both Reflex ratings.

Balance is a derived stat that tells how well the character does at, well, balance tasks. It is equal to Agility, plus the Reflex modifier. (For purposes of Fleetness, Balance is regarded as being an Agility-Heavy activity, thus heavily modified. This is explained under "Mobility").

Roleplaying

It is important that players roleplay their characters according to their mental stats, and likewise the GM must do so. A character is no more intelligent than his stats says he is. Logical Intelligence is particularly important when it comes to formulating complex plans, and Creativity is important for being innovative and "thinking outside the box". Thinking Speed also suggests whether the player should roleplay his character as "quick" or "slow". A very "quick" character will seem intuitive to others, even though he actually does analyze things thoroughly.

Creativity serves two purposes. It is used for long-term invention Tasks, mechanically, like if a mage wants to research a new Spell, and it is also used in the in-play phase, as a guidance for the player, in a non-mechanical way (the player simply looks at the number on his character sheet, and then plays his character accordingly). If he plays his character as smarter or more creative than what he paid points for, the GM must warn him, and if he persists in having his character behave in a contra-realistic fashion, the GM must penalize the player for "bad roleplaying".

Advantages

In FFRE, all traits bought with Advantage Points (DPs) are called Advantages, but for the purpose of this document, it has been deemed helpful to distinguish between those Advantages that are Sub-Attributes and those that are not, segregating them into different chapters.

FFRE contains *many* more Advantages.

Appearance has a base value of 3 (in this it resembles an Attribute) and can be bought up as high as 9 for male Humans and as high as 10 for female Humans. It also costs slightly less to buy up for female Humans than for male Humans, whereas male Humans get more compensatory points for selling it down. Appearance represents the beauty and attractiveness of the face, and the hair and skin. It is independent of culture, both because scientific findings support universal (i.e. species-wide, planet-wide) standards of attractiveness, and because cultural beauty standards can't work in a point-based character creation system.

Sex	Appearance (costs in DPs)											
	0	1	2	3	4	5	6	7	8	9	10	11
male	-8	-4	-2	0	3.5	7	14	28	56	112	-	-
female	-4	-2	-1	0	2.5	5	10	20	40	80	160	-

Sex Appeal represents different things in female and male Humans. In female Humans, it is very clearly defined as a curvaceous, sexy body. It has a base value of zero, and characters may then purchase a bonus, or take on a penalty.

A female with a Sex Appeal bonus will tend to have somewhat larger breasts, but even more so the shape and positioning of her breasts will be more alluring, and most of all her waist-to-hip ratio will be closer to the ideal. A beautiful female Human, one with high Appearance, appeals (mostly) to the *romantic* instincts of heterosexual males, homosexual females, and bisexuals of both sexes, whereas a sexy female Human, one with one or more levels of Sex Appeal, appeals (mostly) to the *caral* instincts of heterosexual males, homosexual females and bisexuals of both sexes.

Sex Appeal in males is vaguely defined as some sort of "animal magnetism". It is used to explain away those males who are good at seduction, but who have neither a high Seduction skill, nor a high Charisma, nor a high Appearance, nor any applicable FIM, nor any other qualities that can explain his success rate (such as high Intelligence, or high social skills, et cetera...).

Feminine Fat Deposits is an Advantage which costs zero points. Almost all females have it. Those who don't look distinctly freaky. Likewise, males who *have* FFDs look freaky. FFDs add one Fat Unit (a mass amount, derived from Size) to the character's weight, and subtract one from Fleetness. It primarily represents a thicker layer of subcutaneous fat, and fat deposits on the hips and behind. In a typical modern female Human (of Size 3), her FFDs would mass a total of 5 kg. Females pay less for Sex Appeal than male Humans, but for females without FFDs, as well as for males with FFDs, Sex Appeal is a lot more expensive.

FIM, First Impression Modifier, is any factor which generally modifies your first impression, but which is neither Appearance, nor Sex Appeal, nor Charisma. Examples of FIM can be an unpleasant bodily odour, or a pleasant voice. FIM can, obviously, be either negative or positive. Any FIM has an applicability, for instance Unpleasant Voice does not apply if you keep your mouth shut, nor does Pheromones give any bonus if you are talking to someone over the telephone. Some Advantages and Disadvantages are accompanied by a recommendation that you should also buy a certain amount of FIM, for instance a Very Fat character should have a negative "is Fat" FIM. In some cases, you may be required to purchase it. Some other Advantages, such as Stuttering, already have a built-in FIM, and you should not buy a separate FIM. The reason for this is that Stuttering is a variable handicap. If the Stuttering character makes a good Fluency roll, he makes a decent first impression, unimpeded by his handicap, whereas if he Fumbles his Fluency roll, he makes a *very* bad first impression.

The Fat Unit, FU, is a unit of Mass derived from the character's Size. A character may have one of four degrees of underweight: Thin, Skinny, Anorexic and Lethally Anorexic. Acquiring a fifth degree means that you die. Each degree subtracts one Fat Unit from your final Mass.

If a character is underweight, he or she gets a +1 bonus to Fleetness, regardless of the degree of underweight - it is assumed that Humans can't become seriously underweight without also experiencing some loss of muscle tissue - this is why the Fleetness bonus does not go up as a character becomes more and more Underweight. Fleetness is explained later in this document, under Movement.

Overweight also comes in levels. There is no upper limit, but the first levels go as follows: Chubby, Overweight, Fat, Very Fat, Extremely Fat. The first level adds one Fat Unit to your Mass, the second adds two (total), the third adds four, the fourth adds eight, and so forth. Each level of Overweight has a specific Fleetness penalty. Each level of Overweight is also accompanied by a recommended FIM value, but this must be modified according to the culture, e.g. a medieval culture does not stigmatize the overweight to the same degree that the present day Western culture does. The recommended FIM values in the table in the Price List document are appropriate for a medieval setting.

A starving character lives off his bodily fat, gradually dropping down the "Overweight/Underweight ladder" towards Lethally Anorexic. FFDs may also be "eaten" this way, and indeed that is the biological purpose of them. 1 kilogram of bodily fat has a food value of 12 Energy Units. Most characters eat between 2.5 and 5 EU per day, depending on the Metabolism stat. For a Size 2, 3 or 4 character (representing a medieval female, a medieval male or a modern female, or a modern male, respectively), one Fat Unit is approximately 4, 5 or 6 kilograms.

Metabolism is a statistic that determines how much food, water and oxygen a character needs per day. It is the average requirement, a character who is very active needs more, whereas a character completely at rest (i.e. in bed, even more so if unconscious) needs less. The base value is 3, and one gets compensatory points for raising it (because it is a *Disadvantage* to need more food, water and oxygen), and one pays points for lowering it (and there is a limit to how low it can be). A character needs an amount of food per day equal to his Metabolism in Energy Units (EU). 1 EU is equal to 750 kilocalories, or approximately 3000 kilojoules. Water and oxygen are measured in "virtual EUs". If a character temporarily becomes more or less active, the food, water and oxygen requirements should just be adjusted on an ad hoc basis, but if the character undergoes an actual lifestyle change, it is appropriate to change his Metabolism stat. Male Humans tend to have a higher Metabolism than female Humans (largely a function of higher Strength, and lack of FFDs). Children and teenagers need a lot of food relative to their size, compared to adults.

Distinctive Feature is anything that makes you stand out from a crowd. There's a subsystem for creating any Distinctive Feature (DF), based on the magnitude of the Feature (bright red hair makes you stand out less in a crowd, than being three meters tall and having glowing yellow eyes) and the concealability of the Feature. Some DFs, combining low magnitude with high concealability, are worth no points, but they should still be listed on the character sheet, because they flesh out the character, helping to

individualize him (and can still, under rare circumstances, be inconvenient). He's not just a knight, he's a knight with bright red hair and a faint lisp. DFs are culture-dependent, and hence Magnitude and Concealability depend on the default culture of the campaign world (skin colour is a good example of this - imagine a Negro, first in 10th century Scandinavia, then in 10th century Spain: Where will he stand out the most?). Some DFs should also result in FIMs, e.g. a very severe Lisp is sufficient to also take a -1 FIM for the character, and worth the compensatory points).

There is a more complex subsystem for creating Addictions. An Addiction is defined by several traits, such as how common the substance is. If a substance is very common, or very rare, the disadvantage of being Addicted to it is greater (because you are either tempted constantly, or else it's immensely difficult to find a dealer so you can satisfy your craving). If the substance is more expensive, or difficult to stop taking, or has immediate-usage or long-term side effects, or is illegal, the point value of the Addiction also goes up. This is dealt with by each trait adding or subtracting Addiction Levels. The final Addiction Level then translates into a DP value. The Price List contains finalized writeups for the most common drugs, like Alcohol, Marijuana, Tobacco, Heroine and Cocaine, and a bunch of less common ones.

All characters have a Preferred Level of Intoxication, "PL Intox." The reason for this is that if the GM asks the players if their characters indulge in the ale, when they are visiting a bar, the players are very likely to say no, because they suspect that something is about to happen, and they do not wish to be inconvenienced by having their characters be slightly drunk. To deal with this metagame thinking problem, all characters are "born" with a certain Preferred Level of Intoxication (usually applying to alcohol, although cannabis and qat are possible alternatives in some cultures). The base value is 3, indicating that the character prefers to reach and maintain a Medium level of Intoxication, but the player may buy down or sell up the Level, to as low as 0 or as high as 6, indicating that the character dislikes the effects of alcohol and never uses it, or that he tends to go straight for a state of severe inebriation. PLIntox is only invoked when the characters are in an intoxicating place, e.g. a tavern, inn or party, it does not apply to sitting around the campfire. Also if the characters have valid reasons to suspect that sobriety is useful, their players are allowed to declare that their characters drink less than they normally would (especially if said character is *not* Addicted to Alcohol), or even that they do not drink at all. And note that such situations occur frequently during adventuring.

There are many ways to give a character an improved memory. Raising Mnemonic Intelligence helps with achieving understanding of facts-heavy bodies of knowledge such as History and to a lesser extent Biology, but there are advantages that help characters to recall information faster, or retain information for longer, or to be better able to remember specific types of information (faces, or gossip, or music). There's also a list of advantages that gives Near Perfect Recall and Percept Recall, pertaining to a single area such as Music or Images or Numbers, and there is Mnemonic Focus which gives a bonus towards rolls to recall particular kinds of information - Mnemonic Focus is usually caused by the character's lifestyle or an obsession he has, and is thus quite cheap, whereas NPR

and Perfect Recall are caused by inborn neurostructural differences, and thus costs a lot of points (they are also, though, a lot more powerful).

One can make one's character more or less Insane. FFRE does not have the usual behavioural disadvantages (e.g. Bad Temper, Intolerant of Elves) because they are problematic in a role playing gaming context (unlike physical and social disadvantages, they are under the player's control rather than the GM's control), but actual Insanities *are* available. The more severe ones are not recommended for player characters, though, but they may be useful and fun in NPCs. One can start with temporarily reduced Sanity (so that one can later recover back to the max value) or with a reduced Sanity maximum (so that the distance between one's normal state, and the straitjacket, is smaller, so to speak), or with the ability to regain Sanity faster or slower than normal, or with one or more actual Insanities, which FFRE incorrectly refers to as Neuroses. Examples of Neuroses are Phobias (one only gets compensatory points for Phobias that are Severe and Crippling. Indiana Jones's "phobia" of snakes is classified as Trivial, *two* steps below Severe), Obsessions and Compulsive Behaviours. Each Neurosis is worth one or more Neurosis Points (or zero, in many cases, for the Neuroses that can be assumed to have little impact on the character's general value and functioning - e.g. Indiana Jones' "phobia"), and for the first three NPs, 1 compensatory DP is given for each. The next three NPs are worth half a compensatory DP each, and the next two pairs of NPs are worth half a compensatory DP each. A character more insane than that gets only one half extra compensatory DP, this is to avoid encouraging the creation of very insane characters.

There are many, many, many more Advantages and Disadvantages in FFRE. They can be found in the Price List document, downloadable from the FFRE-Discussion mailing list.

Perks

Advantages and Attributes are traits that are intrinsic to the character (inside the character, as opposed to external), and that the character is also born with (with some exceptions, such as Strength, Fitness and Overweight/Underweight, but generally such Advantages change only very slowly, requiring at best several Weeks, and more likely many Moons, to change in rating). Skills are also intrinsic but are acquired rather than inborn.

Perks, on the other hand, are extrinsic. They exist outside of the character, they are social advantages. Some are acquired, while others are "inherited", e.g. your father was the king, and since you're his first-born son, you inherit the title upon his death. Perks are characterized by being able to disappear *real fast* under certain circumstances. For instance if a bank goes bankrupt, you may lose a lot of money, or if there is a revolt, you may lose your Royal title and powers.

Examples of Perks are Extra Starting Cash, Extra Starting Equipment Funds, Regular Income, Increased Social Status, Increased Legal Rights, Contacts, Reputation and Popularity. Many of these may also be "sold down", granting you compensatory points.

The monetary unit in FFRE is the penny (d, denarius). Some campaigns may work better if dollars or credits are used, but very often it is easier for the players to just talk about pennies, even though their characters keep accounts in kroner, gold coins or credits. The base starting values are 10d in cash (or cash-like objects, such as hack-silver and jewelry) and 30d of starting equipment funds. One spends the equipment funds to purchase equipment for one's character, and unspent funds are lost upon game start.

One can buy up Starting Cash and Equipment Funds. Usually one buys them up in whole levels, each level multiplying the value by 4, which means that if you buy 3 levels of extra starting cash, you start the game with 640d in cash instead of 10d (because $10d \times 4^3 = 640d$). The cost of a level of Extra Starting Cash, or Extra Starting Funds, depends on the setting.

One can also buy Regular Cash Income, or Regular Food Income, representing such things as stock investments, a job, or ownership of a farm. To a Regular Cash Income, one can attach various multipliers, raising the Income in exchange for something, such as the requirement of a Weekly skill roll, and/or the need to spend some hours per Week attending something (performing work at a work place, or standing in the queue at a welfare office). The combination of those two can represent the holding of a job. One can also pay Perk Points to buy more Levels of Income.

1d is roughly the equivalent of \$12, £8, 12 euros or 100 Danish kroner. In medieval settings it is the equivalent of a strong (not debased) silver penny.

Another Perk is the Unit, meaning that one has a group of Followers. This can be as little as one badly trained slave, or as much as a legion of highly trained, highly motivated, ultra-loyal Roman soldiers.

Many Perks are unsuitable for adventurers, because they are only useful in a particular geographical location (all your contacts may be in Ireland, for instance, so if you travel to Egypt they are useless, except perhaps if you are somehow able to send mail over such a long distance, and receive replies), or because they tend to burden the character down (you can't bring a whole Legion with you into a dungeon), but they are useful for NPC creation, and smaller Perks are also very appropriate for player characters.

Status and Legal Rights are separate stats, with a base value of 3, either able to go as low as -2 or as high as 9. Status is the cheapest, and is not too important. It determines how you are addressed, and whom you can marry (and have affairs with - there's a bit more "wiggle room" in that regard), and how much general respect you get (everything else being equal). The important factor, and the expensive one, is Legal Rights. It has a huge influence on court proceedings, even accusations. In many societies, it is impossible to accuse someone with higher LR than oneself of doing anything - all charges are automatically dismissed. Modern society has a tendency towards "all are equal before the law", therefore the span of LR, from top to bottom, is narrower than in a medieval society. In a modern society, the LR range goes only from 1 to 5, instead of from -2 to 9. The pagan Viking society had mild

legal-egalitarian tendencies, so there the span goes only from 0 to 6, slightly wider than the modern one.

Contacts are built according to a simple system, where the Contact type (Information, Dealer, Trader, Teacher...) determines a base Contact Level, and various added traits (increased Skill, increased Loyalty) then add more Contact Levels. The final Contact Level then translates into a Perk Point value.

One may also purchase a Perk called Connected. It covers a specified Area, with the cost depending on the size of the Area - being Connected in a Village-sized Area costs a lot less than being Connected in a Galaxy-sized Area. Connected halves the cost of all Contacts (it reduces the Contact Level by 4, which is the equivalent of dividing the final PP cost by 2). Connected has no effect after game start, but all characters should take it if they would benefit from it, during creation, because its purpose is to encourage the creation of characters who have Contacts in a limited area, rather than scattered all over the universe.

Reputations and Popularities likewise cover a specified Area, with the size of the Area influencing the cost. It costs more to be Popular in all of France, than it costs to be just Popular in a particular suburb or Paris. Likewise having a Reputation for being extremely intelligent costs more if the Reputation is "valid" in all of Europe, rather than if it is specific to London or Bornholm. Reputations and Popularities also have a Magnitude, defining how Known or Popular you are. A rating of 1 would be a tiny Reputation or Popularity (tiny in the sense that it is small, weak, but it is still "better" than no Reputation or Popularity at all), whereas a rating of 8 would be an immense Reputation or Popularity. Popularities can also be negative, and Reputations can be for something bad - in either case, one gets compensatory points for creating a character with such traits (although not many). It is possible that there is no one alive, currently, with any Reputations of 8, or a Popularity of 8 or -8. Adolf Hitler would be a good example of someone with a Planet-wide Popularity of -7, whereas Josef Stalin rates only a -6 (because his crimes have not been as widely publicized as Hitler's).

Extents can also refer to subsets of populations. For instance, Cordova is a City (Extent 2), so a character can be Popular or have a Reputation in all of Cordova, but instead he could have a Popularity or Reputation rating with a subset of Cordova's population, such as all the Jews or all the non-Moslems, or all those not born in the city, or all the sailors. Simply downgrade the Extent rating appropriately (i.e. to Extent 1 or even Extent 0).

Characters also automatically get Reputations, if they have high Attributes or very high Skills. This is called Auto-Fame, and works according to a table (found in the Price List document). Anyone with a rating of 6 or more in an Attribute, or 8 or more in a skill, gets some Auto-Fame. Other traits, such as a very high Sub-Attribute or high Appearance, also causes Auto-Fame. The person creating the character can *pay* Perk Points to buy this Auto-Fame down, representing the fact that the character has always "kept a low profile". This is useful for thieves who may have high Dexterity and Intelligence - it's easier operating if

you're not known to have high innate potential in those areas. And it's even more relevant if one has high skills, such as Stealth and Lockpicking.

Since Reputations and Popularities have Ratings, GMs may sometimes want to "roll for them", as if they were attributes. There are no rules for this (currently), but it is a possibility.

It is expensive but possible to purchase the Perk of being a leader of an area. This can be as small as a knight's free, or as vast as a Galactic Empire. The cost depends on the size of the area that one controls. One can also buy control of some (or all!) of the Votes in a particular assembly. The cost depends on how large a percentage of the votes one controls (the cost goes up steeply) and according to the importance of the assembly - a village council is cheap but an imperial council is expensive. For major decisions, a 2/3, 3/4 or even a complete majority may be required, instead of a regular (50.1%) majority, that is one reason to have more than half the votes. Another reason is that votes may be lost. Representatives who are under your control at game start may eventually abandon you, if you pass laws that they dislike, so you gradually lose votes (you may then either accept this loss, or try to gain more votes), and they may also be assassinated, or bribed away from you (from the party you control). If there is an election (this is not a given - not all councils are democratic), some or all of the votes are removed, and you gain new ones according to your Popularity, the Popularity of your party, the Popularity of your cause, or a combination of them.

Home is also a Perk. It is bought in Home Levels, which you total up and translate into a Perk Point value. The basic 1 Home Level is a 6 square meter abode. Added Home Levels then increase the size of the area under your control (it matters little whether it is a house that you own, or a house that you rent, as long as you have a claim on it and cannot easily be thrown out). Or improve it in some other way, such as adding fortifications or secret features (doors, passages, escape tunnels). Creating a normal apartment or villa is very fast and easy, whereas if one wishes to create a large, strong fortress with all sorts of secret features, the process can take a bit of time.

You can buy Favours, representing the fact that high-ranking individuals (Abbots, Dukes, Emperors) feel that "they are in your debt". The cost depends on the political influence of the NPC. Favours represent major requests, but should still be kept within the possible. The character approaches the NPC and asks for help, and if the NPC provides the help, the Favour has been spent. Really massive help may cost 2, 3 or even more Favours.

A problem that often occurs in roleplaying gaming is characters who have skills that lets them produce something, like smith: weapon skill that lets a character, if he is sufficiently skilled, forge swords that are durable, well-balanced and very sharp, or a Brewing skill which may let a character create magical potions. Such activities require downtime, and as many campaigns are adventuring-focused, it may be difficult for that character type to ever get to utilize his skills. No realistic solutions exist for the in-game problem, but during character creation, any character with a "production" type skill may purchase a Perk called

Craft. This involves spending a number of Perk Points (in 0.5 PP increments), which then translate into Craft Points according to a formula that takes into account the level of the skill. This means that a character with a low skill must pay a lot of Perk Points to get just a few Craft Points, whereas a character with a high skill gets many Craft Points for just a few Perk Points.

These Craft Points can then be spent during character creation to "purchase" various items that the character is capable of making. They are paid for with CPs instead of being paid for with money (pennies). This means that a genius smith can start the game with a brilliantly forged broadsword, for the cost of only a very few Perk Points, even though normally he would have had to pay many Perk Points to boost his Equipment Funds up to a level where the sword would be affordable. (Skill level requirements *are* enforced, e.g. no one can use the Craft character creation rule to forge a Master quality sword if his skill is lower than 6).

By allowing characters to start with self-made items, according to their skill levels, they get a chance to prove the worth of those skills to the other party members, thereby increasing the chance that the other party members will eventually allow them downtime so that they can further utilize their skills.

It should be pointed out that the intent behind the Craft rule is to remove all random aspects from character creation (even though this is not 100% achieved - Old characters must still go through Aging Rolls), so that it is possible to create demo characters that can be used "off the shelf".

There are many more Perks than mentioned here, they can be found in the Price List document, downloadable from the Files area of the FFRE-Discussion mailing list at YahooGroups.

Skills and Lores

Skills and Lores are the fourth and last category on which one spends Goodie Points. GPs spent here convert into Skill Points, SPs.

Skills are rated acquired abilities, meaning that there is a rating associated with them, such as Sword 4, Barter 5 or Cartography 2.

Lores are binary acquired abilities, meaning that you either have them or you don't. Sometimes there exist a "ladder" of Lores, where one Lore is a prerequisite for another, e.g. you cannot learn No Accent (the ability to speak a specific foreign language without any accent at all) before you have learned Weak Accent (the ability to speak a specific foreign language with only a faint accent, as opposed to a very strong, pronounced and noticeable one), and likewise you must learn Wear Light Armour before you can learn Wear Medium Armour.

Skills sometimes "cap" each other. For instance one may not utilize a Physics skill that is more than twice as high as one's Mathematics skill. Likewise, First Aid may not be higher than 2×Anatomy, and Critical Hit may not be higher than 2×Anatomy either. Most wilderness skills may not be higher than 2× the relevant Terrain skill (e.g. Terrain: Woods, Terrain: Mountains, Terrain: Desert), the exceptions are Camping which is capped at ×2.5 (this is more generous than for the regular Wilderness skills) and Survival which is capped at 1.5 (a quite harsh cap, but suitable).

Skills can also sometimes substitute for each other. For instance, Tactics: Land may substitute for Tactics: Water at /3, meaning that a character who lacks Tactics: Water, but has Tactics: Land 6, can function as if he had Tactics: Water 2.

Each skill is entitled to a specialization, a narrower area of speciality, for instance the Sword skill may be specialized in Broadsword, the Barter skill may be specialized in Slaves or Combat Gear, or the Cartography skill may be specialized in Small-Scale Maps, Medium-Scale Maps or Large-Scale Maps (or in Dungeons). If one is using the specialty of one's skill, it counts as if it is one level higher.

Skill Costs

Skill Points represent the total sum of training and experience (a combination of training time and training quality - 200 hours of self-training are, perhaps, as efficient as 100 hours of training under an inferior teacher or 50 hours of training under a talented teacher or 25 hours of training under a talented teacher who gives all his attention to you) that the character has had in his or her entire life time. They are all spent on particular Skills and Lores.

All skills start at a base value of zero, and are bought up from there. A skill rating of 2 may be labelled Apprentice, a rating of 4 may be labelled Journeyman, and a rating of 6 may be labelled Master. Experienced adventurers, and gifted or highly educated non-adventurers, often have skills much higher than 6, but there are no formal labels for such skill levels - they were called different things in different texts, so they are officially nameless.

A practical limit would be a skill of 12 or maybe 13, for a character who combines very high innate aptitude with an obsessive decade-spanning training regime, in a single skill.

The cost of a skill depends on the value of two or more relevant attributes, because higher attributes mean that you learn faster - you need less training to improve. A highly dextrous person masters the art of lockpicking faster than someone with less nimble fingers.

Calculating the cost of any one skill is a computation-heavy process. The character creation spreadsheet takes care of it all, but some players may wish to know the gory details of the system. They can read it by skipping to the end of this document, where it is described in *full detail* in the appendix.

[Description of the skill cost calculation process cut, and moved to the appendix]

The rest of you, the normal readers, can just read on.

As stated above, all the calculations are done by the character creation spreadsheet. A human can easily create an FFRE character without having fully understood how the system works, because the rules are intuitive. It is intuitively obvious that Strength, Dexterity and Agility affects the learning of melee weapon skills, that Dexterity and Perception affect the learning of missile weapons (with Arm Strength also playing a small (1/7) role for bows), and that Intelligence, Will and Perception affect how fast you learn science skills (and Intelligence and Will, without Perception, affects how fast you learn other knowledge skills).

Also, the character creation spreadsheet creates two skill sheets for each character, one intended for in-game usage, where just the skill names and skill levels are listed, and one intended for character advancement, i.e. that which is done after each session, which in addition lists numerous stats (APT, PV, Difficulty, Complexity and original SP cost), and also lists the cost for the next six levels of the skill

Uses of the skill cost system

There are two ways one can buy a skill for a character. One is to buy a certain skill level. The character creation spreadsheet then tells you how many SPs that will cost.

The other is to pay a certain amount of SPs, and then the character creation spreadsheet tells you what skill level that will get you. SPs beyond the cost of buying the given skill level go towards purchasing the next higher level, so that nothing is lost.

This second option is *much* more powerful than it might seem, because you can use it to define Training Regimens, and then subsequently apply those Training Regimens to characters. You can, for instance, define US Army Basic Training ("Boot Camp") as giving 300 SP in First Aid, 500 SP in Gun: Rifle, 100 SP in Stealth, and so forth. When these SP amounts are applied to individual characters, some will benefit much and some will benefit little, according to their attributes, for instance characters with high Intelligence benefits much from the First Aid training, characters with high Dexterity benefits much from the Gun training, and characters with high Agility benefits much from the Stealth training.

Such values can be derived from the FFRE Teaching/Training rules (currently only covering study under a teacher - they don't deal with self-training, nor learning solely from books, yet). To use this system, you plug in various stats, such as the skills of the Teacher (both his level in the skill being taught, and his Teaching or Training skill, depending on whether it's a largely mental or largely physical skill), the resources spent, the number of students in the class, and other things, and out comes an amount of SPs per hour of tuition. You then decide how many hours of tuition is spent on each subject, and that gives you the final amount of SPs.

One can use this powerful method to create a character by defining his life path, i.e. start by defining what type and quality primary school he attended, then secondary school, then college, then army officer training. Stuff like that. It is even possible to create a random life path system, where each entry on the roll table gives a certain amount of SPs towards specified skills.

About Lores

Lores are binary skills, i.e. they have no rating. A character either has or has not a Lore.

But Lores also have a couple of special features. One is that many Lores work as enhancers on skills. For instance the First Aid skill is normally only good for dealing with simple injuries, like treating basic burns, splinting simple fractures, and bandaging wounds that bleed slightly. One can learn one of two Lores to "enhance" the First Aid skill. The Battlefield Surgeon Lore adds some new abilities to the First Aid skill, but it also renders the cap from the Anatomy skill more severe. Normally one's effective First Aid may not be higher than $2 \times \text{Anatomy}$. With the Battlefield Surgeon Lore, when one is using the new abilities added by that Lore, one's effective First Aid skill can be no higher than $1.5 \times \text{Anatomy}$. Battlefield Surgeon is appropriate for medieval campaigns. The other Lore is called Paramedic, and is more appropriate for modern campaigns (although one can learn both Lores - they add slightly different abilities). It has the same effect on the cap from Anatomy, changing it to $1.5 \times \text{Anatomy}$.

Similarly, there are Lores that enhance the Physics skill, such as Thermodynamics, Relativity Physics, Quantum Physics and FTL Physics (this last one has not been discovered yet, in our world). They also have the effect of rendering the cap from Mathematics more severe. The Seduction skill is normally applicable to only one sex, but a character can learn the Lore of Bisexual Seduction to become able to use his Seduction skill on both sexes.

This leads me to the second way in which Lores are special. Many of them represent *inventions, discoveries*, the results of research. Of course some Lores do not. The Script Lore simply represents the character having acquired familiarity with a particular alphabet (such as Latin, Cyrillic or Ogham), and the Weak Accent and No Accent Lores represent having learned how to pronounce foreign words correctly and speak the language with the correct intonations and rhythm. They cannot be researched, rather they can be taught, and some can also be practiced (it is easy to practice Weak Accent and No Accent, but quite difficult to decode the meaning of a foreign alphabet).

But some other Lores can be researched. Thermodynamics is a good example, and so are the various Spells from the spellcasting magic system (each Spell is a Lore), and also the many Lores which improve spellcasting such as the series of Lores for Fast-Cast and for Silent Cast/No Gestures Cast/Stealth Cast. These Lores can be learned from a teacher, or studied from a book, but if no teacher or book is available, one must resort to inventing them on one's own, even though it is much less efficient. This means that each such Invention Lore should have some additional stats, detailing how difficult it is to invent

(Spells tend to be easy to invent, whereas the higher spellcasting Lores, as well as the higher physics enhancers, are *exceedingly* difficult - Stephen Hawking has spent the last several decades trying to research out the Lore of Quantum Gravity!), and also some modifiers on the actual invention process, detailing how long the invention takes, what the Roll Difficulty is, what to roll for (often a combination of rolls for a relevant sub-attribute of Intelligence, rolls for general Intelligence, rolls for relevant skills (Magic Theory, maybe) and rolls for Creativity), and so forth. None of this Lore Invention structure has been created yet, however, but it will consist of one or (more likely) several Tasks.

The Roll Mechanic

The roll mechanic is based around rolling a number of d12s equal to the tested rating, i.e. the skill level or the attribute rating, or some other trait such as the Durability of a weapon, or the Popularity of a character or the Morale of a Unit.

Skill Specializations

For skills, if you are using your specialization of your skill, you roll one extra d12. For instance, a character with Sword (Broadsword) 5 rolls 5d12 when using a longsword, shortsword or two-handed sword, but when using a broadsword he rolls 6d12. For a few skills, it might be impossible to find a specialization that is not unacceptably wide. The standard example is Seduction. Seduction (Women) is simply too broad, even for a character who might wish to seduce either sex, depending on the situation (perhaps a female agent who seduces men as part of her work, but women for fun). In those cases, there can be no specialization.

A valid specialization should, at the most, cover 1/3 of general usage. One can be found for most skills, for instance there are four general sword types. Barter can apply to many categories of goods. Seduction is one of a very few unfortunate exceptions.

For attributes, a parenthesis after the attribute name refers to a sub-attribute, not a specialization. For instance Dexterity (Manual) 4 says only that the character has a Manual Dexterity of 4 - his Combat Dexterity may be 1 or 3 or 9, and his Facial Dexterity may likewise be any value, we can not know this unless it is stated somewhere else. Some groups use condensed character sheets (and GMs often use such sheets for minor NPCs) where a sub-attribute is only mentioned if it is different from the parent attribute. If the value of a sub-attribute is not mentioned, it means that it is equal to the parent attribute.

Other traits never have parentheses after their names.

Roll Difficulty

You roll the specified number of dice, versus a Roll Difficulty, RD, given by the GM. This can be a number as low as 2 (RD 1 would mean automatic success - there would be no need to roll at all), or as high as 18.

8 is the standard RD. It corresponds to an unmodified roll in most other systems. It is used in situations that are difficult, where there is a chance of failure even for the trained.

RD 6 is used in easy situations, RD 4 in routine situations, RD 2 in very easy situations.

RD 10 is used in very difficult situations. RD 12 is the highest RD where there is an actual chance of success. It is *poison*. Characters, even the extremely skilled, should fear such situations, and do their best to avoid using their skills in them. The chance of a Fumble is *very high* for RD 12. Even RD 11 is dangerous.

RDs of 13 and higher cannot succeed. Their usage is that as the RD goes up, the probability of the worst kinds of Fumbles also goes up. RD 18 *guarantees* the worst kind of Fumble possible.

Likewise, as the RD goes down, the probabilities of the worst kinds of Fumbles go down. For RD 6, the worst kind of Fumble becomes impossible. For RD 5, the worst and the second worst kind becomes impossible. For RD 2, you cannot Fumble, the worst that can happen is that you fail.

The Newbie Sheet document contains a table of RDs. The Game Tables document also contains an RD table, but it is out-of-date, as it was created at the time when the roll mechanic was based on d10s rather than d12s and has not been updated since (well, a partial update *is* on my hard drive. It will be finished and uploaded eventually).

RD modifiers

Various factors may alter the RD. This can lower RD 13, Impossible, to RD 12, Barely Possible, but it can also raise RD 11 to RD 13, Impossible.

Some characters are born with Talents for specific skills or skill categories. A Talent lowers the RD by 1, or 2 or 3 if the Talent is Major or Extreme. Likewise characters can be born with Incompetences, which may be Normal (just "Incompetence"), Major or Extreme, and they raise the RD by 1, 2 or 3.

Special equipment may also lower the RD, such as a pair of lockpicks that are perfectly shaped, or a well-balanced sword, or a spellcaster's Focus (more on Foci, which are quite important for spellcasters, under "Spellcasting").

Circumstances can affect the RD too. Fleetness far above or below the norm (zero) gives a bonus or penalty to certain skills. Some skills are Agility-Heavy (examples are Dodge and Stealth) and gain the larger bonus, the one that come into force even for relatively normal Fleetness values. Other skills are Agility-Medium (melee weapon skills, e.g.) and gain the smaller bonus, the one that only comes into force for extreme values of Fleetness. The concept of Fleetness is explained further down, under "Movement".

Finally, a character may work faster or slower at a task, to raise or lower the RD. More on that under "Time Scale", below.

The outcome

Now, roll the dice.

If one or more dice shows the RD or higher, count them. You have Succeeded, more or less. The number of dice showing the RD or higher is your degree of Success, and is codified 1S, 2S, 3S and so forth. The highest possible degree of Success is your rolled rating, e.g. if your skill is Sword (Broadsword) 5, you can't get more than 5 or 6 Successes, depending on what sword type you're using.

2S is a normal success. It corresponds to "making the roll" in most other systems. You do the job, but not in a fantastically brilliant way.

1S is a partial success. You do the job, but in a limited way.

3S is a Good Success, 4S is a Great Success, and so forth.

If none of the dice shows the RD or higher, you have either failed or Fumbled. Find the highest die. It doesn't matter if several dice shows this same number.

If the highest die is only 1 lower than the RD, then congratulations! You have only failed, not Fumbled. This is codified f-1 (*not* F-1).

If the highest die is 2 lower than the RD, you have gotten a Minor Fumble, codified F-2. It is a Fumble, but it's not too bad.

If the HD is 3 lower than the RD, you've gotten a Medium Fumble, F-3. If the HD is 4 lower than the RD, you've gotten a Major Fumble. If the RD is 5 lower than the RD, you've gotten a Grand Fumble.

If the HD is 6 or more lower than the RD, you've gotten a Disastrous Fumble.

The math-literate will be rather unconcerned, realizing that the worst kinds of Fumbles become *extremely* unlikely as soon as your skill reaches a decent level, provided the RD isn't insanely high.

One can use this roll mechanic for several things. The FFRE Newbie Sheet describes several ways. Here, only three will be mentioned.

Opposed Rolls

This is very simple. Two characters roll, not necessarily for the same skill or against the same RD. The one who gets the most Successes wins. His success degree equals the successes that he rolled, minus the successes that the opponent rolled (the opponent s

regarded as having rolled zero successes if he fails or Fumbles). Also if one Fumbles, he suffers the consequences of it (broken weapon, or similar). If it is a tie, in a situation where a tie is highly improbable, the FFRE Newbie Sheet specifies how one finds the winner.

Special Opposed Rolls

This is like an Opposed Roll, except that if one character should fail or Fumble, his failure degree is subtracted from the success of the other. This means that if one character rolls 2S and the other rolls F-2, the winner is regarded as having rolled 4S. This is used for Barter rolls. There are no *special* consequences of Fumbling, other than that you magnify your opponent's success degree.

The Task Roll

This mechanic is used for activities which may be completed in a variable amount of time, such as picking a lock, casting a spell or repairing something (beyond the simplest patch jobs - fixing a punctured bicycle tire is not a Task, because it is not variable duration, but fixing something complex, like a space ship engine, is).

A Task has an RD, just like an ordinary roll, but it also has a Goal and a Time Increment. The goal is the amount of Progress that is needed to complete the Task. The Time Increment is how long each roll cycle takes. It may be 1/100 Second, 6 Minutes, 15 Years, or any other fixed amount of time.

Each Cycle, the character rolls. If he gets any Successes, he squares that number of Successes and adds it to his Progress, e.g. if he rolls 1S, he adds 1 to his Progress, if he rolls 3S he adds 9 to his Progress. If he rolls f-1, he adds no Progress. If he rolls F-2, his Progress drops to zero (if doesn't matter if it was already zero), but suffer no other ill consequences. If he rolls F-3 or worse, an actual Fumble occurs, something that quite likely makes it impossible for him to continue the Task.

In this way, Task rolls are safer than ordinary rolls, because nothing unpleasant happens if an F-2 occurs.

Once the Progress reaches or exceeds the Goal, the Task is completed. The Newbie Sheet contains a rule for determining exactly when in the last Time Increment the Task was completed, e.g. if one needs precise results such as "Finished in 5 1/4 time Increment".

The Time Scale

FFRE has a single Time Scale, which is used throughout the system. It stretches from infinitely small time increments to infinitely large ones. As you go smaller and smaller, the progression is predictable, but the high end of the scale is not suchly defined.

The middle end of the scale, containing the steps used most frequently, goes like this:

1/10 s
1 Second
6 Seconds (1 Round)

1 Minute
6 Minutes
1 Hour
4 Hours
24 Hours (1 Day, although such "1 Day" activities will usually be spread over 2-3 days)
1 Week (a total of 168 Hours - again, activities will likely be spread out over 2-4 weeks)
1 Moon (4 Weeks)
6 Moons
3 Years
15 Years
75 Years
300 Years
1'200 Years
6'000 Years

Below 1/10 second, each Time Increment is just 10 times smaller, so it goes 1/100 s, 1/1'000 s, 1/100'00 s. The high end has no such fixed progression, although one can be made if desired. It is nowhere defined what the step after 6'000 Years is, as it has never been needed.

Many activities can be "plugged in" to this Time Scale.

Also, with many activities, one can hurry or work more slowly. Trying to do an activity one Time Increment step *faster* raises the RD by 2. If an activity normally takes 1 Minute and is RD 7, then one can try doing it in 6 Seconds by rolling vs RD 9.

One can also try to hurry *a lot*, by rolling vs an RD 5 steps higher than the standard. If successful, one completes the job 2 Time Increment Steps faster than normal, e.g. the activity is completed in 1 Second instead of 1 Minute, but the RD is 12!!

Likewise one can work more slowly, lowering the Time Increment one step in exchange for an RD 1 lower, or lower the Time Increment *three* steps in exchange for an RD 2 lower.

There are some activities where one cannot work faster or slower. Cooking is a good example. Making a meal takes the time it takes, and the completion time simply cannot vary by a significant factor.

With Tasks, one can choose one's working speed for each Cycle, e.g. one can work normally the first Cycle, then if one begins to feel confident, one can switch to working faster. Later again, one can change one's mind and go back to normal speed, or even slow speed.

The purpose of this mechanic is to let highly skilled characters do things faster, e.g. pick locks faster, or repair starship engines faster, while at the same time also giving less skilled characters an improved chance of success, if they are willing to sacrifice time.

Luck Points

All characters have some Luck Points, which their players (or the GM, in the case of NPCs) can spend, either to purchase re-rolls of already made rolls, or else to lower the RD of rolls that have yet to be made, or to purchase re-rolls in advance (this is cheaper than purchasing them after-the-fact). Luck Points are regained slowly in realistic settings, and faster in less realistic ones.

Luck is normally generic, useable for everything, but Aspected Luck is another possibility, for instance a character may have one or more points of Combat Luck, or Spellcasting Luck, useable only in such situations. Even more focused Luck is possible, for instance "Luck that only works when trying to pick up Blondes". Aspected Luck is optional, but is in keeping with the mood and atmosphere of the Ærth setting, where characters often suspect each other of being lucky in general or when it comes to particular types of endeavours.

In-Game Rules

Spellcasting

In the default FFRE magic system, spellcasting is divided into 24 Realms, each of which belongs to one of four Categories

Category	Realms	#
Nature Magic	Animal, Body, Lesser Healing, Plant, Shapechange, Weather	6
Element Magic	Air, Darkness, Earth, Fire, Frost, Light, Water	7
Grey Magic	Combat, Defence, Divination, Emotion, Illusion, Metamagic	7
Black Magic	Curses, Demonology, Horror Magic, Necromancy	4

Nature Magic is referred to, by some characters, as "Green Magic", and a very few take this tradition to the extreme, by referring to Element Magic as "Rainbow Magic" or "Multi-hued Magic".

Metamagic is the Realm that deals with magic, i.e. it contains spells such as Detect Magic, Disrupt Magic, Analyze Magic and so forth. Think of Metamagic as "tool magic", the tools "carried" by a "magic-mechanic". The names of the other realms should be more or less self-explanatory.

Lesser Magic is called that because there used to be a fifth Category, called White Magic, accessible only through the Divine Method of casting (the Divine Method could access all five Categories, with RDs depending upon the nature of the Divine caster's religion (e.g. whether it's nature-themed or Mind-themed or anti-Necromancy), whereas the Arcane

Method could access only the four other Categories, but with unmodified RDs), but Divine spellcasting has since then been removed from FFRE, any exercise of Divine magic now takes place through Powers. The White Category contained three Realms: Greater Healing, Aid and Bless. Greater Healing was intended to be quite powerful, able to heal serious Wounds pretty fast, whereas Lesser Healing was intended to be less spectacular, mostly speeding up the body's natural healing process. The qualifier "lesser" has been retained because it alerts people new to FFRE to the fact that Lesser Healing might not be as powerful as, e.g., the healing magic found in D&D.

Each Realm is a skill, which is learned normally (i.e. you can learn it from a teacher, or from a book, or you can practice it although you absolutely and firmly *do* need an external source for the first skill level) and which is Difficulty 10 (Hard) and Complexity 0 (Normal).

Within each Realm there exists a number of Spells, each of which is learned as a Lore. Each spell is quite easy to learn, the difficulty, the hurdle that ensures that magic is rare, lies in learning the Realm. It is obvious from this that characters are likely to know most, if not all, of the spells in their Realms. If you have mastered Light Magic, you'd tend to know all the Light Spells.

(It may be helpful, for some, to think of each Spell as "enhancing" the Realm skill by enabling the character to use the Realm skill to cast the Spell. Others may find this line of thought to be pointless, or even confusing)

Spells are divided into six levels, covering the whole span of magic prowess, from simple and trivial Cantrips to awe-inspiring Wonders. The Skill Point cost of learning a spell depends on the Level, i.e. it takes 32 times as long to learn a Wonder spell as it does to learn a Cantrip spell.

The Aptitude formula for any Realm skill is heavily influenced by Psyche (4/7), and somewhat influenced by Will (2/7) and Intelligence (this means that highly intelligent characters are not always good at learning magic). The APT formula for any Spell is mostly based in Intelligence (2/3) with some influence from Will (this means that mages with high Intelligence are more likely to know *all* the spells in their Realms than mages with average Intelligence are).

Each Spell is cast as a Task, with the Goal (here called Power) and RD depending on the level of the spell. In addition, for each casting Cycle a number of Spell Energy Points (SEPs) must be expended by the caster. This means that the more skilled one is, the fewer SEPs one tends to pay per spell. Finally, each spell level is associated with a Fumble die, this is the roll you make if you get a Fumble during the casting process, i.e. roll F-3 or worse.

Note that the normal Time Use rules do not apply to spellcasting; instead some slightly different ones are used. Almost all spells have a base Casting Cycle of 1 Round (6 seconds).

L	Spell Level	RD	Power	SEP/Cycle	Fumble Roll
1	Cantrip	7	2	1	1d6
2	Minor	8	4	2	1d8+2
3	Medium	9	8	4	1d10+4
4	Major	10	16	8	1d10+6
5	Grand	11	32	16	1d8+9
6	Wonder	12	64	32	1d6+13

If a Fumble occurs, a roll is made on the Spellcasting Fumble table, which has four columns, one for each Fumble severity (F-3, F-4, F-5 and F-6).

A character's SEPs do not increase as he gains more experience, they are fixed. The effect of experience is instead to allow you to generally cast spells in fewer Casting Cycles, thus cheaper in terms of SEPs. A character's SEPs are derived from Psyche with a minor influence from Will and Intelligence.

There are also other benefits from a higher skill, in particular the chance of Fumbling is reduced. The fear of Fumbles is intended to be the primary "limiter" of magic - a mage will not frivolously cast spells for which he has a high chance of Fumbling. For an apprentice, casting a Minor spell is a daunting task, fraught with risk, whereas for an archmage casting a Minor spell is completely routine.

For almost all spells, each Casting Cycle has a base time of 1 Round. Exceptions are noted in the spell list (or rather, will be noted, as the spell list has not been written yet).

One can apply various Casting Options. These are Slow Cast, Fast Cast, No Gestures Casting and Silent Casting. The later two combined are referred to as Stealth Casting. Slow Cast and Fast Cast are mutually exclusive.

Each Casting Option is applied on a per Cycle basis, meaning that you can change your mind later in the Casting Process. Each Option modifies the RD and multiplies the SEP cost per Cycle. Lores can be learned which improves your ability to use Casting Options, for instance initially Fast Casting is very difficult, raising the RD and multiplying the SEP cost by a huge amount. But by learning a "ladder" of Lores, the character can gradually reduce those penalties until Fast-Casting only raises the RD by 1 and doubles the SEP cost. A similar principle applies to No Gestures Casting and Silent Casting. The last Lore enables the character to "Stealth Cast" at a total penalty of only +1 RD and doubled SEP cost. For Slow-Casting, it always lowers the RD by 1 (it is the only casting option that lowers the RD, the others raise it), but initially it triples the SEP cost. One can learn a Lore to get rid of this tripling, though.

The APT formula for most casting option Lores is heavily influenced by Will with some influence from Psyche.

One may also use a Focus to lower the RD. A Focus is a magic item, an Enchanted object, which lowers the RD of spellcasting attempts. A Focus can apply to a single specific spell or to all magic, but most Foci apply to one Category, one Realm, two or three Realms or two Categories. Foci come in five grades, lowering the RD by 1, 2, 3, 4 or 5 points. A standard Focus would be 2nd or 3rd grade and would apply to one Category. Foci for two Realms, and even more so Foci for a single Realm, are likely to be of higher grade, although 5th grade Foci are extremely rare.

Talents

Characters can be born with Talents for particular types of magic, such as a specific Realm or a specific Category. In fact there are Advantages representing Talents with any one skill, and with narrow and broad skill groups. A Talent lowers the RD of skill rolls by 1, or more for a Major or Extreme Talent, whereas an Incompetence raises the RD by 1, or more for a Major or Extreme Incompetence.

Regular skill Talents are not officially approved of, though, meaning that they should get a cost multiplier, because they are *convenient*.

The intent behind FFRE is that if one wishes to create a character who is a good melee fighter, or rather a character with the *potential* to become a good melee fighter, then one should buy up Dexterity, then further raise the Combat Dexterity sub-attribute. That way, one gets what one wants (higher aptitude for combat skills) but one *also* gets a lot of secondary benefits, ones that one did not actively wish for, such as increased aptitude for other Dexterity-based skills.

A Talent, on the other hand, would be a way to gain a boost only to a specified area of endeavour, with no positive "spill over" into other areas. That is unrealistic, and hence it is recommended that Talents be allowed only at extra cost, like $\times 2$ or $\times 3$ of normal cost.

However Talents for magic should be allowed at normal (not raised) cost, since otherwise all mages would have the same developmental potential for all types of magic, because the APT formula is the same for all Realms. It's much more flavourful if occasionally someone is born with a Talent for Illusion magic, or an Incompetence with Elemental magic.

Fumbles

Spellcasting Fumbles can have a wide variety of unpleasant results. Extensive tables are being developed. One Fumble outcome is that the caster loses the ability to ever cast spells from the particular Realm used, or even the whole Category which the spell's Realm belongs to. This loss may be temporary (that could be the effect of Fumbling a lower level spell) or permanent (if Fumbling a higher level spell). Even without the ability to cast the spells, though, the character may still teach the Realm skill to others, and he may also Invest spells (see below under "Enchantment"). Other consequences are extreme physical

exhaustion (Stamina loss), unconsciousness, Aging (the accumulation of Oldness Points - each OP results in an Aging Roll) or loss of Life Force (see the "Life Force" section below).

Since Fumbles, or more specifically the fear of Fumbling (which is *very* justified!) is the primary "limiter" of magic, the wise mage pays close attention to the RD of his spellcasting rolls. He will freely cast spells when the RD is favourable relative to his skill, but he will cast more difficult spells only grudgingly, and the most difficult spells of all he will refuse to cast, except in dire emergencies.

Life Force

This is a strictly limited resource, and also a personal one. You're born with a certain amount, and it is yours to use. There is no major reason to hold on to your Life Force, other than not being sure how to optimally spend it (characters who waste their Life Force on silly projects are ridiculed by other characters, and it is therefore common to wait until one is somewhat mature, before spending one's Life Force), and the fear of Life Force-draining creatures such as Shades and Wraiths (who are common in some worlds but rare in others, but who tend to be encountered much more often by adventuring mages than by sedentary "Tower Mage" types).

A character's Life Force is derived from four attributes: Constitution, Will, Psyche and Faith. The average person has 3.0 Points of Life Force. A spellcaster built on around 80 GPs will tend to have around 5.0 points of LF. A more powerful caster, built on 100 GPs, will have around 6.5 points of LF, and a 120 or 140 Goodie Pointer may start with as much as 8.5 points of Life Force.

Life Force is kept track of in 0.1 increments. It might be slightly more convenient for some to just multiply all values by 10 to get rid of decimals, but not doing so maintains the general FFRE scale, where 3 is average, and anyway a character's Life Force changes only very rarely so it really isn't necessary.

There are many ways for characters to choose to sacrifice their Life Force to render magic permanent in some way.

One is to simply render a spell permanent, after it has been cast. That tends to cost 0.1 LF per spell, regardless of the spell level, meaning that it is best applied to high-level spells.

Another is to create and enhance a Familiar. This is done by finding an animal and befriending it. Then one or more Familiar Levels are spent/sacrificed, the first simply making the animal into the character's Familiar (if the animal consents to this), and further levels enhancing various aspects of the animal, such as making it more intelligent, enabling it to speak, creating a sensory or telepathic link between the Familiar and the character, or even turning a second (or third or fourth) animal of the same type into an additional Familiar with identical special abilities. The first two levels costs 0.1 LF each, the next two levels costs 0.2 LF each, the next two levels costs 0.3 LF each, and so forth. There are two standard ways to make a Familiar, one is by using spells from the Nature

Realm, the other is through a Lore called Bind Familiar, which exists to enable mages to bind Familiars even without knowing Nature magic.

A third way to get a Familiar is through the use of some kind of personal Power. More on that further down.

Enchantment

A common and popular way to spend Life Force is through Enchanting objects. It is a Task, in many ways similar to spellcasting except that there is no SEP cost. It is not very risky (the RDs are quite mild), as long as one doesn't try for Enchantments of too high a Level relative to one's Enchantment skill, and it does not take a lot of time. The later bit is because where most other fantasy RPG systems use huge time costs as the "limiter" on the creation of permanent magic items, FFRE uses Life Force instead. Removing the need to use time as the "limiter" also moves Enchantment into the realm of PC-feasible activities, whereas in other systems magic items can only reasonably be made by NPCs.

L	Enchantment Level	RD	Goal	Time Increment
1	Trivial	6	2	1 Round
2	Minor	7	4	1 Minute
3	Medium	8	8	6 Minutes
4	Major	9	16	1 Hour
5	Grand	10	32	4 Hours
6	Artifact	11	64	24 Hours (total)

Before an item can be Enchanted, it must receive the "Open" Enchantment, which is 1st level and costs 0.1 Life Force. Once this is done, the active Enchantments are put into the items. But before it can be used, one must "Close" the item, which is a second 1st level Enchantment, also costing 0.1 LF. Once the item is closed, it can never be Opened again.

Since each Enchanted item costs 0.2 LF in addition to any active Enchantments, there is an incentive to put all the desired Enchantments into the same item, rather than spreading them over a multitude of items, with one Enchantment in each. Also one must consider carefully what to put into the item, since one cannot later go back and put in more Enchantments.

The most popular type of Enchantment, by far, is the Focus, which aids in spellcasting by lowering the RD of spellcasting rolls. A Focus can apply to any scope, from a single spell and all the way to all of magic, but the most common Foci apply to one Realm, two or three Realms, one Category or two Categories. A Focus can be of a grade from first to fifth, lowering the RD of spellcasting rolls by the grade. Most Foci are second or third grade, although Foci of more limited scope (especially single Realm Foci) of fourth grade are also somewhat common.

Items can also be created which lower the RD of other skill rolls, including the Enchantment skill. This way, one can create Swords of Perfect Balance, or Boots of

Stealth. The Enchantment costs less Life Force if the item "pertains" to the skill, for instance a pair of Boots of Stealth are cheaper to make than a Ring of Stealth.

It is also possible to Enchant weapons to cause more damage, either against everyone, or against a large, small or tiny group of enemies, or even against a particular individual.

In both these cases, RD lowering and extra damage, the Enchantment is easier (the Level is lowered, or the Life Force cost is reduced, or both) if it applies to a thrown weapon than if it applies to a melee weapon or a missile launcher, and even easier if it applies to a missile.

Missile launchers, thrown weapons and missiles can also have their range improved. Again it's easiest to Enchant a missile, greatly enhancing the range for little cost.

Weapons can also be made to fly to the controlling character's hand upon his command. This normally has a very short range (12 meters, or 6 hexes), but the range can be enhanced at a higher LF cost.

There are many such Enchantments that can be put into items. The "Enchantments" document contains them all, and also condensed rules for how they work.

Investments

Investments may be of special interest. They are a sub-class of Enchantments which enables the item to cast a particular spell a number of times per time unit. By paying more Life Force, the item can get more charges, or the spell can get a longer Duration or a longer Range. Each time an Investment must be used, an Activation roll must be made (other Enchantments work automatically, requiring no roll). This is usually 3d12 vs RD 7, but more Life Force can be paid to make the item more reliable, raising the Activation roll to 4d12, 5d12 or even more. Normally it takes 1 Round to Activate an item, but this can be speeded up to 1 Second or 1/10 Second, or slowed down to 1 Minute or 6 Minutes.

Each Investment consists of a number of Investment Levels. The first IL simply enables the item to cast the spell, e.g. if the spell is of Minor (2nd) spell level then the item can cast it twice per Day, but if it of Major (4th) spell level then the item can cast it twice per Moon. Further Investment Levels then add more charges, increase Range, increase Reliability and so forth. Investments can also be given "disadvantages", costing negative levels but making the item less desirable in some way. Finally, the number of Investment Levels is multiplied by a factor depending on the level of the invested spell, and that is the Life Force cost of the Investment. The level of the Enchantment also depends on the level of the invested spell (but not on the number of Investment levels).

Some of the most popular Investments are ones that enables the item to cast the "Light I" Cantrip six or twenty times per day (this is because if one has such an item, then one can get a "reading light" without having to learn the Light Realm - most mages incorrectly perceive the Light Realm as being quite useless, even though it contains some quite

powerful spells such as the Medium spell "Flash I" and the Major spell "Light Bolt I"), and also on weapons (particularly swords) one that enables the item to cast one of the spells "Fire Weapon I", "Frost Weapon I" or "Spark Weapon I" two or six times per day on itself, making the item cause 1 extra damage per Success, flavoured according to the element of the spell (fire type damage, frost type damage, or electricity type damage).

Special or obscure Enchantments

There are highly specialized Enchantments too, such as the Battle Item Enchantment, which can be used to re-create such legendary items as the Oriflamme or the Ark of the Covenant, items that enhance large armies of soldiers, by raising their Morale, giving them Resist Fear bonuses, and other such benefits.

There are also rules for how *craftsmen* can have an easier time Enchanting objects that they have made themselves, because for certain Enchantments (mostly those affecting weapons and armours), in such a case, the Level of the Enchantment is reduced by one. The Life Force cost remains the same, but the effect is that a craftsman can Enchant items even though his Enchantment skill is not very high.

Another rules encourage the Enchanting of large items, such as a 10-ton standing stone. It is cheaper to Enchant a very large object. No one says all magic items have to be portable, and stationary magic items are very appropriate for the fantasy genre ambience.

All of the Enchantments, and rules pertaining to the subject, are available in the "Enchantments" document, in summary form (and there is a lot more explanatory text now than there used to be).

Powers

These are bought as Advantages during character creation, with the cost depending on the *lowest* of two or three attributes. Powers are divided into two types, Passive and Active Powers. Passive Powers tend to be cheaper. Active Powers have Power Points, which must be spent to actually use the Powers, and are then regained slowly. The number of Power Points for any given Power is determined by the *highest* of the relevant attributes.

Powers are also divided into Categories, like Quasi-Psionics, Bio-Feedback, Psionics, Divine Powers, Nature Powers, Element Powers and Royal Powers.

Quasi-Psionics are low-key passive abilities, not realistic but *very* common in fiction and RPGs, especially Danger Sense and Empathy. They are based on the attributes of Perception and Psyche.

Bio-Feedback Powers are Excitation, Relaxation and Endurance. They are quite realistic, for instance Viking berserkers (Excitation) and Indian faquires (Endurance and Relaxation) exhibit them, but in spite of this they are less commonly represented in fiction and RPGs than Quasi-Psionics are. They are all Active Powers.

Divine Powers are both Active and Passive. A common Passive Power is Sense Holy/unHoly. A common Active one is Turn Undead. Powers of Healing are also found in this Power Category.

Powers all come with a rating, of which the minimum is 2. There is no such thing as buying a Power with a rating of 1, either the rating is zero or is it 2-or-higher. For some Powers, you simply roll a number of d12's equal to the Rating, this is how Danger Sense, Empathy, Sense Holy/unHoly and Turn Undead works. Other Powers include lists of what each Power rating allows the character to do, for instance it requires a certain minimum rating to be able to Fix a Minor Wound. But even in such cases, rolls are often made, with the number of d12's determined by the rating of the Power.

Powers are always bought at character creation, but for some Powers and/or in some worlds, a character may need to "unlock" his Powers by learning a "ladder" of Lore, one Lore enabling him to utilize each rating level, starting with rating 2. These Lore represents the character's ability to understand and control his Power. (It may be fun to also allow a Lore for rating 1, representing very fickle control).

As stated earlier, Powers may be a third way for a character to get a Familiar. Nature Powers is one such option, allowing a Druid character to get a Familiar, even though he has nothing to do with spellcasting. Royal Powers is another, letting a king get a strong, loyal hound, or an enhanced mount. This costs Life Force as normal, but requires neither spells from the Animal Magic Realm nor the "Bind Familiar" Lore.

Powers can also allow a sort of Enchantment, without the character having to learn the Enchant skill. This may be Bless Item for a Divine Power, or Imbue Item for a Royal Power. The Life Force cost is as normal, except that the character does not have to pay for Open and Close. To mitigate this, certain limitations should be in place: A character using Divine Power to Bless an Item may Bless only one item per Moon. One should note that this still will tend to lead to the character Blessing many items with *one* effect each, which is very different from how characters will use Enchantment. The Imbue Item Power from Royal Powers may only be used by an item carried and used by the king himself, for a long period of time prior to the Imbuing.

Combat

Melee

Combat consists of Opposed Rolls. The attacker rolls for his attack skill, and the defender may roll for his weapon skill to parry, or for the Dodge skill or use a Shield. A single weapon skill covers both attack and defence, and it is legal to specialize in Parry, but not to generally attack.

If the attacker gains more successes than the defender, he rolls a number of damage dice equal to the uncountered successes. As an example, let us say that the attacker rolls 5S and the defender rolls 2S. 3S remain uncountered, and the attacker is using a broadsword,

which has d10 as the damage dice. The attacker then rolls 3d10 to determine how much damage he does. Ouch!!

All characters have a To-Be-Hit rating, abbreviated TBH. The base TBH depends on a character's gross Size category (all Humans have the *same* Size category - to get a different base TBH you must be as small as a young child or as large as a Troll), modified by Fleetness (explained under "Mobility") and this can then be boosted by wielding a shield. No skill is required to get a TBH bonus from a shield, only to actively use the shield to parry with.

Armour has an AV, Armour Value, and the AV is multiplied by the number of successes, and then subtracted from the damage total. In our example, we can assume that the defender is wearing heavy leather, which is AV 2. He thus gets to subtract 3S (the attacker's successes) \times 2 AV = 6 hp of damage.

So the attacker may roll 15 for damage, from which we subtract 6, and 9 hp of damage goes through.

But there's more. Many weapons have some ability to pierce armour, PA. For broadswords, this is 1 (PA 1 is good, but not spectacular).

The second uncountered attack success lets the attacker subtract 1 \times PA from the defender's armour. The third uncountered attack success lets the attacker subtract a further 2 \times PA from the defender's AV. The fourth uncountered success lets him subtract a further 3 \times PA from the defender's AV, and so forth. This is pre-calculated, and shown on the character sheet in table form (up to 7S on the character sheet, but Game Tables contains a table that goes higher, for use in those rare cases where it is needed).

In this case, the attacker got 3 uncountered successes, so he gets to subtract 3 from the defender's AV. 3 AV remains, so the defender takes 15 - 3 = 12 hp of damage.

Wounds

A character who loses hitpoint in combat may become Wounded. If he takes damage equal to or exceeding his Hardiness attribute, in a single blow, he has received a Minor Wound. If the damage equals or exceeds twice his Hardiness, he has received a Major Wound. Damage of three times Hardiness causes an Incapacitating Wound, damage of four times Hardiness is likewise Incapacitating but also renders the character Dying Slowly - he will die after a period of time equal to his Constitution \times 6 Minutes. Damage of five times Hardiness renders the character Dying Rapidly, he has too little time left for mundane medical aid to work, as he will die in Constitution \times 1 Round. Damage of six times Hardiness *instantly* kills the character.

Wounds cause a penalty to all physical RD rolls due to the degradation of the body structure - muscles, tendons and bones are damaged, making it more difficult for the character to move properly. This is one general penalty to all physical rolls, rather than

specific penalties depending on what body part the Wound is in, as FFRE does not use hit locations. This RD penalty to all physical rolls is called "impairment".

In addition to impairment, Wounds also cause pain. When a character is fighting, he is assumed to be somewhat "adrenalinic". His bloodstream is thick with adrenaline and endorphins, so he is unaffected by the pain. But once he leaves the adrenalinic state, and that usually happens when the fighting is over, he receives a pain RD penalty to all rolls (not just physical rolls), which is cumulative with the impairment penalty. The pain-caused penalty can be temporarily reduced or negated with a mundane or magical painkiller, or by a Will (Resist Pain) roll.

A Minor Wound causes +1 RD of impairment and +1 RD of pain. A Major Wound causes +3 RD of impairment and +3 RD of pain. An Incapacitating Wound causes +7 RD of impairment and +7 RD of pain. All Wounds must be kept track of, because each must be dealt with separately (an application of the First Aid skill, or one of the Fix Wound spells, deals only with a single Wound), but the default rule is that a character is only penalized by his worst Wound, e.g. a character with two Minor Wounds and one Major Wound receives +3 RD from impairment and +3 RD from pain, not +5 to each.

An optional rule makes Wounds cumulative, however. Here, they are renamed to Minor, Medium and Major Wounds, and cause +1, +2 and +4 impairment and pain. If this optional rule is used, a character with two Minor Wounds and one Major Wound would receive +4 RD from impairment and +4 RD from pain.

Wound also cause blood loss, meaning that the character loses one or more points from the Blood stat per time unit. Minor Wounds cause little bleeding and are easy to staunch with the First Aid skill. The First Aid skill can also be used to alleviate the impairment from Wounds. This does not make the Wound go away, but temporarily removes or lessens the impairment, e.g. for as long as the character wears a splinter. First Aid applied to a Wound also speeds up the healing process.

Hitpoint loss

Characters lose hitpoints from weapons too, whether they become Wounded or not, and this is kept track of. Hitpoint loss represents general battering, and a character who drops below zero hitpoints gets penalties. If he drops low enough, he may even become Bleeding and Dying, but one can never Die Instantly just from hitpoint loss.

That's how standard melee weapons, those that cause "wounding" damage, works. Unarmed attacks and blunt weapon attacks work differently. They are described under Unarmed Combat below. Piercing attacks, which usually mean arrows and spears, also cause damage in a different way, they are described under Piercing Attacks, after Ranged Combat.

Unarmed Combat

Fists, feet and most blunt weapons (clubs and staves, but not maces) instead cause Stun damage. There is no hitpoint loss here, nor any Wounds, instead if the rolled damage exceeds a multiple of the character's Stun Factor (a derived stat), the character becomes Stunned or even knocked out. If the rolled damage does not exceed $1 \times SF$, *nothing* happens. This means that a character can stand and take tiny fist blows all day long, without any ill effect.

Unarmed attacks, and light blunt weapons, can of course be used to "coup de grace" helpless opponents, and if the Martial Arts rules are used, characters may learn Stunts that transforms the damage done from Stun damage to Wound Damage. (Other Stunts allows the character to strike more than once per Round, or disarm the opponent, or cause more damage, or get a bonus to the Reflex roll to determine initiative).

Ranged Combat

All ranged weapons, whether thrown or missile weapons, have a Range Increment. Attack spells also have RIs.

For missile weapons, there are four range categories. Close range is everything within 1 RI, Medium range is everything between 1 RI and 2 RI, and shooting at a target at Medium range causes a +1 RD penalty. Long range is everything between 2 RI and 4 RI, and the penalty is +2 RD. Extreme range is everything between 4 RI and 8 RI, and the penalty is +3 RD. This is also how attack spells work.

For thrown weapons, there are only three range categories. Short range is, again, up to 1 RI, and at no penalty. Medium range is between 1 RI and 2 RI, and gives a +1 RD penalty. But Long range is between 2 RI and 3 RI and causes a +3 RD penalty.

Another way of putting it is to say that there is no Long range for thrown weapon, but that they skip over it (and thus over the +2 RD penalty) and go directly from Medium range (+1 RD) to Extreme range (+3 RD).

This last is the method used on the spreadsheet-generated character sheet (at least newer versions - older output may look different), where all the range categories are pre-calculated.

Piercing Damage

A piercing attack, which usually means an arrow or a spear (thrown or used as a melee weapon) or a knife attack (stab), works slightly differently. You roll for damage as usual, but the target doesn't lose as many hitpoints as the rolled value. Rather the rolled value is used only to figure if the target is Wounded.

Arrows and knives cause only 1 hp of damage, and spears cause 2 hp of damage. This means that a character can go through a hail of arrows, virtually unscathed, as long as none of them hit vital spots (i.e. inflict Wounds upon him).

Initiative

Initiative is rolled only in the first Round, although characters who enter combat later roll at the time when they enter combat. It is a Reflexes (Body) roll (although sufficiently magical combat may warrant a Reflexes (Mind) roll instead) and depending on the outcome quality, the character may be allowed to act freely in the first Round, or he may be limited in his options for one or two Rounds if he rolls badly enough. Those characters who may act do so in order of roll quality, i.e. if one rolls 1S, one rolls 3S and one rolls f-1, they go in order of 3S, 1S and f-1.

The ability to strike first is useful, especially if the opponent rolls so badly for Initiative that he gets an RD penalty on his defence roll or even becomes incapable of defending, but after the first Round initiative is not really important, this is why initiative is not rolled for at the beginning of *every* Round, it would add extremely little to the game, while costing a lot of time. Some weapons are inherently faster (both length, weight and type influences this, e.g. a long, light thrusting weapon is much faster than a heavy, short, swung weapon) or slower than the norm, thus giving a modifier to Initiative rolls.

Durability and Quality Weapons

All weapons have a Durability rating. In theory, all non-weapon objects also have a Durability rating, but this is not very formalized. When a Fumble occurs, in combat, the character who Fumbled may be instructed by the Combat Fumble Table to make a Durability check for his weapon, to see if his clumsy usage of it causes it to become damage, or even break apart (usually such a breakage is repairable).

This opens up for one way in which weapons can be of above-standard quality. Weapons made of better alloys, or by craftsmen of above-average skill, or both, have a higher Durability, whereas weapons made of inferior alloys, or by inferior craftsmen, or both, have a Durability lower than the norm.

Another way for weapons to be of high quality is if it has an RD bonus. This is quite powerful, but a -1 RD bonus is not a game-breaker. Such weapons are obvious candidates for Enchantment, though (all weapons with quality bonuses are, but ones with RD bonuses most of all).

A third way is a damage bonus, for instance normally a broadsword does d10 damage per Success. But if it was made by a brilliant smith, it might do d10+1 damage per success.

Ranged weapons can have an RD bonus, just as melee weapons, but they can also have an improved Range Increment. If both the missile launcher and the missile used have an improved Range Increment, then the improvement stack (multiply them). Increased Durability is not too useful for ranged weapons, but one should assume that ones of very high quality do have at least a minimal Durability bonus relative to normal weapons.

Movement

Fleetness is a derived statistic. It is not an Advantage, because it can not be modified directly with Advantage points. The base value is derived from the ratio between the character's Leg Strength and the character's Size. Various other traits then raise or lower Fleetness, for instance if the character's Arm Strength equals $2 \times \text{Size}$, 1 is subtracted from Fleetness because the huge bulk of arm and torso musculature weighs down the character. If a character has FFDs, 1 is subtracted from Fleetness. Overweight and Underweight also affect Fleetness. Encumbrance from carrying equipment, wearing armour, wielding a shield, or wielding a heavy weapon, also lowers Fleetness.

In a nod to the Celts, fighting while nude gives a +1 Fleetness bonus (nudity means no clothing, or nearly so, and no armour - but a shield does not invalidate the nudity bonus). In earlier versions of FFRE, fighting in bare feet also gave a +1 Fleetness bonus, cumulative with any nudity bonus, but that rule has been dropped.

The average Fleetness value for a male Human is 0, whereas for female Humans (because of the FFDs) the average is -1. Positive Fleetness gives bonuses to a lot of things, including increased movement speed, slower Stamina expenditure, and a bonus to Initiative. Negative Fleetness has the opposite effect. Values close to zero have small effects, values farther away from zero have larger effects.

(It should be mentioned that a change is being planned, of altering the average Fleetness to become 3, so as to make it correspond better to the standard FFRE scale - this will be achieved simply by adding 3 to all old Fleetness values. It has not been implemented yet, though).

Skills are also divided into three categories: Those that are not influenced by Agility (or minimally influenced, such as Agility having 1/7 influence) - these are most of the skills in FFRE, those that are lightly influenced by Agility, and those that are heavily influenced by Agility. Rolls for "raw" Agility falls under this last category

As soon as a character's Fleetness value is a couple of points above or below zero, the character starts to receive a bonus or a penalty to Agility-Heavy skills. As his Fleetness becomes more extreme, the bonus or penalty to Agility-Heavy skills goes up, and he also starts getting a bonus or penalty to Agility-Medium skills.

Think of Fleetness as a sort of Effective Agility. Other RPG systems would tend to simply give a character a temporary penalty to his Agility attribute if he was heavily encumbered, or something like that, but FFRE does it this way instead, so that a character's Agility never changes.

Also important is Pace. This is a basic stat, derived from a character's Agility and from a character's Leg Length, a sub-attribute of Size (and thereby, by definition, equal to the character's Size unless something was done during character creation to change it). The average Pace, derived from Agility 3 and Size (Leg Length) 3, is 4, meaning that the

character can move 4 Hexes per (6 Second) Round, if moving at a Walk speed. (1 hex is 2 meters).

There's a large range of movement speeds available. Originally there were only Slow Walk, Walk, Fast Walk, Jog, Run, Sprint and Mad Dash. But later it was deemed necessary to include two more movement speeds, Jog+ and Run+, because it is often the case that a character is fit enough to move for quite some time at a Run speed, e.g., but if he opts to Sprint then he will fatigue very quickly. The problem with this is that it is fairly common for a character to have Stamina sufficient to move for a prolonged period of time at a Run speed, so to differentiate these *very* fit characters from those who are merely fit, the Run+ speed was invented. Jog+ was invented for similar reasons.

Each movement speed has a multiplier to Pace, e.g. if a character is moving at a Walk speed then he moves 1×Pace hexes per Round, if he moves at Jog speed, he moves 1.7×Pace, if he moves at Run speed he moves 2.5×Pace, if he moves at Mad Dash speed then he moves at 4×Pace. Also associated with each movement speed is a Fatigue Increment, this is how much time it takes you to burn one Fatigue Increment. For Walking, it is 1 Hour, for Jogging it is 6 Minutes, for Running it is 1 Minute and for Dashing Madly it is 1 Second. The value of one Fatigue Increment depends on your Fleetness. A character with ordinary Fleetness (0, or close to 0) has a Fatigue Increment of 10 points of Stamina, whereas a character with a high Fleetness (5 or 6) may have a Fatigue Increment of 6 points of Stamina. This means that if both these characters first Walk for 1 Hour and then Jogs for 18 Minutes, one will have burnt 40 points of Stamina and the other will have burnt 24 points of Stamina - both 4 Fatigue Increments.

(Note to self, the above Fleetness and FI values are pure guesses, verify eventually)

This serves to let fit characters move for long periods of time, thereby approaching real world possibilities such as the running of *multiple* marathons (i.e. two or three times 42.2 km *in one day*) - amazing as it sounds there are actually a few people alive who can do this.

Walking Fast is not at all efficient compared to Jogging. You get only 1.4×Pace instead of 1.7×Pace, yet you burn Fatigue twice as fast (FI of 3 Minutes instead of 6 Minutes). So why would anybody Walk Fast? One reason is that walking is a stable, bounce-free mode of locomotion. This means that many activities are possible while you Walk (even if you Walk Fast), but as soon as you switch to Jogging, they get penalized or become completely impossible - this includes moving on slippery surfaces, or walking backwards on an imperfect surface (on a perfect surface, it should be perfectly safe to Jog+ backwards). Also, moving at a Jog speed (or faster) is noticeable. On a sidewalk, you'll attract more attention if you Jog than if you Walk Fast.

For overland movement, any type of Terrain is given both a Terrain Difficulty and a Terrain Type. Other RPG systems may dictate that there are three types of Forest: Open Forest, Normal Forest and Dense Forest.

FFRE instead says that the Terrain Type is Forest, but leaves the GM free to choose *any* Terrain Difficulty from DT 1 to DT 8. Naturally, Forest can't be DT 1 or DT 2, and even the wildest jungle can't be DT 8, but it is preferable to leave such things up to the GM, rather than to dictate it through rules.

DT1 is Very Good terrain, like a Roman Road (this is pretty much the *only* terrain type that qualifies as DT1 in a medieval setting). It is not functionally different from DT2, Good Terrain, except for very bad weather conditions, in which DT2 (which could be a road) becomes temporarily more difficult whereas DT1 *stays* DT1.

DT3 is normal - but still easy - terrain. A path, or a bad road, or a plain, or maybe a very open forest on flat land.

DT4 and 5 are Slightly Impeding and Impeding terrain.

Up until this stage, the only effect of DT has been a movement speed multiplier and a Fatigue Increment multiplier (e.g. on DT1 and DT2, you burn 1 FI only every 75 Minutes if you Walk, rather than the usual every 60 Minutes).

But for DT6, DT7 and DT8, your movement speed depends on your skill with the terrain type in question, e.g. Terrain: Woods, Terrain: Desert or Terrain: Mountains. This is to differentiate characters, into those who are somewhat "at home" in the general terrain type, and those who are not. The higher your skill is, the less the terrain impedes you. There is also a special rule for characters who lack skill in the particular terrain type, they are regarded as having a terrain skill level of 0.5.

So any map drawn for use in an FFRE campaign should include DT designators for all major terrain features, e.g. any forest should be given a DT rating, or several different ones for different parts of the forest. Very tall and difficult mountains can usually safely be classified as DT8. Where other systems would just classify them as completely "impassable", the FFRE rules lets characters progress through DT8 terrain at a *very* slow speed (the higher the DT is, the more likely the movement speed is to represent an average speed, seen over time, but which actually breaks down into periods of standstill and periods of relatively rapid progress), sufficiently slow that it is very worthwhile to seek out passes and suchlike.

There's a rule for how a character may assist others, effectively "lending" them his skill if they lack it. This can be used for Terrain skills (that was the intent), but also for the Climbing skill. This won't let a Ranger-type character led a party of city slickers through the wilderness *as fast* as he would be able to move if he was alone, but on the other hand his presence will let them move faster than they could if they were without him.

Stamina Recovery

The rules for recovering Stamina are quite complex, but this is necessary because there is no other way (at least the designer can not see one) for making a realistic system when Stamina must always be lost in a deterministic (totally non-random) fashion.

A character has a daily allotment of Stamina Recoveries. Each such utilized Recovery lets him regain a Stamina Unit (not the same as a Fatigue Increment), which is 1/9 of his max Stamina (this number was chosen because it is a neat fraction of 36, the amount of Stamina had by an average Human - playtesting may reveal that it is easier to us a Stamina Unit of max/10).

The Allotment is 2 rests of 1 Hour, 2 rests of 6 Minutes, 2 rests of 1 Minute, a total of 8 Hours of sleep (sleep does not need to be consecutive, but if it is, maximum benefit is derived) and 3 Meals each lasting 30 Minutes. For tactical reasons, characters should utilize their longer rest periods first, if possible, so that they have the shorter periods in reserve.

This may sound metagamey, but it's the best that can be produced.

Note that in most situations, there is no need to keep track of Stamina. Also, the higher Stamina a character has, the fewer there will be of such situations. Of particular interest is the character with the lowest Stamina in the party - he sets the limits for how the party can travel.

Physical Discomfort (PD) and Metabolic Disruption (MD)

People may confuse these two concepts, initially. But try not to, they are quite different in terms of importance.

Physical Discomfort is a way of abstracting distracting unpleasantries. Instead of having one rule for sleep deprivation, another for thirst, a third for hunger, a fourth for fatigue and a fifth for insect bites, all of these just give PD. PD adds up, and as it exceeds certain threshold values, the character begins to receive RD penalties to all his rolls. This is in part due to a desire for realism, and in part to encourage players to have their characters *behave* in a realistic fashion - make the characters *try* to not skip meals, *try* to get enough sleep, and so forth.

Metabolic Disruption is the scary bit. Many of the things which give PD also give MD. But accumulating MD is *much* worse. It causes temporary (but hard-to-recover-from) loss of attribute ratings, reduces the speed at which a character regains Stamina, reduces the maximum Stamina capacity, reduces the character's Resistance towards Diseases (Con (Res. Disease)), and several other important things.

Hitting MD is a recipe for disaster, so characters should try very hard to avoid it. Fortunately, MD does not accumulate easily, it requires either very adverse circumstances, or else determined effort on behalf of the characters.

Perception

FFRE has Perception ratings for all normal Human senses, and ideally any character who has a non-standard Sense should also have a Perception rating for that. But for the sake of simplicity, senses such as Hearing and Vision normally only have one rating, e.g. a character capable of both normal-spectrum vision and infrared vision has only one Perception (Vision) rating, rather than one Perception rating for normal spectrum (also called "visible light" - the wavelengths from red to purple) vision and one for infrared vision.

For Vision, Hearing and Touch, each character has a capability code line, which indicates which spectra he can perceive. For Vision, the line potentially looks like this: $\gamma x u V i r$, but since Humans can only see "Visible" Light, then for them the line looks like this:
---V---

y stands for the ability to see gamma-rays

x stands for the ability to see x-rays

u stands for the ability to see ultraviolet light

V stands, naturally, for the ability to see visible light

i stands for the ability to see infrared light

r stands for the ability to see radio waves

For hearing, the block for Humans looks like this: -H--.

i stands for the ability to hear infrasound (elephants appear to have this ability)

H stands for the ability to hear "hearable" sounds (frequencies of 20 Hz to 20 kHz).

u stands for the ability to hear ultrasound

U stands for the ability to hear *high* ultrasound (*very* high frequencies. FFRE arbitrarily defines this as frequencies above 100 kHz, but it may turn out that there's good reason to set the limit at another point, like 80 kHz or 120 kHz - if so, the GM should just do that)

For the sense of Touch, the block for Humans looks like this: PrTePa.

Pr stands for the ability to feel pressure

Te stands for the ability to feel temperature differences

Pa stands for the ability to feel pain

It may seem absurdly elaborate to have this amount of detail, since *all* Humans will look the same (---V---, -H-- and PrTePa), but the reason is that not *all* the characters will *be* Humans. Even if none of the players opts for playing dolphins, Alpha Centaurians or intelligent dogs, the GM may very well need to have such exotic creatures as NPCs, and therefore the system should accommodate them.

A fourth block is not officially supported, but still exists as an option. It deals with *detailed* colour perception. The designer's preference is to abstract out colour perception to a single rating, e.g. just say that someone suffering from red/green colour blindness (the most

common form, the one which laypeople believe can't occur in women) has a -1 RD penalty to Colour Vision rolls, instead of the more complex (but also more correct) definition which is that he is unable to distinguish between red and green - they look the same to him. But for those who want the extra detail, there's a colour spectrum block too, although room will have to be made on the character sheet: ROYGIBV, standing for Red, Orange, Yellow, Green, Indigo, Blue and Violet.

Apart from the complication of this, which the designer deems unnecessary, there is also the problem of how to actually *handle* a character whose colour perception block says, e.g., -OY-IBV. Making him unable to see red, and unable to see green, would be wrong (this is how it works for the three officially supported blocks - e.g. -H-- means that you *are* unable to perceive infrasonics and all ultrasonics). Rather he can perceive them both, but cannot *discern* between them. Perhaps the best solution, for those few who want this level of detail, is to use numbers instead of -'s, e.g. 1OY1IBV to signify that for this character, the colours designated 1 looks the same. This is useful if a character has *two* colour pairs that he can't discern, e.g. (to invent a condition that probably does not exist in the real world) 1221IBV - a character who can perceive red and green, but can't tell *them* apart, and who can also perceive orange and yellow but can't tell *them* apart, but who is perfectly capable of discerning between the two pairs of red/green and orange/yellow.

Again, this is an option, and, in the designer's opinion, using it does not enhance the game at all.

Perception Rolls

Some characters have a Sensory Acuity modifier, rated as -1, -2, -3, -4, +1, +2, +3 and so forth (a modifier less than -4 means "no sense", as in Blind or Deaf). This translates into an RD modifier, starting at +1 RD for a -1 acuity modifier, and -1 RD for a +1 acuity modifier, and then for each level of acuity modifier, the RD bonus or penalty doubles. (Humans can't have acuity modifiers higher than +2 - higher values are reserved for animals, and for magically, genetically and technologically modified Humans).

This RD modifier is then written next to the Perception score for each sense, e.g. a character might have Perception 4, Sensory Focus +1 Hearing, Sensory Focus -1 Vision, Sensory Acuity +1 Hearing and Sensory Acuity +1 Taste (not Smell). His Perception rolls would then look like this:

Vision	3	
Hearing	5+1	(remember, +1 means that you <i>lower</i> the RD by 1)
Taste	4+1	
Smell	4	
Touch	4	

The RD modifier, if any, is then applied to all RDs for Perception rolls. This is much more powerful than it seems. Imagine a Dog, with Hearing N+8. It doesn't matter what its Perception is, it is virtually guaranteed to hear *all sounds* because of its sharp sense of

hearing. That is as it *should* be. Likewise a perceptive person who is nearly blind. He'll pick up only the starkest (very high RD) visual stimuli. The roll mechanic's use of RDs that are orthogonal to the rolled-for trait means that extremely stark and extremely weak stimuli are shifted strongly towards auto-success and auto-failure.

RDs are based on stimuli magnitude (e.g. the loudness of a sound) and then modified for distance. Perception rolls belong to a special class of rolls, called "safe rolls", because there are *no consequences* for Fumbling. You roll only to find out if a person notices something, not discerning between f-1 and F-6, nor between Success degrees - 1S is as good as 15S!

Because altering RDs can shift sounds from over to under the "perceivability" barrier, or from under to over it, attentiveness does not affect RDs, rather it is simulated by applying a multiplier or divisor to a character's Perception rating. For instance, if a character wants to pay special attention on one Sense, then for the purpose of that Sense, his rating is temporarily increased by a percentage, while the rating for his other Senses are temporarily reduced by another percentage.

No rules exist, as of this moment, for subliminal perception, that is for stimuli which are so faint as to be impossible to notice consciously for the character, but which nevertheless affect the character on the unconscious level.

Attitude Rolls

When characters first meet, an Attitude Roll is made if an NPC is involved (if two NPCs meet, both make an Attitude Roll). The rules do not require PCs to make Attitude rolls, but PCs should behave appropriately when meeting beautiful, charming or sexy NPCs for the first time.

The base number of dice is the Charisma of the character. To this, any applicable First-Impression-Modifier value is added (e.g. if the first encounter is a phone conversation, a pheromone-based FIM does *not* apply). Other modifiers may apply depending on the situation.

There are three types of situations in which Attitudes are formed. Those that are highly sexually charged, those that are somewhat sexually charged, and those that are not sexually charged at all. An encounter can have one degree of charge from one point of view, and a different degree of charge from another point of view.

A situation is not sexually charged if the character forming the Attitude is not sexually oriented towards the character he or she forms the Attitude towards. As an example two women meet. One woman is heterosexual, so for her the situation is not sexually charged. It makes no difference to her if the other woman has a sexy (or decidedly non-sexy) body, and the Appearance of the other woman makes little difference (unless she is extremely beautiful or extremely ugly, the difference rounds to a +0 modifier).

However the other woman may be bisexual or homosexual, instead of heterosexual. If so, for her the situation is either somewhat sexually charged or highly sexually charged. Which one it is depends on the circumstances. For instance if it is a business meeting, the tendency would be towards somewhat sexually charged, whereas if it was an encounter at a bar, it would tend towards highly sexually charged. Characters themselves can also attempt to "shift" the charge by their behaviour, for instance some characters may try to transform a somewhat sexually charged situation into a highly sexually charged situation. Stereotypically, men do this more often than women. Characters may also try to "lower the charge". Stereotypically, it is women who are most likely to do this.

It is impossible to transform a situation from sexually charged to *not* sexually charged. Similarly, no matter how hard the bisexual or homosexual woman from the example tries, she can't transform the encounter situation into a sexually charged one, from the other woman's point of view, even one that is only somewhat charged, because the other woman simply is no more sexually attracted towards her than she is towards an office chair.

Characters may also resist attempts by other characters to alter the sexual charge of the situation. Generally this is handled without dice, by the GM or the player taking into account the personality, background and goals of the NPC or PC. Most often, such changes are resisted (pretty much equally well by both sexes, contrary to stereotypes), but once in a while such a transformation attempt is accepted by the other character ("I thought this was going to be a business meeting, but... Sure, I'd like a glass of wine").

A bonus from the Sex Appeal advantage (or a penalty from the negative Sex Appeal disadvantage) applies only to highly sexually charged situations.

A character with Appearance that is not 3 gets a bonus or penalty. This bonus tends to be very small for situations that are not sexually charged, meaning that except for characters who are extremely ugly, or extremely attractive, the modifier rounds to zero. The bonus is higher in somewhat sexually charged situations, so it does not round to zero for characters who are significantly below or above average. In highly sexually charged situations, the bonus applies strongly.

Appearance	high sexual charge	low sexual charge	no sexual charge	APP
-1	-4	-2	-1	-1
0	-3	+1	-1	0
1	-2	-1	+0	1
2	-1	+0	+0	2
3	+0	+0	+0	3
4	+1	+0	+0	4
5	+2	+1	+0	5
6	+3	+1	+1	6
7	+4	+2	+1	7
8	+5	+2	+1	8
9	+6	+3	+2	9

10	+7	+3	+2	10
11	+8	+4	+2	11

The RD of the Attitude roll depends on the situation, on the conduct of the other character, and on any prejudices held by the character. Keep in mind that RDs are vitally important in FFRE - even a very charming and handsome character can't consistently get good Attitudes if he behaves in very inappropriate ways, so as to raise the RD. Likewise, an ugly or low-charisma person isn't automagically screwed, if he approaches people in a thoughtful and polite manner.

The more successful the roll is, the more the character likes the other character. If the roll Fumbles, the character may become verbally hostile, or even physically hostile for severe Fumbles!

Dazzling

This is a special ability which very attractive characters have. For all characters, a Dazzle Sum is calculated, and if this exceeds certain thresholds, the character can Dazzle, Mega-Dazzle, Giga-Dazzle or even Ultra-Dazzle. There has probably never been a person, in the entire universe throughout all of time, who was sufficiently attractive to be able to Ultra-Dazzle, but that does not justify not having rules for it!

The Dazzle sum is found by adding up Charisma, the highest Appearance bonus (the one for "high sexual charge", equal to AP-3) and any applicable FIM (this means that characters with FIMs may be able to Dazzle in some situations, and unable to do so in other situations) and *twice* the Sex Appeal bonus. As an example, a character with Charisma 5, no applicable FIMs, Appearance 7 and 1 level of Sex Appeal would have a Dazzle sum of $5+0+4+2=11$.

Sometimes a particular character may find a negative FIM adorable, for instance a lisp, in which case it does not apply even though it normally would (e.g. the lisping character is speaking), or the character may even have a fetish for the FIM, rendering it positive. This is exceedingly rare, though, as one should keep in mind that FIMs represent serious deviances from normality. A lisp has to be very severe before it warrants a FIM.

Dazzling only works towards others who are sexually oriented towards the character, e.g. a Dazzle-capable male can Dazzle homosexual males, heterosexual females and bisexuals of both sexes.

It is also possible to execute a Focused Dazzle against one particular person. This represents a medium grade flirt, it is neither overt nor particularly subtle. This raises the character's Dazzle sum by 15% towards that person, but reduces it by 30% towards others (an overt Focused Dazzle should receive a modifier higher than +15%, whereas a subtle Focused Dazzle should receive a modifier lower than +15%, obviously).

If the Dazzle sum is between 8 and 11, the character can Dazzle.

If the Dazzle sum is between 12 and 14, the character can Mega-Dazzle.
If the Dazzle sum is between 15 and 20, the character can Giga-Dazzle.
If the Dazzle sum is 21 or higher, the character can Ultra-Dazzle.

Statistical analysis of the distributions of Charisma, Appearance, FIM and Sex Appeal among female Humans suggests that 1 in 7000 are capable of Dazzling generally (more females can Dazzle if they Focus), 1 in 5 million can Mega-Dazzle, 1 in 27.8 billion (2.78×10^{10}) can Giga-Dazzle and one in 110 billion billions (1.1×10^{20}) can Ultra-Dazzle.

The analysis has not yet been performed for male Humans, but since high Appearance is rarer, and positive Sex Appeal is much rarer, males who can Dazzle are rarer than females who can.

There are no rules for what happens when a character is Dazzled. It should be roleplayed as a general state of confusion, distraction and fascination. Given that Dazzle-capable female Humans are rare, and Dazzle-capable male Humans even rarer, the effect should be quite powerful.

We see attractive people all the time on television, and in movies, but there are wholly different norms for beauty in real-life versus television versus movies. In real life, the average Appearance is something like 2.8 for male Humans and 3.2 for female humans, but in television the average is higher, and in movies it is much higher (easily as much as an average of 7 for female Humans and an average of 5.5 for male Humans - check out some of the biggest male movie stars some day... many will turn out to have surprisingly symmetrical faces). One might assume that this prevalence of media beauty renders us immune, or at least resistant, to "lower" levels of Appearance, but the fact is that even if one has just seen a blockbuster movie with an Appearance 7 (or 8!) leading lady, meeting an Appearance 6 woman on the streets will be a powerful experience - because one's instinctive expectations are based on those women that one has actually *physically* met.

The Dazzling rules, and indeed the more general Attitude Roll rules, are intended for use in real-life encounters where two-way communication is effortless and not bothered by any degree of lag (even the minimal lag between Earth surface and Luna (Earth's Moon)), and with high-resolution visuals. If any of these factors are altered (or even removed!), the rules will have to be modified. This can usually be done on an ad hoc basis, although if the campaign features a particular type of communication a lot, such as text chat or email, the GM should work out new rules beforehand.

Gender vs Sex

FFRE divides characters into two sexes and four genders (at least for Humans and other Humanoids - this division obviously will not work for all species). One sex is Male, which is divided into the genders of Man and Boy, and the other sex is Female, which is divided into the genders of Woman and Girl.

The purpose of this is to avoid debates about whether young characters are unable to seduce or not. Non-pedophilic characters (who don't have the Asexual advantage) are oriented solely towards Men, Women or both, and can not be seduced by Girls or Boys.

For female Humans (Elves, Dwarves, Alpha Centaurians and so forth, may differ), the definition is one of age and presence of FFDs. A very young woman is classified as a Girl, if she lacks FFDs. When she gains them, and heterosexual men - and homosexual women and bisexuals - will react to her as if she is a Woman, regardless of her actual age. If she reaches a certain age without gaining FFDs (very late teens) she will face social consequences - other people expect her to have FFDs, but she don't, so she is *freaky*. On the other hand, a Girl without FFDs faces no social consequences, because it is not *expected* of her to have FFDs. The onset of puberty, in women, depends a lot on diet quality, both in terms of regularity (getting three meals a day, absence of famines) and quality (mostly protein content, although lack of vitamins and minerals may also play a role). It is also hypothesized that pollution with chemicals that resemble female sex hormones are responsible for some girls entering puberty very early, today. In a modern day campaign, assume puberty starting between the age of 12 and 13 in most girls, and lasting 1 or 2 years. When it's over, she's a Woman. For medieval campaigns, it occurs later. Somewhat later among nobles and free (Celtic/Saxon/Viking) farmers, later again among peasants, and latest of all in urban populations. Historically, females desperate to avoid arranged marriages have starved themselves to prevent the onset of puberty and/or the gaining of FFDs. It worked (provided the female in question had a sufficient combination of desperation and discipline) but may have caused irreversible damage.

For male Humans, the criteria are not as obvious. Height, voice, musculature, all matters. Assume it occurs between the age of 12 and 15, and takes one or two years. Some people may balk at the idea of a 13 year old "Man" capable of seducing a woman, but if he has the height, musculature, voice, and appearance of maturity, then she will be unable to *tell* whether he's 13 or 15 or 17. A very few may even be able to pass as older than that.

Character Advancement

It's important for everyone to understand that character advancement is almost purely an intragame event. Almost all other RPG systems have character advancement depend on metagame factors, often to the point where characters can't advance by doing things that would cause advancement in *our* world, such as going to school!

Skills

In FFRE, if you work at a job, any kind of job, or do anything (design RPG rules systems, or debate on Usenet in your own language or a foreign one) else, you accumulate Experience Points, albeit *very* slowly, towards raising specific skills.

Deciding to dedicate yourself to improvement, for a period of time, means that the training rules kicks in. There's a whole page of these, for training or studying under a teacher, where many factors are totalled up, to produce a final quality of the teaching process (measured in Teaching Efficiency Points - TEPs). This value then translates into a

certain amount of SPs per Hour. How long the character spends in school depends on the game world and on his priorities (he might have to choose, eventually, between paying for food or paying for tuition).

Some factors influencing the final TEP value are the skills of the teacher (both his Teaching skill - or his Training skill instead if it's a physical skill - and his skill in the subject being taught, e.g. Physics or Seduction or Sport: Soccer or Language: Italian), the number of students versus the teacher's Command skill (the ability to supervise a large number of people), the Aptitude span in the class (it's less efficient if the class spans the whole range from retards to geniuses), the resources spent and the discipline of the students (e.g. primary school pupils vs military academy students).

Rules for self-training, and for learning from books, will also be needed, but they have not been created yet. They will probably look somewhat similar to the Teaching rules.

All the above is 100% pure intragame.

But there are some added rules. Technically they are optional, but I'll be using them, and will advise other GMs to also use them. They boil down to "heroic growth". When any character, PC or NPC, engages in a difficult conflict (relative to the character's specific prowess - or his general prowess for a grander, more strategic conflict), he earns skill experience points, towards advancement in the skills he used during the conflict, in proportions determined by how much he used each skill.

This is a good idea for several reasons. First of all, if the characters (please notice how I don't talk about the *players* - because they don't exist within the game world, and thus they are not of relevance) are engaged in frequent conflicts (which most PCs will be) and they often find those conflicts to be challenging, they will feel a desire to take breaks from the conflictual lifestyle and train, either under a teacher or by themselves.

"Heroic growth" will reduce that pressure, so that boring training periods become less frequent.

Also note that the GM can tailor the rate of "heroic growth" for his world. I'd prefer a somewhat low rate, so that PCs and NPCs earn only relatively few experience points for engaging in conflicts. This is because a too rapid "heroic growth" will feel unrealistic.

Based on the above, one would classify the concept of "heroic growth" as an 100% intragame phenomenon.

But "heroic growth" is where the GM can give experience point bonuses and penalties, for players who exhibit particularly good or bad roleplaying. I define good roleplaying as having the character behave in an inefficient fashion due to his personality - it is the opposite of always making the decision of maximal efficiency. Bad roleplaying is when a player has his character do things which may threaten the willing suspension of disbelief of

the other participants, such as utilizing out-of-character knowledge, or having his character behave in a manner contrary to previously established personality, without a good reason. If "heroic growth" is not used, then characters only earn experience points for work and training, and this means that there's nowhere to include bonus or penalty points for exceptionally good or bad roleplaying. Also I favour the roleplaying bonus or penalty to be a lump sum of experience points, rather than a percentage bonus or penalty to the "overcoming conflict" points, because there may be some sessions where the PCs engage in very few conflicts, and thus if they earn a minimal "conflict" bonus, then a 5% or 10% roleplaying bonus of this minimal "conflict" bonus will be microscopical indeed.

Another thing one can do, which I'd want to try out, is to include a "player attended the session" bonus to the heroic growth. This is to reward players who actually show up. One can go further and give an extra bonus when a player has attended 5 or 15 sessions in a row. A *problem* with this approach is that it, unlike the above things, treats PCs differently from NPCs. That is unfortunate, but necessary.

One reason for giving an "attendance" bonus is that some players don't take the campaign too seriously. I'd be inclined to just throw such players out of the campaign, if they can't give good reasons for their non-attendance (I much prefer to GM for people who take their roleplaying seriously and give it a high priority). But the other reason is that there will be some sessions in which the PCs don't really engage in any conflicts, or at best a couple of minor ones. Normally, that would mean that the only character advancement would be the "roleplaying bonus". An "attendance bonus" mitigates this situation somewhat.

Rank

Characters who are members of hierarchical organizations, such as religious orders (The Druids, The Knight's Templars, The Secular Catholic Clergy, The Assassin's Guild) must purchase Rank with Rank Points. During character creation, Rank Points translate from Perk Points on a 1:1 basis. The reason they exist as a distinct type of points is that once the campaign begins, Perk Points are no longer kept track of, but Rank Points (and also Fame Points and Popularity Points - defined further down) are.

Each hierarchical organization has some values. It prefers some kinds of members to others. This may be explicit, out in the open, talked about, or it may be implicit, not talked about but possibly (although not always) still understood on some level - at least by senior members. Usually this has to do with attribute values.

An organization is said to prefer certain attributes, to some degree. For instance, a Thieves' Guild would greatly (III) prefer Intelligence, would prefer (II) Dexterity, Agility, Will and Perception, and would slightly (I) prefer Strength and Charisma. Other attributes are unimportant.

It is very rare for organizations to dislike high values in any attributes. E.g. only a few organizations would actually not want highly intelligent characters to advance - if a smart

character has a hard time advancing, in a real life organization, it is almost always because he *utilizes* his high Intelligence in a fashion that feels threatening to the more senior members, not at all because he is highly intelligent. Such a situation would be simulated by his threatening actions/behaviours causing him to *lose* Rank Points.

Other factors may also be preferred, or even disliked. Some organizations are open to only one sex, while others may allow in both sexes but prefer one of them for advancement purposes. Status can also matter, for instance a high-Status character is likelier to advance to a high rank in the Church than a low-Status character, everything else being equal (and note that everything is *not* always equal).

Now, each character has a Personal Advancement Ease Sum. For the average character, this is just +0.

For each preferred attribute that is a value other than 3, subtract 3 from it, then if the attribute is slightly preferred, just use the result as is. If the attribute is preferred, then double the value, or if the attribute is greatly preferred, multiply it by four.

Other factors have, for each organization, a defined modifier, for instance being female might give a +2 to PAES, being bisexual might give a +1 to PAES, and so forth.

Add up all these PAES values, one for each relevant attribute (the value may be zero or negative), and also those caused by other factors.

Now, in the Price List there is a table that translates the PAES into a Rank Point cost per Rank Unit. For a very low PAES, far below zero, the cost per Rank Unit may be as high as 22 RPs. For a very high PAES, the cost per Rank Unit may be as low as 1 RP. For a PAES value close to zero, the cost per Rank Unit is about 10 RPs.

This is because the "collective consciousness" of the organization "wants" some members to advance and wants others to not advance (these later people can't be kept from advancing, but at least the collective consciousness does not "propel them forward"). Members with high values in preferred attributes are seen as attractive and useful to have in positions of leadership. Also popular members, which is why Charisma should almost always be a preferred attribute. Organizations in which high Charisma doesn't boost your PAES, at least slightly, should be very rare.

All organizations have a Rank table. A modern military has a quite complex Rank table, but it will do as an example. The first Rank Tier is for Privates, that is from Recruits to Private First Classes. Each level of Rank in the first Tier costs 1 Rank Unit.

Then comes the second Rank tier, the NCOs, from Corporals to the most senior Sergeants. Each level of Rank in the second Tier costs 2 Rank Units.

Third tier are the Officers, from 2nd Lieutenants to Colonels. Each level of Rank in the third Tier costs 3 Rank Units.

The fourth tier are the Generals, from Brigadier Generals to Generals (4-starred) and possibly Marshals (5 stars). Each level of Rank in the fourth Tier costs 4 Rank Units.

The Roman Catholic Church has as the first Tier Minor Orders and then Deacon (the first Holy Order), then as second Tier comes Priest up to the rank just below bishop. Third Tier is from Bishop and up to Cardinal. Fourth Tier has only one rank: Pope.

Often hierarchies have more actual Ranks than there are formal ranks. Usually this is done by dividing a formal rank into a "junior [Rank]", a "[Rank]" and a "senior [rank]". This is to smooth out advancement.

Characters earn Rank Points by doing things for the hierarchy, in public. The "in public" part is *important*. If a member of the Assassin's Guild secretly kills the leader of the Thieves' Guild, and does not tell any senior Assassins about his deed, then he earns no Rank Points for it. It's about public deeds. This even allows characters to cheat, claiming credit for things done by others. That is, after all, perfectly realistic.

Characters may earn rank simply by dedicated service, at a low rate, or even at a much lower rate simply for being a member ("accumulating seniority"), but the best way to earn rank points fast is by going out and doing missions. This can be traditional adventuring, or something more diplomatic or scholarly.

Various Rank levels grants social powers, such as the right to baptize or excommunicate, or some kind of income of monies or food. They do not need to be paid for during character creation (with Perk Points), and they are automatically gained when the character reaches that rank.

There are a bunch of Perks in the Price List, such as "Initiated Priest" and the like. These are intended for use in campaigns where the Hierarchy system is not used.

Reputations/Fame

Outside of roleplaying gaming, a primary motivation for adventuring is to gain fame, ideally eternal fame. In fact that was the *main goal* of the Vikings. Hot chicks (preferably Irish), rich lands to farm, and lots of silver, all that was a lot of fun, but the main goal was to gain a name that would live on after one's death, in songs and stories.

Yet in roleplaying gaming campaigns, fame tends to be binary. A character is either famous or he's not. Usually he starts out without fame, and then he earns the status of "Famous". And then what? Where does he go from there? What's there to strive for? He's *done*.

Therefore FFRE tracks Reputations on a scale. A character may have *many* Reputations. Each has an Extent, defining the area it covers, and a Magnitude, defining how strong it is,

and a "flavour", indicating what the character is famous for (a character may be famous for several things, thus having several Reputations).

This is where the now-famous character can go, this is what he can strive for: Fame covering a greater area, and Fame of a greater magnitude. Slain a Troll? Okay, then the next step would be to slay five Trolls. Then twenty. Then a Dragon.

Fame Points (FPs - not to be confused with Rank Points/RPs) are earned for public deeds - and can of course also be "stolen", if a character manages to steal the credit for a deed performed by another. A character may also have several identities, in such a case Reputations are obviously kept track of separately.

The Price List contains a table showing multipliers for Extent and Magnitude. Great Fame costs many FPs, and Fame covering a large area also costs many FPs. If you want *both*, it'll be *really* expensive!

Note that all Reputations *must* have a "flavour". A character is never just Famous. He's *always* Famous for *something* (but that something *can* be "is a celebrity", that would be very appropriate in a modern setting, where most famous people are famous solely because they are famous, to the extent that their original remarkable deed is completely forgotten by 99.99% of the population. But also note that this particular flavour of Fame has a very short half-life, compared to other more solid types of Fame - such characters, without remarkable abilities, must constantly compete with each other for attention from the gossip media, in order to stay Famous).

Popularity

This works rather a lot like Reputation, but is more expensive to raise. The answer to Niccolo Machiavelli's question is that it is better to be loved than to be feared, but that it is bloody difficult to get people to love you.

Popularities can also be negative, making you generally disliked, or even hated. Good ways of doing this is to rape little children, or point out, on Usenet, that the most popular roleplaying gaming practices are stupid.

Again, it's about public deeds. Characters can also frame each other, that is set up situations so that it looks as if somebody else has done something very bad (or good). If it succeeds, the victim loses (or gains) Popularity.

Strength, Stamina and Overweight/Underweight (and Metabolism)

These should mostly change automatically as a character undergoes a lifestyle change, handled by the GM on an ad hoc basis, although the player is always allowed to complain, if he feels that change is occurring too fast or too slow, or is not occurring when it should, if it is occurring when it should not.

Imagine a sedentary, scholarly wizard. He has gained a few pounds, and does not have much wind. But as he works with heavy books a lot, his Arm Strength is reasonable. He sits a lot, though. Now, he begins adventuring, whether from his own free will or because circumstances force him to it. If the adventuring is at all exerting, he will gradually improve, although slowly - often very slowly, in terms of losing excess fat (going from Overweight to Chubby in the course of 6 Moons or so - faster if there is little food, then from Chubby to Normal in a couple of Moons, and then maybe even from Normal to Thin in another couple of Moons), and improving his Leg Strength and his Stamina.

Try to think in terms of pressure. This is probably not biophysically sound, but it will do for roleplaying gaming purposes: The body develops when it is pressurized into it. When a character pushes himself to the limit several times, within a short time frame, the body "realizes" that it needs to "build up" a bit. Increase the number of muscle fibers, increase the number of capillaries (tiny blood vessels), and so forth.

There are two types of pressure. One is intense pressure. You only have to lift a heavy weight several times on a few occasions, before you build up muscle tissue. The other is less pressure. If you start working harder, even without going to extremes, your body will build up, but more slowly. If the wizard from above took up staff fighting, and trained 4 hours a day initially, then 6 hours a day after a moon or so, and finally 8 hours a day, he'd develop physically much faster than I've outlined in the above scenario.

Most of the time, the GM can just eyeball it.

If more "precision" is desired, there are some useful tricks.

Muscle tissue can be accounted for in kilograms. Arm muscle tissue (also includes chest and shoulder muscles) weigh $(\text{Arm Strength} \times \text{Arm Strength})/2$ kilograms. Based on this, the GM can simply decide that the character gains a certain amount of muscle tissue per week of "buildup activity", and then when the character reaches a muscle mass equivalent to the next higher level of Arm Strength, he has gained it. Leg muscle tissue likewise equals $(\text{Leg Strength} \times \text{Leg Strength})/2$ kilograms (this leaves out abdominal musculature - unfortunate, but unlikely to cause serious harm), and can be trained the same way, on a weight basis. The two Human sexes do not develop muscle tissue with the same ease. A simplified - and probably not very correct (although it will do for game purposes) - rule is to say that women build up Arm muscle half as fast as men, and Leg muscle 75% as fast as men.

Stamina is derived from the Constitution (Fitness) sub-attribute, which is accounted for in 0.5 increments during character creation. For character development purposes, however, it may be useful to increase (and decrease) it in 0.1 increments, so as to reflect gradual development (or degradation). There are probably no differences between the Human sexes in terms of how difficult it is to develop a higher Stamina - it is easy for both sexes. The reason male and female athletes are segregated is due to FFDs (extra encumbrance), and to differences in hip structure (this is abstracted into FFDs in FFRE, which is a

simplification as women lacking FFDs still have a hip structure geared towards child birth, as opposed to high "male-type" mobility), and for some sports also differences in Arm Strength.

Overweight/Underweight can - and this is hopefully obvious - simply be accounted in kilograms of excess fat (this can be negative, of course), especially if Metabolism is taken into account. Remember that 1 kilogram of excess fat equals 12 Energy Units of skipped food. So if one is not a stickler for accuracy, one can simply account for weight loss (or gain) in terms of energy usage vs energy intake.

Two factors must be taken into account, though: If the body does not get enough food, it will switch to a reduced metabolism after a while. The character feels less energetic, tires more easily and so forth. This complicates energy input/burn calculations somewhat, but can be ignored in almost all campaigns.

The other issue is that of female characters. FFDs are, it must be emphasized, mostly located on the hips and posterior, but breasts easily account for a quarter of a kilogram, and more for a large-busted woman. There is also a layer of fat beneath the skin (men have such a layer too, but it's much thinner) which serves to give the woman a feminine look. This means that weight loss for female Humans can be problematic, in terms of where the fat is lost *from*. But again, this causes problems only in extreme cases, and can thus be ignored for game purposes. In most cases, if a woman manages to go from Overweight (2 levels of overweight) to Thin (1 level of underweight) and in the process her breasts are reduced by one full "cup size", then in the eyes of almost everyone, her attractiveness is *improved*.

A woman actually losing her FFDs would be a rare occurrence (outside of prolonged and severe starvation situations - remember that an average medieval woman has FFDs worth 48 Energy Units, and an average modern woman has FFDs worth 60 EUs), although it does seem to the designer as if some top female athletes have lost most of their subcutaneous fat, thereby gaining a masculinized appearance (chiefly female runners). For most women, loss of FFDs should probably never occur *before* they have become Thin (most athletes are Thin - not Skinny). At the *latest*, FFDs should disappear after the character has "achieved" a state of normal (not Severe) Anorexicness.

Losing Sex Appeal is more likely, but still not a given. It bears repeating that Sex Appeal has to do *mostly* with the waist-to-hip ratio, and a woman losing weight is more likely to improve in that regard than she is to "deteriorate".

Death by starvation occurs, at the latest, when the character needs to lose more Excess Fat, due to an imbalance between energy usage and food intake, but is at a state of "Severely Anorexic" and has lost FFDs (if female). If it occurs before, it is because of disease (a starving character is vulnerable, as simulated by the Metabolic Disruption rules, as described earlier) or lack of proteins or micronutrients (vitamins and minerals - this is also Metabolic Disruption).

Metabolism should be temporarily modified every time the character undergoes a temporary lifestyle change, and be permanently modified every time a character undergoes a permanent lifestyle change, or if his Arm Strength, Leg Strength, Con (Fit) or Excess Fat changes significantly. It is possible to keep track of Metabolism in 0.1 increments, but it is not recommended, it is quite unlikely to be worth the trouble.

Gender transitions

This is only really relevant in longer campaigns (on the other hand, FFRE lends itself very well to such campaigns). Just eyeball it. When the time is right, provided the character has eaten sufficient food, it happens. The boy become a man, or the girl becomes a woman. Extreme and prolonged physical stress (such as adventuring) may delay the transition, but can very rarely prevent it or derail the process. Diseases may also delay it.

Other factors

It is important to keep in mind that characters evolve naturally in FFRE. Other systems, such as GURPS, work something like this: The PCs do a mission, maybe they catch a major villain after a couple of sessions. They get some reward Character Points (CPs) for this. Normally these would go towards advancing the skills used during those sessions, but the GM decides that the PCs have befriended the local chief of police, so they get him as a Contact, but paid for out of their bonus CPs.

That means that their skills advance *less* than they otherwise would have.

Not so in FFRE. Points are awarded separately. If two characters both engage in the same conflict, they both gain the same amount of "heroic growth" bonus points, assuming the conflict matched their stature ("heroic growth" should be reduced drastically for characters engaging in conflicts that are *too easy*). If one then also befriended a police chief, then he *also* gets that man as a functional Contact, in addition to the skill advancement - he does not lose skill advancement for this.

The reason is that it is *natural* and *realistic* for him to gain the police chief as a Contact. (It doesn't matter if the NPC is written down on the character sheet as a Contact or not - the GM knows that the police chief is somewhat inclined to help that PC in the future).

If a character sells down his Cash, during character creation, then he gets compensation only for his starting situation, which is temporary. He is not under any sort of "curse of poverty" which makes it more difficult for him to hold on to money than it is for other characters. And so it is with *all* Perks.

Species Packages

This is a collection of attribute cost modifiers, advantage/disadvantage cost modifiers, actual advantages and actual disadvantages which, if taken together with no modifications, get a cost discount, with the discount being greater the more "traits" there is in the species package.

As an example, let us examine the current version of the Dwarf species package, which I use in my *Ærth* campaignsetting (other settings may use different package, although I like to think that I have built a package that manages to simulate the archetypical semi-modern fantasy Dwarf), trait by trait. These costs for each trait are tentative values, as that part of the system is not finished yet.

A significant part of what makes up a species is the way its attribute averages *differ* from those of Humans. To achieve this, in a point-based system, without being heavy-handed about it (particularly taking into account the coarsegrainedness of the FFRE scale), the costs of buying up and selling down attributes are modified.

For Dwarves, Agility costs more. A secondary effect of this is that you get more compensatory points if you "sell down" Agility. Constitution gets a "flat" +1 bonus to the final value, which can also be described as a modified cost table. Hardiness is slightly less expensive than in Humans, and Will is cheaper too.

Dwarf	1	2	3	4	5	6	7	8
Agility	-16	-4	0	5	20	45	80	125
Constitution	-27	-12	-3	0	4	16	36	64
Hardiness	-28	-7	0	8	32	72 ^{mx}		-
Will	-8	-2	0	3	12	27	48	75

Human	1	2	3	4	5	6	7	8
Agility	-12	-3	0	4	16	36	64	100
Constitution	-12	-3	0	4	16	36	64	100
Hardiness	-32	-8	0	9	36 ^{mx}		-	-
Will	-12	-3	0	4	16	36	64	100

The costs of the other 8 attributes, including Size, are the same as for Humans.

As is hopefully evident, the modified cost schemes will induce, in players creating Dwarven PCs (and in GMs creating Dwarven NPCs), a *slight* tendency towards selling down Agility, and towards buying up Constitution, Hardiness and Will, compared to when creating Humans.

It may seem strange to some, but in reality the average Dwarf and the average male Human weighs the same. It's just that the Dwarf is shorter, and thus has more mass per centimeter of height (he has a higher Body Mass Index, or BMI).

Tentative, raw values of these attribute-cost modifying Advantages are:

Modifier	Cost
Agility cost raised	-2 DP (for the used cost scheme)
Constitution Bonus	6 DP (very tentative value)
Hardiness cost lowered	8 DP (very tentative value)

Will cost lowered

6 DP (for the proposed cost scheme)

Total so far is 18 DP.

In addition to these, there are other cost-modifying traits, and also some regular advantages.

Dwarves get a +0.5 bonus to the final value of the Constitution (Fitness) Sub-Attribute. Combined with the +1 bonus to the final value of base Constitution, this means that the average Dwarf has more than 3.3 times as much Stamina as the average Human (4.5³ vs 3³). In fact the average will be slightly higher, because Dwarves also have a slightly higher average Will, and high Will gives a bonus to Stamina. The +0.5 bonus to Fitness might cost 0.5 DP.

Dwarves also get a flat -1 penalty to their final Fleetness value, and a flat -1 penalty to the Size (Leg Length) attribute. Dwarves aren't fleet-footed and tend towards having short legs. The first trait might cost -1 DP, the second one -0.5 DP.

They also get a flat +1 bonus to Intelligence (Mnemonic), which might cost 1 DP, and a +1 to Heat Tolerance and a +1 to Cold Tolerance, each of which might cost 0.5 DPs.

Then they have the Expanded Mnemonic Horizon advantage (Humans may also buy this advantage normally). For normal humans, memories begin to fade after 6 Moons, and are almost gone after 3 Years. But for those with this advantage, memories are retained with good clarity for 3 Years, then they begin to fade, and they are almost gone after 15 Years. This costs 3 DPs.

Dwarves have Infrared Vision. This might cost 5 DPs.

The maximum Appearance is lowered. The average Dwarf is not the slightest bit uglier than the average Human, it's just that they don't ever produce any super models. A very hesitant guess is that the final value of this trait, lowering the maximum Appearance by 3, would be -6 DPs.

Dwarves are also born with a Talent for the whole Category of Elemental magic, i.e. the Realms of Air, Darkness, Earth, Fire, Frost, Light and Water. When they try to cast spells from these Realms, the RD is 1 lower. Combined with the cheaper Will, this means that Dwarven mages are common, and Dwarven elementalists are particularly common. According to the rules that are current as of this moment (late May 2004), such a Talent it would cost 20 DPs, but that cost is really geared for character creation, where a player would only take such a broad Talent if he intended to make use of it, and an appropriate cost for a species might be 8, 10 or 12 DPs.

Dwarf Females do not need Feminine Fat Deposits. Since it is not normal for a Dwarf female to have FFDs, one who has them would be regarded as *freaky*.

Dwarves are Incompetent with the Jumping skill. The current cost for creating a character who is Incompetent with Jumping would be 0 DPs, but again the cost for a species should differ. Perhaps an appropriate cost would be -0.5 DP or -1 DP. Also Dwarves should have an Incompetence with the Acrobatics skill, perhaps even a Major one (not sure yet).

All in all, the sum of the values of the Advantages in the Dwarven species package might be something like 33 DPs.

A further detail in the species creation system is that the more traits a species package contains (including traits with a cost of zero), the greater the DP cost of the species package is reduced. More traits mean that the cost is reduced by a greater and greater percentage. This serves to shift the cost closer to zero, whether the cost was a high positive value or a high negative value.

The purpose of this is to encourage players to accept playing "genetically normal" specimens. If this rule was not in place, then players could just peruse species packages, and say "Well, I kinda like the Dwarven package, but I want to play a wimpy mage, so I'd like to play one of those very few Dwarves who happens to be born without the gene that raises the average Constitution and the average Hardiness. That should lower the species package cost, right?"

Wrong, in the case of FFRE. Players are (almost completely) free to choose to play *realistic* mutants, e.g. Dwarves lacking the Talent with Elemental Magic, or Dwarves lacking the gene that makes Will cheaper. But as soon as a player deviates from the species package mandated by the setting, he loses the cost discount for "number of traits". Since this cost discount is often quite big, 40%, 50%, 60% or in some cases higher, it's often not worth it, and the player decides that he might as well play a genetically normal Dwarf after all.

The Dwarven species package, described above, contains 17 traits in all, so it would be discounted by something (this is also a tentative value) like 67%, reducing the cost from 33 DPs to 11 DPs.

The Ubermensch Factor (UMF)

The species creation system is not safe to give to players so that they can create their own species. Unlike the FFRE character creation system, there is huge potential for abuse. Only mature players and mature GMs should create their own species.

Even then, the designer has deemed it prudent to include a little bit of "checks and balances" in FFRE. Each trait, in the species package, which alters the cost of an attribute, or gives a "flat" bonus or penalty to the final attribute value, also has a modifier to the Ubermensch Factor (UMF). For instance, if a species has slightly cheaper Appearance than Humans, then that might count as +1 UMF. If the species has slightly cheaper Dexterity, it might count as +3 UMF, or +6 UMF if Dexterity is two steps cheaper.

The UMF total then converts into a cost in DPs which is added to the cost of the species package, but *after* the discount for "number of traits". The UMF rule serves to encourage the creation of species who are generally balanced, in the sense that if one attribute is made cheaper, then another ought to be made more expensive.

Usually UMF does not cost many DPs, but for a species with great genetic potential it can cost a dozen DPs.

The Dwarven species package, above, is fairly balanced in terms of UMF. It may cost a further 1 or 2 DPs, though, for a total cost of 12 or 13 DPs to play a Dwarf, and get all the direct benefit Advantages, and also get to purchase attributes and sub-attributes according to the Dwarven "price list".

Appendixes

Skill Cost calculations

This section of FFRE is expected to have such an intimidating effect on potential players that it was decided to cut it out from the regular text, and place it in an appendix.

11 or the 12 Attributes may affect skill learning speeds. Each has a one-letter acronym.

S Strength

D Dexterity

A Agility

Z Size

O Constitution

W Will

I Intelligence

P Perception

Y Psyche

F Faith

H Charisma

(Hardiness does not affect the learning speed of any skills. Its acronym is **HA**)

Each skill has an Aptitude Block, consisting of 7 letters (never more, never fewer), indicating which attributes affect the skill. No less than 2 attributes, and no more than 5, affect the learning speed of any given skill.

IIIIIIWW means that for this skill, Intelligence determines 5/7 of the learning speed, and Will determines 2/7 of the Learning Speed. DDDAASS means that the weighting is 3/7 Dexterity, 2/7 Agility and 2/7 Strength.

You simply add up all the attribute values, then divide by 7, to get the character's Aptitude (APT), which is the basic value used to determine skill learning speed (and thus the cost in Skill Points).

A character, Jack, may have an Intelligence of 5, a Will of 2 and a Perception of 3. He tries to learn a skill with an APT Block of **IIIIWWS**, 4/7 Intelligence, 2/7 Will and 1/7 Perception. We then add 4 times Intelligence, 2 times Will and 1 time Perception, or $5+5+5+5+2+2+3 = 27$. We divide this by 7 to get 3.86. That is his Aptitude for learning this skill. The average Aptitude is 3, so for this character, this skill (**IIIIWWP** is typical of Science skills) is slightly easy to learn. He learns it slightly faster than the average person would.

But deriving the APT is not quite as simple as that. You must also factor in the Sub-Attributes. In many cases, the Sub-Attribute is simply equal to the parent Attribute, in which case it can be ignored (you just use the parent).

All skills have a Sub-Attribute influence line, which explain the subs that influence that particular skill. Some Sub-Attributes never influence skills (for instance those under Will or Constitution). For the rest, the codes are as follows:

- US** - Upper Body Strength
- LS** - Lower Body Strength
- MD** - Manual Dexterity
- CD** - Combat Dexterity
- FD** - Facial Dexterity
- OD** - Vocal Dexterity
- CV** - Acute Colour Vision (under Perception) + Sensory Focus: Colour Vision
- SH** - Acute Hearing + Sensory Focus: Hearing
- ST** - Acute Sense of Taste/Smell + Sensory Focus: Taste/Smell
(Separate codes for Taste and Smell will be added later)
- SV** - Acute Vision + Sensory Focus: Vision
- An** - Animal Intelligence
- IP** - Interpersonal Intelligence
- Li** - Linguistic Intelligence
- Lo** - Logical Intelligence
- Mn** - Mnemonic Intelligence
- Mu** - Musical Intelligence
- My** - Mystical Intelligence
- Sp** - Spatial Intelligence

Sensory Focus is the Advantage that one can purchase to get a specific bonus to Perception for a single Sense. For the purpose of skill Aptitudes, it is cumulative with the bonus for an Acute (i.e. sharper) sense.

There is also a weight code, a letter from **A** to **D**.
A means that the Sub-Attribute has 25% weight
B means that the Sub-Attribute has 50% weight
C means that the Sub-Attribute has 100% weight

D means that the Sub-Attribute has 200% weight

Continuing our example with Jack, the skill he wishes to learn is Geology (which, conveniently, is **IIIIWWP**). The Sub-Attribute Influence Line for Geology currently says: **CV:C Mn:A**. (The whole skill list is supposed to undergo an eventual revision, changing many of the values, so a year or two from now, the line may say something different from **CV:C Mn:A**).

CV:C means that Colour Vision has full (100%) influence. Jack happens to have a +1 Sensory Focus with Colour Vision, so whenever he is making a Perception (Colour Vision) roll, his Perception is regarded as being 4 instead of 3.

Here, we need to find the difference between Jack's base Perception and his Perception (Colour Vision). That difference is +1. We then multiply this by the weight (100%) to get +1. We then add +1 to his Perception to get 4. Finally, we replace the Perception value in the APT calculation with the appropriate one, i.e. $5+5+5+5+2+2+3$ is replaced with $5+5+5+5+2+2+4$. We now get 28, and dividing by 7 we reach an APT of 4, slightly improved because Jack is good at noticing subtle colour differences.

Jack also has a +2 bonus to Mnemonic Intelligence, so that whenever he makes Intelligence rolls to remember something, he rolls as if he had Intelligence 7 instead of Intelligence 5. The difference between the parent and the sub is +2, and we multiply the difference with the weight (25%) to arrive at a result of +0.5. We then add this result to the Intelligence rating used in the APT calculation, so that it is changed from $5+5+5+5+2+2+4$ to $5.5+5.5+5.5+5.5+2+2+4$, which gives 30. We divide by 7 to arrive at 4.28, Jack's *actual* APT.

So, now we have the Aptitude. How do we use it?

Well, it is used in three ways. The first is to calculate the Learning Speed, **LS**. That is quite simple. You square the APT, then you divide by 9. Conveniently, this gives the average person (APT 3) an LS of 1. Jack's APT squared is 18.37, and dividing by 9 we get 2.04. Jack learns slightly more than twice as fast as the average person.

The second number we derive from the APT is the Plateau Value, the **PV**. For most skills this is simply APT rounded down. But some skills are Complex or Very Complex, subtracting 1 or even 2 from the PV. Other skills again are Simple or Very Simple, adding 1 or even 2 to the PV. Most skills are neither, however, so the PV is simply APT rounded down. That is the case with Geology, Jack's APT is 4.

The third number derived from APT is the Plateau Value multiplier, the **PVm**.

The pre-Plateau Value multiplier is always 1.5 (at least for almost all Humans. Some creatures, as well as Humans with particular and severe learning disabilities, may use a different pre-PVm, but for 99.99% of all humans the pre-PVm is 1.5).

The post-Plateau Value multiplier, the pPvM, is 2.0 for most Humans, but some use a slightly smaller or larger value (1.8, 1.9 or 2.25 are most common). Jack's, however, is 2.0.

The Plateau Value multiplier, the PvM, is calculated by taking the difference between the pPvM and the pre-PvM, and multiplying it by the decimal portion of the APT, e.g. the APT minus the APT rounded down. You then subtract the result from the pPvM to get the PvM.

Jack's pPvM is 2.0 and his pre-PvM is 1.5, so the difference is 0.5. The decimal portion of his APT of 4.28 is 0.28. Multiplying 0.5 and 0.28, we get 0.14. We subtract this from the pPvM (2.0) and get 1.86. That's Jack's PvM, Plateau Value multiplier, for this particular skill (Geology).

Okay, these four acronyms are somewhat difficult to tell apart, so here's a re-cap:

PV Plateau Value
pre-PvM pre-Plateau Value multiplier
PvM Plateau Value multiplier
pPvM post-Plateau Value multiplier

Skills also have a Difficulty, indicating how generally difficult they are to learn. Normal skills are Difficulty 6, Hard skills are Difficulty 10, Very Hard skills are Diff 15. Higher Difficulties are possible but rare. Easy skills are Diff 4, Very Easy skills are Diff 2. Difficulties are linear, meaning that a Difficulty 4 skill takes 2/3 the times to learn that a Difficulty 6 skill, if all other factors are the same.

Geology is Difficulty 10. That is typical of science skills.

We now know everything we need about Jack in order to calculate how many Skill Points it costs him to buy any given level of the Geology skill.

His APT is 4.28, but *we* don't need his APT any more, we're done with it. Jack's player may want to reference the APT to get a general sense of how easy it was (how easy it *felt*) for Jack when he learned Geology (since an average person has, by definition, an APT of 3.0 for all skills).

We can also "discard" the Complexity of the skill, since that was only needed to calculate the PV.

We do need *these* stats, however:

His LS is 2.04
His PV is 4
His pre-PvM is 1.5
His PvM is 1.86
His pPvM is 2.0

The Difficulty of the skill is 10

The cost of the first level of the skill equals the Difficulty, multiplied by 10, then divided by the LS, then rounded down. $10 \times 10 = 100$. $100 / 2.04$ is 49.13, which we round down to 49 SP.

That *fits*!

Jack is *supposed* to learn Geology slightly more than *twice* as fast as the average person (2.04 times as fast, to be precise). For the average person, the first skill level (Geology 1) would cost 100 SP, because $10 \times 10 / (LS) = 100$ SP, so we see that things are working as they should.

Okay, on to the second level. Until we reach the Plateau Value (PV), each new level costs 150% of what the previous level costs, rounded down. So we say $49 \text{ SP} \times 1.5 = 73 \text{ SP}$. The third level costs $73 \text{ SP} \times 1.5$ rounded down, which is 109 SP.

Next level we reach the PV, so instead of multiplying by the pre-Plateau Value multiplier, which is 1.5, we multiply by the Plateau Value multiplier, which is 1.86. So the fourth level costs $109 \text{ SP} \times 1.86 = 202 \text{ SP}$.

Beyond the PV, each new skill level costs the price of the previous level multiplied by the post Plateau Value multiplier, then rounded down. So the fifth level costs 404 SP, the sixth level costs 808 SP and the seventh level costs 1616 SP.

This is why it is a significant advantage to have a pPvM just 5% smaller than that of the average person - it allows you to improve your skills to high levels much more easily. It should also be easily understandable why having a pPvM of 2.25 is quite a handicap (even though such a character may be playable, if he has high attribute values).

The total cost for a Geology skill of 3 for Jack would then be $49 + 73 + 109 = 231 \text{ SP}$.

The total cost for a Geology skill of 6 would be $231 + 202 + 404 + 808 = 1'645 \text{ SP}$.

The total cost for a Geology skill of 8 would be $1645 \text{ SP} + 1'616 + 3'232 = 6'493 \text{ SP}$.

This really needs to be compared with a person who has average attributes, one who has 3 in Intelligence, Will and Perception, and who has a +0 to Perception (Colour Vision) and a +0 to Intelligence (Mnemonic).

Since his Aptitude is simply 3.0, the calculations get a lot easier. His LS is 1 ($3^2/9=1$), his PV is 3, and his PvM is 2.0, same as his pPvM.

So for him, an average person, the first level costs 100 SP, the second costs 150 SP, the third costs twice as much as the second, 300, because we're now at the PV, the fourth costs

600, the fifth costs 1'200, the sixth costs 2'400, the seventh costs 4'800 and the eighth costs 9'600, for a total of 19'150 SP.

(*Note:* The character creation spreadsheet seems to have a bug, in that it would multiply by 1.5 for the third skill level, for the APT 3.0 character, and multiply by 2.0 only for the fourth and subsequent skill levels. The correct interpretation of the rule is the one in this document, however, the PVm *should* be 2.0, and not 1.5, for APT 3.00)

There is a special rule for what happens if a character's Aptitude for a particular skill is lower than 1. That rule is necessary, because otherwise negative APTs would result in high Learning Speeds, since squaring a negative number gives a positive result. I will not go into it here, since it is exceedingly unlikely for a Human to have an APT of less than 1 even in just one skill. The special rule was originally created to make it *extra* difficult for dogs to learn such skills as Physics! (I kid you not, that *was* the original creative impulse for this rule).

Note that this special rule is, apparently implemented in neither the character creation spreadsheet nor the Skill Cost Master Table spreadsheet. I thought it was, but upon testing it, it seems to not be the case.

Lores

The cost of a Lore equals the Difficulty multiplied by 10, then divided by the LS, and finally rounded down. The LS equals the APT squared then divided by 9. But unlike Skills, Lores have APT blocks consisting of only three attributes, e.g. I IW or I ID, instead of DDDAASS or I I I I I W W. It follows from this that you divide the sum of the attributes by 3, rather than by 7, to get the Aptitude.