THE BEST OF
WHITE DWARF
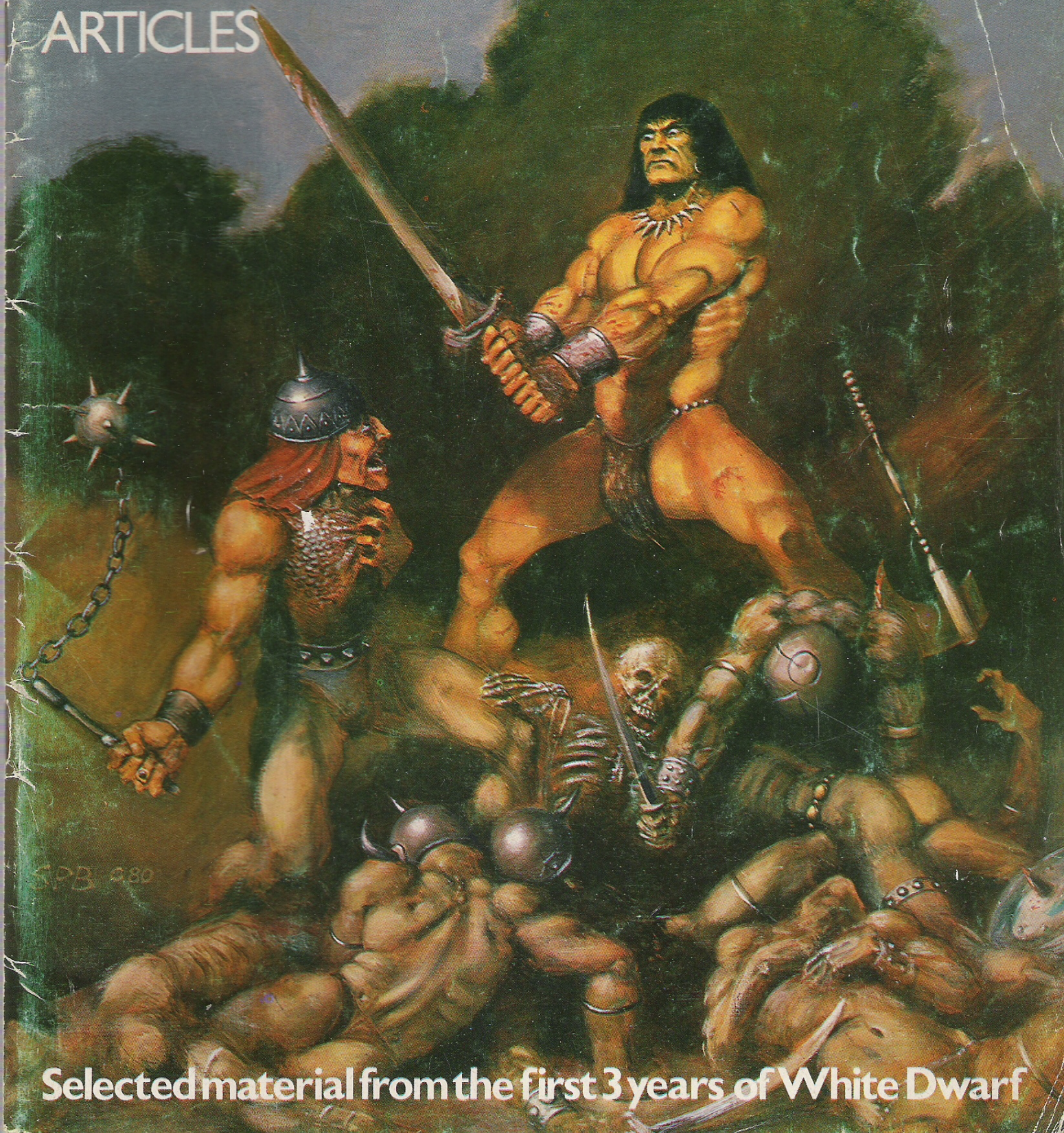## ARTICLES

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Selected material from the first 3 years of White Dwarf

THE BEST OF WHITE DWARF

It was with some reservations that the first White Dwarf was published in mid-1977. However, despite initial doubts, the magazine has prospered; in fact, some articles have proved so popular that the issues containing them are still requested.

Unfortunately, many of these back-issues are out of print, and for financial reasons it is not possible to reprint them.

It is hoped that this compendium will prove a partial answer to the problem of tracking down these early articles. Some of them have been updated to cope with, for example, the rise of Advanced Dungeons & Dragons; the revised versions are included here.

These, then, are the best of White Dwarf's articles over the past three years. We hope you like them.

Ian Livingstone

ARTICLES

TREASURE CHEST

The monstermark appeared in issues 1–3 of White Dwarf, *before the introduction of* Advanced Dungeons & Dragons; *it is, therefore, concerned with original* D&D. *The new rules in* AD&D *have, in the majority of cases, only changed a creature's Monstermark slightly — not enough to warrant rearranging the monster level tables. Since the Monstermark was intended as a rough guide for monsters appearing, the system's validity is not entirely lost.*

The Monstermark System

by Don Turnbull

In developing the Monstermark I was trying to provide a systematic method of assessing a monsters relative malignity, so that new monsters (from *Strategic Review, Dungeoneer* etc. — and I wonder how many of you use *EPT* monsters in non-*EPT* dungeons?) could be assigned with reasonable accuracy to levels. As it happens, revised monster level tables are not the only product of the system, particularly in its newer refined form. Many have criticised the *Greyhawk* experience points table, for instance, and this method provides a basis for quite accurate reappraisal. The method gives dungeonmasters better guidance than previously available on the thorny question of how many wandering monsters should appear against a party of a particular size and strength. Also — is a 4 dice +2 Su Monster about as nasty as a 4-dice Giant Snake? This method clothes the bare bones of intuition.

The 'D' Factor

I define two factors for each monster. The first, which I now call **D** (Defence), is a measure of a monster's vulnerability:—

$$\mathbf{D} = \text{The average number of melee rounds it takes a first level fighter to kill the monster with a 1-8 sword, allowing no bonuses}$$

$$= \frac{\text{The Monster's average hits}}{\text{Probable hits received per round}}$$

$$= \frac{\text{Monster's average hits}}{4\frac{1}{2} \times \text{probability of hitting}}$$

$$= \frac{\text{Monster's average hits} \times 40}{9 \,(AC+2)} \quad \text{where AC is the monster's armour class.}$$

In case you didn't know the bit about the average roll from a particular die, the average roll of an 8-sided die is $(8+1)/2 = 4\frac{1}{2}$; that of a 6-sided die is $(6+1)/2 = 3\frac{1}{2}$ etc. So a beast with 4 8-sided dice has an average of $4 \times 4\frac{1}{2} = 18$ hits. Similarly a beast delivering a 1-10 bite will inflict $(10+1)/2 = 5\frac{1}{2}$ hits per bite on average, and a character with 4 4-sided dice will have an average of 10 hits. (Incidentally, do you know the probability of rolling that all-characteristics-above-15 character you have hidden away?).

The 'A' Factor

The other factor which I call **A** (Aggressiveness) enumerates the risk you take in attacking a particular monster, i.e. the number of hits it hands out during the time it takes you to kill it:—

A = the average number of hits a monster would hand out to a character of AC2 during the number of melee rounds denoted by **D**.

= **D** *times* the probability of the monster hitting an AC2 defender each round *times* the average number of hits it delivers if successful.

I will come back to the methods of calculation, in illustrative form, later, but first must note that there are, of course, problems with both factors. A first level fighter, used as the criterion for **D**, can't hit some monsters at all without magic weapons; in this case **Dx** is calculated and displayed, where x is the lowest level of fighter capable of delivering damage. A normal sword cannot damage certain monsters no matter how strong or high level the fighter, so **(D)** — or even **(Dx)** — indicates what the value of **D** would be were normal weapons effective against the monster (and the final assessment of the monster's malignity would have to incorporate some sort of bonus).

Equally, **A** can't be calculated for certain monsters such as Wights which don't hand out hits but instead drain levels (which could be fatal or merely serious, depending on the initial level of the victim). In my view there is no way of assessing a realistic comparative value of **A** in these circumstances.

Another unrealistic element which creeps into both factors is their assumption of one-on-one combat — the possibility of many-to-many melee has to be ignored since the computations soon get far too complex and long-winded. I had to picture a line of first level fighters attacking a monster successively — in other words each would wait for his predecessor to keel over before going into action; this is possible in games involving some players, but is far from normal practice.

The Monstermark

Bearing these restrictions in mind, however, it seems that the method is not without value and in this article it is developed further to introduce the Monstermark which I will call **M** (for obvious reasons). For quite a lot of monsters **M** is the same as **A**, but for those with poison, paralising powers, magical defence and attack mechanisms etc. **M** attempts to support **A** as a modified value. For those monsters without an **A** factor, **M** has to be assessed (and these values are open to considerable challenge and debate).

One thing which must be tackled early is the monster attack modes I have devised. I have no doubt other DMs use other modes, and I claim no original thinking in developing the modes; it struck me quite early, however, that a beast would have one helluva job attacking an opponent with the horn on top of its head at the same time as biting him (or someone else) as *Greyhawk* has it in some cases, so I thought a monster's melee mode had better be regularised. For brevity here I will adopt a standard notation for each monster:

$$N: \quad p_1 n_1 : p_2 n_2 : p_3 n_3 \ldots \ldots : \quad S$$

N refers to the number of attacks the monster makes per melee round (usually one). I have ignored for simplicity the possibility of attacks on two different victims in the same round, of which some monsters are capable.
$p_1 p_2$ etc. refer to the probability of a particular mode of attack (biting, clawing etc. — the actual mode isn't specified but you can find it in the rules);
while
$n_1 n_2$ etc. represent the average number of hits handed out by that mode of attack if it is successful.
S refers to special powers and may be one or more of a number of things — Po for poison, Pa for paralisation, Ma for magical defence and/or attack methods, Pe for petrifaction, L for level drain, S for strength point drain, and if anything else crops up I will define it then.

A few examples might help to clear up a lot of things at this stage. Let us calculate **D, A** and the melee notation for three different beasts.

These will be the Bugbear, the Manticore, and the Giant Snake, three of the more popular beasts — at least with DMs, if not players! After that, I shall deal with the other humanoid monsters, and then move on to those creatures with special powers — those which paralyse, poison, drain, and so on — before tackling the undead, fire-breathers, golems, and other nasties. I'll then consider EPT monsters.

So let's get on with the first three beasties:

1. A Bugbear has 3 dice +1, AC5, one attack per round, 2-8 damage if successful. It has no special powers.

$$D = \frac{14\frac{1}{2} \times 40}{9 \times 7} = \text{about } 9.2$$

$$A = D \times \frac{2+8}{2} \times 0.4 = \text{about } 18.4$$

Melee notation is: 1 : 100% 5 : –

2. A Manticore has 6 dice +1, AC4 and attacks once per round; 60% of the time it attacks with two 1-3 claws (average 2 each) and a 1-8 bite (average 4½), the other 40% it uses six 1-6 iron spikes. It does nothing special (isn't that lot enough?).

$$D = \frac{29 \times 40}{9 \times 6} = \text{about } 21.5$$

$$A = D \times \frac{9}{20}\left(\left[\frac{6}{10} \times \frac{1+3}{2} \times 2\right] + \left[\frac{6}{10} \times \frac{1+8}{2}\right] + \left[\frac{4}{10} \times \frac{1+6}{2} \times 6\right] \right)$$
= about 145

Melee notation is: 1 : 60% 8½ ; 40% 21: –

3. A Giant Snake has 4 dice and AC4; it attacks twice per round — one bite (1-6 plus poison) and one constriction (2-8), we will assume on the same victim. The poison apart, it has no special powers.

$$D = \frac{18 \times 40}{9 \times 6} = 13.3$$

$$A = D \times \frac{9}{20}\left(\frac{1+6}{2} + \frac{2+8}{2} \right) = 51$$

Melee notation is :   2 : 100% 3½ : 100% 5 : Po

I hope this helps illustrate the method of calculation as well as the notation. Applying these methods to some simple human-type monsters:

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A=M
Kobold	7	1	1 : 100% 2½ : –	1	2.2	1.1
Orc	6	1	1 : 100% 3½ : –	1	2.5	2.2
Goblin	6	1½	1 : 100% 2½ : –	1	3.75	2.3
Gnoll/Hobgoblin	5	1½	1 : 100% 4½ : –	2	4.3	4.8
Ogre	5	4+1	1 : 100% 5½ : –	4	12.1	29.9
Hill Giant	4	8	1 : 100% 9 : –	6	26.7	120
Stone Giant	4	9	1 : 100% 10½ : –	6	30	189
For comparison, some simple non-humanoids:						
Stirge	7	1	1 : 100% 2 : –	1	2.2	2
Wildcat	8	2	1 : 100% 10½ : –	–	4	6.3
Lizard Man						
unarmed	5	2+1	1 : 40% 4 : 60% 4½ : –	–	6.3	8.2
armed	5	2+1	1 : 100% 4½ : –	–	6.3	8.6
Bugbear	5	3+1	1 : 100% 5 : –	2	9.2	18.4
Centaur	5	4	1 : 50% 3½ : 50% 4½ : –	–	11.4	29.6
Su Monster	6	4+2	1 : 100% 12½ : –	–	11.1	62.5
Minotaur	6	6	1 : 50% 5 : 20% 2 : 30% 4½ : –	5	15	57.4
Manticore	4	6+1	1 : 60% 8½ : 40% 21 : –	5	21.5	145
Griffon	3	7	1 : 40% 5 : 60% 9 : –	–	28	103.6
Ent	2	8	2 : 100% 10½ : 100% 10½ : –	–	40	420
Invisible Stalker	3	8	1 : 100% 10 : –	5	32	160

It is immediately obvious, even considering only these simple cases, that there is more to this business than hit dice, and anyone who uses that criterion alone to assess the risks of attacking deserves to die a cruel and hard death. Rightly an experience point system based only on hit dice should be questioned (though in fairness to *Greyhawk* that system does not rely on hit dice alone). An 8-dice Giant is child's play compared with an 8-dice Ent — I'd be more careful which trees you rest under (or whatever it is you do under trees) in future — a 6-dice Minotaur is in reality quite docile, while Su Monsters and Manticora are far more fearsome than one might have thought. *Greyhawk's* monster level table is, to say the least of it, questionable even on this limited evidence.

Special Powers

Moving on to more complex matters, it will sooner or later (so it might as well be now) be necessary to enumerate the 'bonus' to be assigned to the 'special power' section of the melee notation — in other words to define the relationship between **A** and **M** when they are not equal. All this is very subjective and I would be surprised not to meet with different views, but the following bonus relationships seem to give results which instinctively 'feel' right:

Pa =	paralisation	M = 2A	
Pe =	petrifaction	M = 2½A	
Po =	poison	M = 2A	
Ma =	magic attack/ defence methods	M = 1½A – 3A	depending on extent
S =	Strength point drain	M = 1½A	
L =	Level drain	M = 2½A	
R =	regeneration potential	M = 1½A	
H =	strong hug (Owl Bear)	M = 1½A	

In Ma I have included those cases in which normal weapons are not effective; I think this, on its own, only warrants a 50% bonus since it is rare to have a character without at least a +1 sword, and many DMs will let you purchase them at the local market before the trip.

Using these relationships, we can now look at some monsters with simple special powers, leaving the tough and unusual customers until later. In the odd case of a monster with two or more special powers, the A–M bonus is increased accordingly.

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A	M
Shadow	7	2+2	1 : 100% 2½ : S Ma	4	5.4	4.1	8.2
Harpy	7	3	1 : 40% 4 : 60% 3½ : Ma	3	6.7	14.8	22.2
Blink Dog	5	4	1 : 100% 3½ : Ma	4	15.6	24.5	36.8
Gargoyle	5	4	1 : 40% 6½ : 60% 7½ : Ma	4	(11.4)	(26.2)	39.3
Medusa	8	4	2 : 100% 4½ : 100% 2½ : Pe	–	8	22.4	56
Cockatrice	6	5	1 : 100% 3½ : Pe	4	12.5	19.7	49.2
Owl Bear	5	5	1 : 40% 11½ : 60% 7 : H	4	28.6	113.1	169.7
Phase Spider	6	5	1 : 100% 3½ : PoMa	4	12.5	19.7	59.1
Ogre Magi	4	5+2	1 : 100% 6½ : RMa	5	18.1	53.1	106.2
Displacer Beast	4	6	2 : 100% 5 : 100% 5 : Ma	4	30	135	202.5
Intellect Devourer	4	6	1 : 100% 10 : Ma	–	(90)	(405)	1215
Basilisk	4	6+1	1 : 100% 5½ : Pe	6	20.7	51.3	128.4
Lammasu	6	6+2	1 : 100% 7 : Ma	5	16.1	56.4	84.6
Troll	4	6+3	1 : 100% 9½ : R	5	22.2	105.6	158.4
Wyvern	3	7	1 : 67% 3½ : 33% 9 : Po	5	28	74.7	149.4
Gorgon	2	8	1 : 100% 7 : Pe	6	40	140	350
Umber Hulk	2	8	1 : 100% 19 : Ma	5	40	360	540
Couatl	5	9	2 : 100% 2 : 100% 5 : MaPo	–	25.7	108	216
Lurker	6	10	1 : 100% 3½ : Sm	–	25	52.5	131.3

Note: Sm for the Lurker is 'smother' which in the circumstances warrants a **M** = 2½A relationship, I think.

Again, clear evidence to show that all in the Greyhawk garden is not lovely. What on earth is the Shadow doing in the fourth monster level? And witness the wide variation in the others — even if my **A** – **M** relationships are at times suspect (and they are at least arguable) the wide variation exists in **A** alone. Confirmation I think that this method puts us on the right track (although there is the possibility that it puts us consistently on the wrong track . . . . I'm not sure how to prove which is which!)

The Undead and other 'Specials'

At any rate, let us confidently advance to complete the set. So far we have missed the Undead, the Giant Insects, the Lycanthropes, the 'wanderers' and the Fire-Breathers, plus a few very tricky customers, plus any others I have missed, plus *EPT* monsters and new monsters from any other source. In the *Undead* category we meet for the first time monsters who have no **A** factor, and the values of **M** are, therefore, the product of **D** and instinct. The precise value of **M** is not of course as important as its order of magnitude.

For a Mummy we will need Di = Disease which qualifies for **M** = 1½A. In the case of the Mummy, we must also bear in mind that the monster is very vulnerable to fire so the calculation below applies to a fire-proof Mummy (there are other examples of this elsewhere but none perhaps so obvious as as this one). A normal Mummy would have a much smaller **M**; how much smaller is a subjective matter. But let me not stress to much the inadequacies of the system . . . .

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A	M
Skeleton	7	1	1 : 100% 3½ : –	1	2.2	.9	.9
Zombie	7	1	1 : 100% 4½ : –	2	2.2	2	2
Ghoul	6	2	1 : 60% 4 : 40% 2½ : Pa	2	5	3.3	6.6
Wight	5	3	1 : – : LMa	3	(8.6)	–	70
Wraith	3	4	1 : 100% 3½ : LMa	4	(16)	(25.2)	75.6
Mummy	3	5+1	1 : 100% 6½ : DiMa	5	(41.8)	(122.2)	244.4
Spectre	2	6	1 : 100% 4½ : LLMa	5	(30)	(60.75)	243
Vampire	2	8	1 : 100% 5½ : LLMa	6	(40)	(110)	440

A remarkably self-consistent set of results for the Undead which may help us later in drawing up new monster level tables. These calculations also show how important it is to recruit a high-level Cleric to the party — anything worse than a Ghoul is rather too tough for a small cleric-less party. Nowadays some nasty-minded DMs (this one included) are apt to put high-level anti-Clerics with their Undead to challenge and oppose any turning away; this is a dirty trick, of course, but the resulting anti-cleric-v-cleric mental combat may make the psionic rules worth while (I have found no other reason).

So onto the *Giant Insects*, some of which are simple, others less so. I had better explain that my melee notation for the Giant Scorpion, which looks a bit odd, is the result of my ruling that this beauty attacks with two pincers (1—10) each on the same opponent and if either or both pincers hit, the victim also suffers a sting attack (1—4 plus poison) which automatically hits if both pincers have hit but which has the normal probability of hitting if only one pincer has hit. Since it is a 3-dice beast, it requires a roll of 13 or more to hit which means a hit probability of 8/20. Therefore the probability of both pincers missing is $(12/20)^2$ which is 36%, and this is the only time the sting attack is not attempted. So the sting will attack 64% of the time, 16% automatic hit, 48% normal probability of a hit. This makes the calculation for that beast rather complex and it may be worth displaying as an example:

$$D = \frac{\text{Average hits} \times 40}{9\,(AC+2)} = \frac{13\frac{1}{2} \times 40}{9 \times 8} = 7\frac{1}{2}$$

$$A = 7\frac{1}{2} \times \frac{4}{25}\left(\left[\frac{1+10}{2} \times 2\right] + \frac{1+4}{2}\right) + 7\frac{1}{2} \times \frac{12}{25}\left(\frac{1+10}{2} + \left[\frac{2}{5} \times \frac{1+4}{2}\right]\right)$$

$$= 7\frac{1}{2} \times \frac{26}{5}$$

$$= 39$$

(Incidentally, this prompts me to ask anyone who disagrees with my arithmetic to let me know in what respect we differ. I can't hope to have carried out all these calculations without error).

We need to intorduce De = Deafness and Ad = Acid for the Bombardier Beetle, together warranting **M** = 3A. Also note the Giant Wasp's virulent poison requires **M** = 3A at least and the Giant Tick as disease-bearer needs **M** = 2½A.

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A	M
Giant Fire Beetle	4	1—1	1 : 100% 13½ : —	4	2.6	7	7
Giant Bombardier Beetle	4	1	1 : 100% 6½ : DeAd*	4	3.3	5.4	16.2
Giant Spider.	7	2	1 : 100% 2 : Po	3	4.4	2.7	5.4
Giant Toad	6	2	1 : 100% 5½ : Po	2	5	8.25	16.5
Giant Leech	8	2	1 : 100% 7 : LPo	—	4	8.4	25.2
Giant Tick	4	3	1 : 100% 2½ : Di	10	10	10	25
Giant Wasp	5	3	1 : 100% 4½ : Po	—	8.6	15.4	46.2
Giant Scorpion	6	3	2 : 2x 100% 5½ : 64% 2½ : Po	4	7.5	39	78
Giant Snake	4	4	2 : 100% 3½ : 100% 5 : Po	4	13.3	51	102
Giant Boring Beetle	3	5	1 : 100% 10½ : —	4	20	94.5	94.5
Giant Slug	8	12	1 : 100% 6½ : Ad	5	24	109.2	218.4

The *Lycanthropes* are, for a change, relatively easy. None can be hit by normal weapons but that apart there is no complication. Di in this case is lycanthropy which alone would require **M** = 1½A, so **M** is at least 2A in all cases to reflect lycanthropy and invulnerability to normal weapons.

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A	M
Wererat (rat form)	7	3	1 : 100% 2 : MaDi	3	(6.7)	(5.3)	10.6
(human form)	7	3	1 : 100% 4½ : MaDi	3	(6.7)	(12)	24
Werewolf	5	4	1 : 100% 5 : MaDi	4	(11.4)	(22.9)	45.8
Wereboar	4	4+1	1 : 100% 7 : MaDi	4	(14.1)	(44.3)	88.6
Weretiger	3	5	1 : 100% 10½ : MaDi	4	(20)	(94.5)	189
Werebear	2	6	1 : 100% 9 : MaDi H	4	(30)	(162)	405

Again a useful and consistent set of results which belies the *Greyhawk* tables. Lycanthropes seem to me a mush-ignored feature of dungeons — I am sure more could be made of their peculiarities and the behaviour their 'mission' would lead them to exhibit. Methinks the Editor would welcome an article on this subject from someone who has done some in-depth study.

Only a few of the *'wandering'* monsters lend themselves to the analysis. Some (Yellow Mould, Green Slime, Grey Ooze

for instance) are really traps rather than true monsters and ther is no difficulty in killing or avoiding them once their presence has been detected. The Rust Moster is a damned nuisance but can't harm a person at all unless there is something very peculiar about his insides. Generally, these types of 'wanderer' can be spread throughout all levels of a dungeon. This leaves us with a few 'true' wanderers, none of which present any calculation difficulty.

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A	M
Carrion Crawler	3	3+1	1 : — : 8xPa	2	12.9	—	120
Gelatinous Cube	8	4	1 : 100% 5 : Pa	1	8	18	36
Ochre Jelly	8	5	1 : 100% 7 : —	3	10	31.5	31.
Black Pudding	6	10	1 : 100% 13½ : —	—	25	202.5	202.

One obvious question arises here — why is the Ochre Jelly ranked on Greyhawk level 3? Its only special property is that weapon hits cause it to multiply — and who, moderately familiar with dungeon lore, is daft enough to go hitting Ochre Jellies with swords?

The Fire-Breathers

The Fire-breathers cause more complications, though fire-breathing itself does not require handling as a special power — it is just another attack mode. Dragon melee rules are explained in some detail in *Monsters & Treasure* but Hell Hounds etc. get thin treatment. I rule that a Hell Hound will try to bite each round; if successful there is a 40% chance it will also set fire to its victim but it can only use its fire weapon twice in one day. Similarly a Chimaera will attack with two 1-3 claws 20% of the time and with all three heads the other 80%; if the latter is the case there is a 20% chance the dragon head will breathe fire (3-18) rather than bite (3-12). Similarly the Fire Lizard will breathe fire 58.3% of the time with its 1-10 breath weapon.

The calculation for Hell Hounds is quite easy — taking a 3-dice beast **D** works out by the normal method to 10, so for 10 melee rounds the beast has a probability of 8/20 of hitting. This gives 4 hits total, each with 3½ average damage, or a total average damage of 14. Additionally there is a 40% chance that it will breathe so this happens 1.6 times during the 10 rounds, each with 10½ average damage or a total of 16.8 damage. Adding this to the 14 gives a grand total of 30.8 = **A**. A 4-dice beast has **D** = 13.3 and a probability of 9/20 of hitting which means 6 rounds in which the beast will hit for 3½ average damage — total 21 damage. There is a 40% chance that it will breathe and if its breath weapon were unlimited it would breathe in 2.4 rounds, but it is limited to 2 fire-raisings per day so the additional damage is 2 x 14 = 28 and **A** = 21 + 28 = 49. The stronger Hell Hounds will also use up their breath potential during the melee so one allows for just 2 lots of fire hits.

For Dragons and the Fire Lizard the arithmetic is a bit more tedious. Taking the Fire Lizard as an example, I use the following melee system:—

Each round roll two 6-sided: 2-6 = 2 claws (1-8 each) and one bite (4-16)
7-12 = breath weapon (1-10) maximum 3 times/day

In melee notation terms this is 1 : 41.7% 19 : 58.3% 5½ : —

Once the beast has used up its fire ration it will claw and bite each time it hits; the questions are — how long before the fire supply runs out and how many rounds normal melee will it therefore sustain? Since it is a 12-dice beast it hits AC2 with probability 14/20 and **D** works out to 60. Therefore it will hit on 60 x 14/20 rounds = 42 rounds. If x is the number of rounds it takes to use up its fire, then x times 58.3% = 3 from which x = 5.14 so the breath weapon will be exhausted during the melee period. Therefore one can expect 3 rounds of fire @ 5½ average damage and 39 rounds of normal melee @ 19 damage, a total of 757.5 = **A**. This is one of the few monsters whose opponent wishes it had a greater fire potential.

A similar method of calculation applies to the Dragons (and I have taken average maturity so the breath weapon delivers 3½ hits per die) but the Chimaera in my rules has an unlimited breath weapon (it only uses it 16% of the time anyway) which makes things easier.

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A=M
Hell Hound	4	3	1 : 100% 3½ : 16% 10½ : —	5—6	10	30.8
	4	4	1 : 100% 3½ : 18% 14 : —	5—6	13.3	49
	4	5	1 : 100% 3½ : 18% 17½ : —	5—6	16.7	61.25
	4	6	1 : 100% 3½ : 18% 21 : —	5—6	20	73.5
	4	7	1 : 100% 3½ : 20% 24½ : —	5—6	23.3	89.8
Fire Lizard	2	12	1 : 100% 19 : 58.3% 5½ : —	—	60	757.5
Chimaera	4	9	1 : 20% 4 : 64% 15 : 16% 18 : —	6	30	239
Dragon — White	2	5	1 : 41.7% 14 : 58.3% 17½ : —	6	25	168
	2	6	1 : 41.7% 14 : 58.3% 21 : —	6	30	210
	2	7	1 : 41.7% 14 : 58.3% 24½ : —	6	35	276.5
Dragon — Black	2	6	1 : 41.7% 15½ : 58.3% 21 : —	6	30	225.8
	2	7	1 : 41.7% 15½ : 58.3% 24½ : —	6	35	298.3
	2	8	1 : 41.7% 15½ : 58.3% 28 : —	6	40	347.5
Dragon — Green	2	7	1 : 41.7% 16 : 58.3% 24½ : —	6	35	305.5
	2	8	1 : 41.7% 16 : 58.3% 28 : —	6	40	356
	2	9	1 : 41.7% 16 : 58.3% 31½ : —	6	45	478.5
Dragon — Blue	2	8	1 : 41.7% 18 : 58.3% 28 : —	6	40	390
	2	9	1 : 41.7% 18 : 58.3% 31½ : —	6	45	526.5
	2	10	1 : 41.7% 18 : 58.3% 35 : —	6	50	581
Dragon — Red	2	9	1 : 41.7% 21½ : 58.3% 31½ : —	6	45	610.5
	2	10	1 : 41.7% 21½ : 58.3% 35 : —	6	50	675.5
	2	11	1 : 41.7% 21½ : 58.3% 38½ : —	6	55	878.8
Dragon — Golden	2	10	1 : 41.7 24½ : 58.3% 35 : —	6	50	766.5
	2	11	1 : 41.7% 24½ : 58.3% 38½ : —	6	55	985.3
	2	12	1 : 41.7% 24½ : 58.3% 42 : —	6	60	1081.5

There is no doubt about dragon strength and fearsomeness overall, but to lump them all together on monster level 6 is too much of an approximation for my liking; an average White Dragon is about as dangerous as a Weretiger which is listed on level 4.

Golems and other 'Nasties'

Before moving on to those really tricky customers the Golems, the Elementals and the Demons there is a miscellany of monsters which for some reason have been omitted so far. None of these are particularly difficult to deal with (in arithmetical terms at any rate) so a bare list will suffice, pausing only to define F = Freeze for the Ice Phantom, T = Tentacle Brain Penetration for that nasty customer the Mind Flayer and Sw = Swallow for the Purple Worm which seems to have been parted from its mates in the wandering section.

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A	M
Ice Phantom	5	3	1 : — : F	—	(8.6)	—	60
Doppelganger	5	4	1 : 100% 6½ : Ma	4	11.4	33.4	50.1
Tracker	1	5	1 : — : Pa	—	33.3	—	200
Triton	5	6	1 : 100% 10½ : Ma	—	17.1	81	202.5
Hydra	5	5	5 : 5 x 100% 3½ : —	5	14.3	75	75
	5	6	6 : 6 x 100% 3½ : —	5	17.1	108	108
	5	7	7 : 7 x 100% 3½ : —	5	20	220.5	220.5
	5	8	8 : 8 x100% 4½ : —	5	22.9	370.3	370.3
	5	9	9 : 9 x 100% 4½ : —	6	25.7	468.6	468.6
	5	10	10 : 10 x 100% 4½ : —	6	28.6	707.1	707.1
	5	11	11 : 11 x 100% 5½ : —	6	31.4	1045.8	1045.8
	5	12	12 : 12 x 100% 5½ : —	6	34.3	1278.8	1278.8
Shambling Mound	0	6*	2 : 2 x 100% 4½ : SmMa	—	73.3	297	594
(*10-sided hit dice)	0	7*	2 : 2 x 100% 4½ : SmMa	—	85.6	385	770
	0	8*	2 : 2 x 100% 4½ : SmMa	—	97.8	440	880
	0	9*	2 : 2 x 100% 4½ : SmMa	—	110	594	1088
Djinn	5	7+1	1 : 100% 9 : Ma	—	20.6	92.3	138.5
Salamander	4	7+3	1 : 27.8% 12½ : 72.2% 13½ : —	5	25.6	168.9	168.9
Naga (Water)	5	7	1 : 100% 2½ : PoMa	—	20	25	62.5
	5	8	1 : 100% 2½ : PoMa	—	22.9	28.6	71.5
Naga (Spirit)	5	9	1 : 100% 2 : PoMaPa	—	25.7	30.8	92.4
	5	10	1 : 100% 2 : PoMaPa	—	28.6	34.3	102.9
Naga (Guardian)	5	11	2 : 100% 5 : PoMa	—	31.4	154	385
	5	12	2 : 100% 5 : PoMa	—	34.3	168	420
Mind Flayer	5	8+3	1 : — : T	—	24.8	—	700
Shedu	4	9+2	2 : 2 x 100% 3½ : Ma	—	31.5	132.2	198.3
Efreet	3	10	1 : 100% 9 : Ma	—	40	324	486
Lich	3	10	1 : 100% 5½ : PaMa	—	40	132	396
Ghost	0	10	1 : — : Ma	—	(100)	—	1600
Roper	0	10	6 : 6 x 100% 12½ : MaPo	—	100	1500	3750
	0	11	6 : 6 x 100% 12½ : MaPo	—	110	1650	4125
	0	12	6 : 6 x 100% 12½ : MaPo	—	120	1800	4500
Purple Worm (front)	6	15	1 : 100% 13 : Sw	6	37.5	341.3	682.6
Purple Worm (rear)	6	12	1 : 100% 4½ : Po	6	37.5	118	336

The separate treatment of the two parts of the Purple Worm is a bit unsatisfactory (probably for the Worm as well); since it is pretty unlikely that one opponent (which is the basic criterion of the method) will be engaged at both ends at the same time, perhaps the best answer is the average value of M which is 509.3. These calculations make the Ropers the most fearsome beasts we have met so far; I don't recall ever meeting them down a dungeon, and I devoutly hope I never will.

Incidentally, if there is a monster missing from the above lists which you expect me to include, I have only listed those in my own dungeon or potentially so; if you want more music you had better get out your calculator and play it yourself! Sooner or later though I have to work round to the nasties in the shape of Golems, Elementals and Demons.

The main characteristics of the Golems are (a) a fixed number of hit points, (b) a very low armour class which means we will have to calculate Dx rather than D in most cases, and (c) invulnerability to normal weapons. None of these are difficult factors to incorporate.

Take the Stone Golem as an example. It has AC –3 and 60 hits and its melee notation is 1 : 100% 13½ : Ma. A fighter of level 1—3 cannot hit the beast and it is affected only by weapons with a +2 bonus or greater; I rule that it has the hit probability of a 10-dice beast (12/20 against AC2).

$$(D_4) = \frac{60 \times 40}{9 \times 1} = (266.7)_4. \qquad (A_4) = \frac{800}{3} \times \frac{12}{20} \times \frac{27}{2} = (2160)_4$$

The Ma bonus I rate as 200% (i.e. M = 3A) but M should be doubled again to reflect the fact that we are working from (D_4) rather than (D). So M = 6A = 12,960. That Rock-Mud spell would come in handy.

The other two are approached in the same way but note that M = 12A for the Iron Golem which has poison and magic immunity and can only be hit by fighters of level 7 or higher with weapons of bonus +3 or better. All Golems are on Greyhawk level 6.

Monster	AC	Hit Dice	Melee notation	Greyhawk Level	D	A	M
Flesh Golem	−1	40	2 : 2 x 100% 4½ : Ma		(177.8)	(960)	1920
Stone Golem	−3	60	1 : 100% 13½ : Ma		$(D_4)=(266.7)_4$	$(A_4)=(2160)_4$	12960
Iron Golem	−5	80	1 : 100% 22 : MaPo		$(D_7)=(177.8)_7$	$(A_7)=(2737.7)_7$	32849

If I should ever run into the odd Iron Golem or two, I hope I remember to bring the tame Rust Monster along!

Elementals are of four types — Air, Earth, Fire and Water — and the hit dice of each type varies according to its method of summoning. Staff Elementals have 8 dice, Device Elementals 12 dice and Conjured Elementals 16 dice. Non-magical attacks have no effect on them which means the property Ma and M = 2A. Their attack varies according to the victim's element — I have assumed all attacks take place on earth (i.e. down a dungeon) except that I have added for the Water Elemental its more violent attacks against a victim in the water element (which is not impossible down a dungeon). All Elementals have AC2 and are ignored in the Greyhawk tables.

Elemental	HD	Melee notation	Victim's element	D	A	M
Air	8	1 : 100% 9 : Ma	Earth	(40)	(180)	360
	12	1 : 100% 9 : Ma	Earth	(60)	(378)	756
	16	1 : 100% 9 : Ma	Earth	(80)	(504)	1008
Fire	8	1 : 100% 13½ : Ma	Earth	(40)	(270)	540
	12	1 : 100% 13½ : Ma	Earth	(60)	(567)	1134
	16	1 : 100% 13½ : Ma	Earth	(80)	(756)	1512
Water	8	1 : 100% 4½ : Ma	Earth	(40)	(90)	180
	12	1 : 100% 4½ : Ma	Earth	(60)	(189)	378
	16	1 : 100% 4½ : Ma	Earth	(80)	(252)	504
Water	8	1 : 100% 16½ : Ma	Water	(40)	(330)	660
	12	1 : 100% 16½ : Ma	Water	(60)	(693)	1386
	16	1 : 100% 16½ : Ma	Water	(80)	(924)	1848
Earth	8	1 : 100% 18 : Ma	Earth	(40)	(360)	720
	12	1 : 100% 18 : Ma	Earth	(60)	(756)	1512
	16	1 : 100% 18 : Ma	Earth	(80)	(1008)	2016

The main problem with the Demons is to come to an assessment of their magical powers and particularly their ability to gate in allies. Opinions will vary but I suggest M = 3A for Demons I and II, M = 3½A for Demons III and IV, M = 4A for Demon V and M = 5A for Demon VI. For the Succubus' magical power alone I would suggest M = 3A but its level draining kiss needs an extra bonus and I settle for M = 4A overall. Additionally some Demons get extra bonus for AC — 1 or less. Demons are not listed in the *Greyhawk* tables.

Demon	AC	Hit Dice	Melee notation	D	A	M
I	0	8	1 : 40% 8½ : 60% 9 : Ma	160	704	2112
II	−2	9	2 : 100% 10 : Ma	$D_4=90$	$A_4=756$	4536
III	−4	10	1 : 50% 18 : 50% 17½ : Ma	$D_7=66.7$	$A_7=710$	6390
IV	4	7 (1-10)	3 : 2 x 100% 4½ : 100% 7 : Ma	(28.5)	(376.4)	2634.8
V	7	7	7 : 6 x 100% 4½ : 100% 5 : Ma	(15.6)	(248.9)	1991.2
VI	2	10	1 : 41.7% 13 : 58.3% 17 : Ma	(50)	(535.5)	5355
Succubus	9	6	2 : 2 x 100% 2 : MaL	(10.9)	(19.6)	78.4

I have not tackled the Princes since I don't expect to use them.

A rather surprising set of results — surprising in A as well as M, so it is not just the bonuses which cause the unexpected variation. Yet the beasts with the highest values of M are the ones with low AC, so perhaps the results are not so surprising

The Monstermark System

after all. Did the designers feel that the increased magic resistance and power of the high-numbered Demons more than adequately compensated for a weak AC? If so, it seems they are wrong.

It is worth digressing a bit to stress the importance of AC. Take a fictitious beast with variable AC between −1 and 9, with hit probability 50% and 10 dice, which hands out 2—12 damage per hit — melee notations is 1 : 100% 7 : —

AC	9	7	5	3	1	−1
D	18.2	22.2	28.6	40	66.7	200
A=M	63.7	77.7	100.1	140	233.5	700

A wide variation in **M**, solely the product of variation in AC. Yet do we consider AC when deciding whether or not to attack a particular beast? I think not — most players' minds are set on the possible damage they could take, and this I suggest can be dangerously misleading.

EPT Monsters

I suspect mine is not the only dungeon to contain free adaptations of *Empire of the Petal Throne (EPT)* monsters so I have included some here. We need I = Insanity (qualifying for **M** = 2A) for the Hliir, H = Hypnosis (**M** = 2A) for the Marashyalu and E = Electrical Defence (**M** = 2A) for the Ruum. MC in the melee notation for the Ngayu is Metal Corrosion (no bonus since it doesn't affect the person).

Monster	AC	Hit Dice	Melee notation	D	A	M
Chnelh	7	1−1	1 : 100% 3½ : —	1.6	1.2	1.2
Kurgha	6	1	1 : 100% 2½ : —	2.5	1.6	1.6
Qol	2	1+1	2 : 100% 3½ : 100% 2½ : Po	6.1	9.1	18.2
Mrur	6	1+3	1 : 100% 3½ : R	4.2	3.6	5.4
Hlutrgu*	7	2	25% 1 : 100% 3½ : —			
			25% 2 : 2 x 100% 3½ : —			
			25% 3 : 3 x 100% 3½ : —			
			25% 4 : 4 x 100% 3½ : —	4.4	7.9	7.9
Shedra	6	2	1 : 100% 4½ : —	5	6.8	6.8
Huruu	7	2+3	1 : 100% 3½ : De	5.9	6.2	9.3
Hlyss (1st)	4	2	2 : 100% 3½ : 100% 4½ : Pa	6.7	16	32
Hlyss (2nd)	4	3	2 : 100% 3½ : 100% 4½ : Pa	10	32	64
Hlyss (3rd)	4	4+1	2 : 100% 3½ : 100% 4½ : Pa	14	50.7	101.4
Hlyss (4th)	4	5+1	2 : 100% 6½ : 100% 5½ : Pa	17.4	94	188
Hlyss (5th)	4	6+1	2 : 100% 6½ : 100% 5½ : Pa	20.7	112	224
Dlaqo	2	3	1 : 100% 3½ : —	15	21	21
	2	6	1 : 100% 6½ : —	30	87.8	87.8
	2	9	1 : 100% 12 : —	45	324	324
Muagh	8	3	1 : — : Ad	6	—	30
	8	6	1 : — : Ad	12	—	60
	8	15	1 : — : Ad	30	—	150
Shen	2	3	1 : 70% 4½ : 30% 10½ : —	15	37.8	37.8
Mnor	2	3+1	1 : 100% 3½ : —	16.1	22.6	22.6
Kayi	7	4	1 : 100% 7 : L	8.9	—	110
Ngayu	4	4	1 : 50% 3½ : 50% MC : —	13.3	21	21
Marashyalu	3	4	1 : 100% 9 : H	16	64.8	129.6
Biridlu	3	4+1	1 : — : Sm	16.9	—	120
Thunruu	4	5	1 : 100% 7 : —	16.7	52.5	52.5
Feshenga	4	5	1 : 100% 4½ : Po (25%)	16.7	33.8	50.7
Tsuruu	3	5+3	1 − 4 : 1 − 4 each 3½ : Ma	22.7	89.3	178.6
Zrne	5	6	1 : 100% 7 : PoMa	(17.1)	(54)	162
Aqaa	2	6	1 : 100% 10½ : Sw	30	142	284
	2	12	1 : 100% 10½ : Sw	60	284	568
	2	18	1 : 100% 10½ : Sw	90	426	852
Hra	4	7	1 : 100% 7 : LR	23.3	81.7	245.1
Hliir	2	8	1 : 100% 7 : I	40	140	280
Sagun	3	10	1 : 100% 10½ : Po	40	252	504
Ruun	2	11	2 : 100% 4½ : 100% 5 : E	55	366	732

* (The complex melee notation is due to the beasts' uncertainty whether to throw one, two, three or four darts at its opponent.)

So the set is virtually complete and I am left wondering what to do with all these results. Go out and stamp the appropriate Monstermark on each monster's anatomy? There are a few obvious omissions — the Titan and the Beholder for instance — but when you think about their properties you will realise why I have ducked them. Further monsters can be added at will — and the method provides a useful check for 'designers' of new monsters. I wonder whether the bloke who devised the Roper, for instance, realised just what a fearsome beast he was putting out on the market.

Monster Level Tables

Greyhawk has not been completely discredited and there still remains discernable correlation between the Monstermarks and the Greyhawk monster level tables. But the correlation is sufficiently weak to suggest that the tables need revision. Nearly 200 monsters have been mentioned in this article, so if you want to include them all and yet retain a reasonable

number in each monster level, I suggest *Greyhawk's* six levels be abandoned in favour of twelve new levels based on the Monstermarks. The ranges of **M** have been chosen so as to provide between 10 and 20 monsters on each level to make die-rolling easy. Some monsters are not included — the Rust Monster and the more-or-less static 'wanderers' such as Green Slime. Humans are also excluded (evil wizards, chaotic heroes and the like) though they too can be added. I have inserted a few more for which there is no Monstermark — the Titan, the Beholder and the Homunculus.

Here, then, are my proposed monster level tables.

Level I M=0.1 to 6.0
1. Kobold
2. Orc
3. Goblin
4. Gnoll
5. Hobgoblin
6. Stirge
7. Skeleton
8. Zombie
9. Giant Spider
10. Chnelh
11. Kurgha
12. Mrur

Level II M=6.1 to 20.0
1. Wildcat
2. Lizard Man (armed)
3. Lizard Man (unarmed)
4. Bugbear
5. Shadow
6. Ghoul
7. Giant Fire Beetle
8. Giant Bombardier Beetle
9. Giant Toad
10. Wererat (rat form)
11. Qol
12. Hlutrgu
13. Shedra
14. Huruu

Level III M=20.1 to 40.0
1. Ogre
2. Centaur
3. Harpy
4. Blink Dog
5. Gargoyle
6. Giant Leech
7. Giant Tick
8. Wererat (human form)
9. Gelatinous Cube
10. Ochre Jelly
11. Hell Hound (3 dice)
12. Hlyss (1st level)
13. Dlaqo (3 dice)
14. Muagh (3 dice)
15. Shen
16. Mnor
17. Ngayu

Level IV M=40.1 to 72.0
1. Su Monster
2. Minotaur
3. Medusa
4. Cockatrice
5. Phase Spider
6. Wight
7. Giant Wasp
8. Werewolf
9. Hell Hound (4-5 dice)
10. Ice Phantom
11. Doppelganger
12. Water Naga
13. Hlyss (2nd level)
14. Muagh (6 dice)
15. Thunruu
16. Feshenga

Level V M=72.1 to 100.0
1. Lammasu
2. Wraith
3. Giant Scorpion
4. Giant Boring Beetle
5. Wereboar
6. Hell Hound (6 dice)
7. Hell Hound (7 dice)
8. Hydra (5 heads)
9. Spirit Naga (9 dice)
10. Succubus
11. Homunculus
12. Dlaqo (6 dice)
   Owl Bear

Level VI m=100.1 to 140.0
1. Hill Giant
2. Griffon
3. Ogre Magi
4. Basilisk
5. Lurker
6. Mummy
7. Giant Snake
8. Carrion Crawler
9. Hydra (6 heads)
10. Djinn
11. Spirit Naga (10 dice)
12. Hlyss (3rd level)
13. Kayi
14. Marashyalu
15. Biridlu

Level VII M=140.1 to 200.0
1. Stone Giant
2. Manticore
3. Invisible Stalker
4. Troll
5. Wyvern
6. Weretiger
7. White Dragon (5 dice)
8. Tracker
9. Salamander
10. Shedu
11. Water Elemental (on land — 8 dice)
12. Hlyss (4th level)
13. Muagh (15 dice)
14. Tsuruu
15. Zrne

Level VIII M=200.1 to 280.0
1. Displacer Beast
2. Couatl
3. Mummy (fireproof)
4. Spectre
5. Giant Slug
6. Black Pudding
7. Chimaera
8. White Dragon (6-7 dice)
9. Black Dragon (6 dice)
10. Triton
11. Hydra (7 heads)
12. Hlyss (5th level)
13. Aqaa (6 dice)
14. Hra
15. Hliir

Level IX M=280.1 to 450.0
1. Ent
2. Gorgon
3. Vampire
4. Werebear
5. Black Dragon (7-8 dice)
6. Green Dragon (7-8 dice)
7. Blue Dragon (8 dice)
8. Hydra (8 heads)
9. Guardian Naga
10. Lich
11. Air Elemental (8 dice)
12. Water Elemental (on land 12 dice)
13. Dlaqo (9 dice)

Level X M=450.1 to 800.0
1. Umber Hulk
2. Fire Lizard
3. Green Dragon (9 dice)
4. Blue Dragon (9-10 dice)
5. Red Dragon (9-10 dice)
6. Golden Dragon (10 dice)
7. Hydra (9-10 heads)
8. Shambling Mound (6-7 dice)
9. Mind Flayer
10. Efreet
11. Purple Worm
12. Air Elemental (12 dice)
13. Fire Elemental (8 dice)
14. Earth Elemental (8 dice)
15. Beholder
16. Aqaa (12 dice)
17. Sagun
18. Ruun
19. Water Elemental (16 dice on land)
20. Water Elemental (in water — 8 dice)

Level XI M=800.1 to 2000.0
1. Intellect Devourer
2. Red Dragon (11 dice)
3. Golden Dragon (11-12 dice)
4. Hydra (11-12 heads)
5. Shambling Mound (8-9 dice)
6. Ghost
7. Flesh Golem
8. Air Elemental (16 dice)
9. Fire Elemental (12-16 dice)
10. Earth Elemental (12 dice)
11. Demon V
12. Titan
13. Aqaa (18 dice)
14. Water Elemental (in water — 12-16 dice)

Level XII M=2000.1 up
1. Roper (10-12 dice)
2. Stone Golem
3. Iron Golem
4. Earth Elemental (16 dice)
5. Demon I
6. Demon II
7. Demon III
8. Demon IV
9. Demon VI
10. Will O'Wisp

These new monster level tables require a new monster determination table -- and note that we now have twelve levels instead of *Greyhawk's* six. To compose a new table isn't easy, however. Should it be impossible, or merely highly improbable

for a party to meet a Demon or a Golem on the first dungeon level?

Monster Determination Table

Level Below Ground	Monster Level Table											
	1	2	3	4	5	6	7	8	9	10	11	12
1	1–6	7–12	13–19	20								
2	1–3	4–8	9–13	14–17	18–19	20						
3	1	2–5	6–9	10–12	13–15	16–18	19	20				
4	1	2–4	5–7	8–10	11–13	14–16	17	18	19	20		
5	1	2	3–4	5–7	8–10	11–13	14–15	16	17	18	19	20
6,7		1	2	3–5	6–8	9–11	12–14	15–16	17	18	19	20
8,9			1	2–3	4–6	7–9	10–12	13–15	16–17	18	19	20
10–12				1	2–3	4–6	7–9	10–12	13–15	16–17	18–19	20
13+				1	2	3–4	5–7	8–10	11–13	14–16	17–18	19–20

Additionally, I believe the Monster Determination Table should not be viewed in isolation from the other parameters of a dungeon. A lot depends, for instance, on the dungeon's generosity or otherwise. One which swims in Gold Pieces should have harder monsters than one with little treasure otherwise balance will be lost. And how does a DM attempt to relate the general level of an exploring party (which he probably doesn't know when the dungeon is designed) with a 'fair' level of monster toughness? A party of first level characters venturing for the first time into a dungeon would not care to meet half a dozen Trolls, but the same party, a few adventures later and with a few thousand experience points and magical items under their belts, might relish Troll-bashing. Again, my own experience is that few parties will venture deep into a dungeon, no matter how strong they are, while they have reason to suspect reasonably rich pickings still remaining on level 1. Perhaps this is a good reason for limiting the number of rooms on the easier levels.

To compose a new table is therefore rather more complicated than it might at first appear, and before doing so a DM will have to reconcile quite a lot of subjective judgements. He may, of course, merely combine my suggested monster levels (so that level 1 and level 2 monsters would be in level 1, level 3 and level 4 monsters would comprise level 2 etc.) and use the table in volume III of the rules (page 10).

Experience Points

However, a second practical use of the Monstermark is to determine the experience points which should be awarded for slaying a particular beast. Although it has been said by quite a few *D&D* addicts that the *Greyhawk* system of experience points, which is based on monsters' hit dice, is too stingy I don't think this is something which can be considered in isolation. Overall, the DM has to decide how generous or stingy his dungeon should be and the number of experience points available per level is not a bad measure. However, there are drawbacks which include the following at least:—
(a) the number of features (rooms etc) wherein experience can be gained will vary from level to level and from dungeon to dungeon; if the overall experience points total is to be the same in all cases, those dungeons whose first level contains a large number of rooms, like mine, would be populated exclusively with weak beasts, and that's no fun, particularly for the DM who never gets to see anyone killed.
(b) DMs award experience points for different things — some award them only for gold and for monster-slaying; others add the use of spells and success in turning away Undead, while still others (I understand) award experience to a character for finding a magic sword, wand or other device/artifact. Amongst the players who regularly penetrate the Greenlands Dungeon is one who persistently claims that his successful mapping, which allows the party to get out alive (only every so often) should be rewarded with experience points — and he has a case, though he knows damned well I will never concede it.
(c) DMs are — and in my opinion should be — apparently inconsistent in handing out experience points. If a party meets and kills a single Hobgoblin, gaining X experience points for doing so, should they get 10X points for killing 10 Hobgoblins? 50X for killing 50 of the things? I doubt it — the risk taken does not bear a linear relationship to the number of monsters; killing a single mewling, puking, scared-stiff Hobgoblin is not only an act of cowardice and uncharitable to boot, it also carries virtually no risk for any party. How to allow for this factor is, however, quite another matter and I have ignored it in the analysis which follows. Yet another aspect in which contributions from readers would be welcome.

We are therefore in a morass of subjective judgements from which there seems little hope of escape (now we're back to the Greenlands Dungeon again). In the final analysis it is the DM who must reconcile these judgements in his own mind when designing his masterpiece and the proof of the pudding will, as usual, only emerge after the damned thing is eaten and it's too late to change it. DMs must start their task secure in the knowledge that a generous dungeon leads rapidly to boredom; to 'own' a 38th level fighter (which an acquaintance of mine actually claims to do) is cold comfort when no self-respecting DM will let him enter another dungeon. Contrariwise, the designer of a harsh and stingy dungeon can't expect to keep his friends for long — and it must be a very lonely job designing dungeons which no-one will enter.

Inevitably it will be difficult, particularly for an inexperienced DM, to avoid these extremes, in which case the only hope is to be sensitive in the course of play itself, varying treasure and number of monsters to try to counter-balance whichever extreme seems to be inherent in the dungeon's design. The looks on the players' faces will give sufficient guidance.

When I first started this racket, my dungeon was too hard but I kept rigidly to the pre-prepared plans. The result was the death of a number of well-beloved characters and the near-ostracism of my dungeon. More recently, I have designed with the original fault in mind and have tried to correct it; sometimes I have failed and it emerges as too tough, while at others it emerges that I have over-reacted towards the simple extreme. So let me nail my colours to the mast — when engaged in the happy art of DMing, I unashamedly bend things quite regularly nowadays to try to preserve my sense of the balance. Whether I have succeeded or not I don't know, but at least players still want to penetrate — and occasionally don't seem to mind perishing in — the Greenlands Dungeon. I have avoided the strong temptation to conduct a secret vendetta against any particular character; mind you, if I ever get my hands on that sod Witherspoon. . . .

All this may sound like heresy, but I believe flexibility and sensitivity are the most important qualities of a good DM. After all, the main purpose of playing the game is to enjoy it, for good or for ill — players can't do this if they have to spend time perpetually rolling new characters to replace the bodies littering the upper levels, nor can it be particularly enjoyable to own a 132nd level fighter who needs a fleet of lorries to carry all his goodies, who employs a full-time librarian to store and catalogue them and to whom slaying an Iron Golem at every turn is merely passing the time of day.

So, circuitously, back to experience points. In my view they are intended to reflect *risk*. A character gets experience for meleeing with a monster because there is a finite, non-zero risk that he will be killed or at least suffer wounds which could contribute to his eventual death. He gets experience for gold because he has taken risks in order to grab it. He gets experience for surviving traps, magical attacks and the ceiling falling on him. He should not, however, get experience for finding a magic sword or that seven-spell scroll since these things will assist him in getting experience by other means. He should get experience for being kissed by a Succubus or charmed by a Harpy, but thrashing around in the straw in room 47 with the Priestess should be rewarded, not with experience points, but with the loss of 2 — 5 strength points (depending on the Priestess) and an utter shattering of constitution for the rest of the day.

Since the whole purpose of the Monstermark is to measure the risk inherent in tackling a particular monster, experience points should bear a linear relationship to **M**. But there is a difficulty, no matter how you have resolved the various subjective problems I mentioned earlier. If there was a 1:1

relationship between experience points and **M** values, killing a Kobold would earn a mere 1.1 points — not worth the effort — while slaughtering an Iron Golem would earn nearly 33,000. Granted there are only two monsters with five-figure values of **M** and precious few with **M** in excess of 2,000 so that extreme might be tolerable, but the lower extreme end of the scale is quite ludicrous.

At the least, killing a Kobold should be worth 5 or 10 experience points, otherwise no-one will ever be promoted.

Men & Magic suggests, with a good deal of justification, that experience points awarded should vary according to the level of the character. If a first level fighter performed an act in the dungeon's first level which earned 100 experience points, the same act performed by a 5th level fighter in the dungeon's 4th level would earn 4/5 x 100 = 80 points. This seems very sensible, though I don't see why a 4th level fighter in the dungeon's 5th level should not get 5/4 x 100 = 125 points for the same act (*Men & Magic* rules that ratios greater than 1:1 are not permitted and would award 100 points only in the latter example). To select the dungeon's level as a modifier seems to me inappropriate, and this is recognised by the *Greyhawk* system. Now we have **M** which is an ideal modifier, and I can suggest the basic rule:

Experience points awarded are proportional to

$$\frac{\text{the Monstermark } \mathbf{M}}{\text{character's level}}$$

The constant of proportionality must be devised so as to reconcile the various subjective judgements I mentioned earlier, and for simplicity **M** should be rounded up to the next highest multiple of 5 before entering the calculation.

For the sake of some examples, let the constant of proportionality be 10, so

$$\text{Experience points} = \frac{10M}{\text{character's level}}$$

with **M** rounded up. In all examples I will assume that total experience points gained are divided equally between all the characters actively participating.

Example 1

A lone 2nd level fighter happens upon three Goblins and kills them. Since M = 2.3 for a goblin, this is rounded up to 5 and the total experience is 3 x 5 x 10 = 150. Since he is second level he gets 150/2 = 75 points for this heartless act.

Example 2

A party happens to slay a Manticore with the loss of a bit of life. Discounting those killed, three fighters (two 3rd level, one 4th), a 3rd level cleric and a 5th level MU actually participated in the scrap. M = 145 for a Manticore so the total experience available is 1450 (*Greyhawk* would say 650). Since five characters are involved they share out equally — basic 290 points each.

The third level fighters and the cleric would each get 290/3 = 96.7. Say 100.

The fourth level fighter would get 290/4 = 72.5. Say 75.

The fifth level MU would get 290/5 = 58. Say 60.

(Again, rounding up the resulting experience points for each character to the next multiple of 5 keeps the arithmetic tidy).

Example 3

A large party emerges triumphant from a melee — a complex business involving four Giant Snakes and Two Giant Scorpions. Survivors who actively participated in the melee were five fighters (two 4th level, two 3rd level and a foolhardy 1st level who couldn't find the door), two clerics (one 5th, one 2nd level) and a 3rd level MU.

M = 102 for the Snakes so the experience available is 105 x 4 x 10 = 4,200.

M = 78 for the Scorpions so the experience available is 80 x 2 x 10 = 1,600.

Total experience available is 5,800 (*Greyhawk* would say 600), shared equally between eight characters which means 725 each in basic terms.

The two fourth level fighters each get 725/4 = 181.25 or 185.

The three third level characters each get 725/3 = 241.7 or 245.

The second level cleric gets 725/2 = 362.5 or 365.

The first level fighter gets 725 — lucky dog!

The fifth level cleric has to be content with 725/5 = 145.

Example 4

A lone 8th level fighter, cut off from his mates in an unexplored part of the dank fifth dungeon level, luckily kills a Shambling Mound of 7 dice. M for this beast is 770 so he gets 770 x 10/8 = 962.5 or 965 points. Mind you, how he survived the 385 hits the thing would on average hand out is quite another matter; let's say he was clad in a Centurion tank.

(One disadvantage of this system is that the strong and high-level characters subsidise the weak and low-level; they may wish to do this, of course, but if they don't they could, for instance, agree to divide the total experience points in proportion to the level of the character in the first place).

Off-hand I would say this is not far off the mark — the results don't seem particularly generous or particularly stingy. The fighter in example 1 would need to repeat his encounter 27 times to gain promotion to third level, while our friend in the Centurion, to attain 9th level, would need to find another 124 Shambling Mounds! This may seem too many, but remember he should be picking up a fortune in GP on the fifth level and every 965 GP he finds means one fewer Shambling Mound to tackle. In that light, a factor of 10 may be too generous (and from my limited experience of the system I should say it is). If you regard the factor of 10 as too high or too low, which depends on the standard you have set in your dungeon, it is a simple matter to vary it to suit your taste. My own dungeon uses a factor of . . . ah, that would be telling.

Wandering Monsters

Another use of **M** is to give guidance on the number of wandering monsters which should appear against a party of a particular size and strength. I assume that other DMs agree with me that wanderers should present a party with just as great a threat as treasure-guardians — I don't think their presence is worthwhile if they are only there to boost experience and help the party limber up. It is an easy business to calculate the average number of hits a party can take, as the following example shows.

Example

A party consisting of four fighters (one 2nd, one 3rd and two 5ths), three clerics (one 1st, two 4ths) and three MUs (one 2nd, two 3rds) meets some wandering Bugbears. How many Bugbears should be arranged if the encounter is
(a) to be fatal to the entire party?
(b) to reduce the party by half their hits?
(c) to reduce the party's hits by two hits per character?

Assume no magic weapons, armour or spells, and don't allow either side to run away.

First, the average hits of the party:

Two 5th level fighters (5 dice +1) have average hits 2 x (5 x 9/2 + 1) = 47.

One 3rd level fighter (3 dice) has average hits 3 x 9/2 = 13½

One 2nd level fighter (2 dice) has average hits 2 x 9/2 = 9

Two 4th level clerics (4 6-sided dice) have average hits 2 x 4 x 7/2 = 28

One 1st level cleric (1 6-sided die) has average hits 7/2 = 3½

Two 3rd level MUs (2 4-sided dice) have average hits 2 x 2 x 5/2 = 10

One 2nd level MU (1 4-sided die + 1) has average hits 5/2 + 1 = 3½

Total average hits for the party = 114½.

(a) **M** for the Bugbear is 18.4 so we need $\frac{114.5}{18.4}$ = 6.22 to deliver the right number of hits. So 7 of them are likely to slaughter the party.

(b) To deliver half hits we need half the number or 3.11. 3 Bugbears will probably do the trick.

(c) To deliver 2 hits per character requires 20 hits so we need $\frac{20}{18.4}$ = 1.1 Bugbears and a single wanderer nearly meets this condition.

Not only is this method tedious — who would expect a DM to cower behind his screen for long enough to work out that lot? — but it is also wildly approximate, for one reason because it disallows the use of magic in any form. A single sleep spell for instance would upset all the arithmetic and it's hard to believe no magic swords or whatnot. In any case, a party which had no magic use at all would be pardoned for hastily seeking the nearest exit if they happened to meet 7 Bugbears.

So this method can give a very rough guide, at best, and I suppose it may be of limited use to designers who plot out their wanderers before the game. I have found it useful to roll for the wanderers and their hits when planning the dungeon (in other words to pre-plan the wanderers, though not their locations, in the same detail as the guardians of treasure). This saves a lot of time when that 6 appears, but is risky in that a large party of wanderers could happen to appear just when a much-battered and depleted group of adventurers had deservedly reached the exit stairs. Again, intuition and flexibility are the best guides — in such a case, reduce the number of wanderers on the spot; if the players find out you are bending your own rules, I hardly think they will complain.

Monsters and Treasure

Finally, another possible use for **M** but one which I don't intend to pursue. This is to regulate monsters and treasure so that a monster with high **M** always guards a rich hoard while a low **M** monster guards the peanuts. Frankly, I don't think such a constraint adds to the game and may even detract from its enjoyment. There seems to be no reason why a couple of Orcs shouldn't be left guarding 5,000 GPs — they may simply be short of Orcs willing to undertake the unsocial hours of guard-duty, and look at the pleasant surprise the party will get. On the other hand, most DMs have a grisly sense of humour and stationing a regiment of Ogres to guard a couple of hundred silver pieces may well appeal to it (again, the Ogre economy might be based on silver since they hate the sight of gold and its touch brings them out in spots). Nor do I think a DM should give such obvious clues as to the location of his richest treasure. So I do not intend to investigate this idea further, but anyone wanting to do so can profitably pursue the method already derived for experience points.

With that, I think we have now covered the obvious uses of the Monstermark, but if readers derive other applications I would be interested to learn about them. It has been a very long haul, but I hope you will think it worth the effort.

Magic Items

The Swords of Meryn Caradeth
by Roger Coult

The little that is known of Meryn Caradeth, is contained in a small fragment of poetry engraved on a plinth bearing two sheathed swords and a small wooden box:

> " . . . . . . and I passed beyond to journey 'mongst the planes
> Sought death, found life and swords that shall ever bear my name
> The Black, death black, be ever at my side
> For fear of death I ever play death's game
> Sought law, found pain and swords for heroes glory wrought
> The White, pure white, you have your sting
> Bitter experience has your lesson taught
> This quarrel's mortal wound shall see me breathe my last breath
> This night, in pain, shall see the end of old Meryn Caradeth
> I dwell on pain, for pain is . . . . . . "

One sword is white and its sheath is decorated in white enamel and golden runes, the meaning of which is unknown. The other is black, the sheath black and silver with similar runes but arranged in different patterns. The box is lined with red velvet and contains a single bloodstained crossbow quarrel wrapped in a blood-stained rag. The blood on both is still as fresh as the day it was spilled.

The White Sword

Upon unsheathing the sword the character's Strength, Dexterity and Constitution become 18^{00}. The sword is equivalent (see note below) to a +2 Magic Sword (Intelligence 0, Ego 0) which also does 2D6 damage.

If the character subsequently loses the sword (it can be stolen, forgotten, given away, impounded, etc), the three attributes mentioned immediately drop to 03.

The Black Sword

Upon being unsheathed the character loses all his/her hit points bar one. The sword is equivalent to a +3 Magic Sword (see below). It does 2D8 damage. All damage done by the sword is 'given' to the owner again bar one hit point. Thus the character rapidly gains hit points. If he/she receives more than 11, i.e. the sword does more than 12 hit points damage, the rush of energy is deemed too great to handle and the character loses conciousness before having time to deliver another blow. Unconsciousness lasting 2D4 melee turns.

If the character parts company from the sword in any way, his/her Hit Points are all again lost bar one.

The Quarrel and the Rag

The quarrel is equivalent to a +2 Magic Arrow (see below) it does 2D8 damage, whatever type of crossbow it is fired with. Upon striking its target or otherwise the quarrel vanishes and reappears in the box. It can then be used again, if the character has remembered to bring the box.

The rag can be used by Clerics in the act of *healing*. It changes the spell to heal 1D8+2 hit points if layed on the forehead of the 'patient'. Evil Clerics touching the rag must save against poison.

Notes

While magical in effect, these weapons originate on another plane of the multiverse where the weapons are not magical nor exhibit the same effects. Their behaviour is a consequence of the differing physical behaviour of the two planes. Thus they cannot be 'drained' of their magic by any means. Neither do these weapons 'feel' magical and *detect magic* has a negative result.

Dwarven Dust
by Nigel Locke

This dust is orange coloured and found in small, highly ornate silver boxes (value 100 s.p.). If all the dust in the box is sprinkled on the floor around the holder, it will act as *dispel magic* cast by a 20th level magic user.

THE MAGIC BRUSH

Fantasy Figure Painting As An Art

by Shaun Fuller

Part 1: Paints and Equipment

Before I get up on the soap box, I'd like to make it clear that anything I say in this article should be treated as purely advisory. This is because figure painting should be regarded as an art rather than a craft. Any form of figure painting has its limitations, but fantasy is free from some of the restrictions that are imposed on the military figure painters.

The terms by which you judge the merit of your own creations are your own, for not only is the fantasy painter able to employ any style or effect that his imagination can conceive and his hand execute, he is also no longer subject to that mania for detail and historical accuracy that sends the military modeller groping madly through the reference books in order to discover the exact colour of an embroidered grenade on a private's backpack of the Prussian Landwehr at 2pm on the 3rd August, 1814! Rather the painter of fantasy figures seeks his inspiration where he will and treats it as inspiration and not a command. No person or company in this field can dictate colours or dimensions to the artist. They would, at best, be wasting their time and at worst eroding the creativity of those new to the art.

Already there is a great variety in style to be seen. This diversity is shared by the figures themselves. The American *Archive* range, for instance, is chunky and yet is so inspired in design that I regard them as the best figure range available with the possible exception of the very promising new *Citadel* range. Other people would give the crown to the delicate texture of the *Ral Partha* miniatures. The more fantastic a creature, the greater is the designer's latitude. There are perhaps three reasons for the variety and quality of the figures on the market today. The first we have just mentioned. The second lies in the nature of fantasy games, and *Dungeons & Dragons* in particular. In these games there is a very close identification with the figure of the character one is playing. Each of these figures becomes an entity in its own right, rather than an anonymous blob in the serried ranks of the world domination league. The good designer makes real people and creatures, monstrous or fair, putting terror into the grotesque, and strength into the arm of the brave. The third reason is the people. Games such as *D&D* attract those with imagination and creativity. It is only natural that this is reflected in the art as well as the literature.

Having completed this soapbox oratorio, I'll begin the article and hope that it will be of some use to the newcomer in this field. If you have heard much of what I have to say before, I beg your indulgence, but I still hope that you may benefit.

Painting in 25 mm

First of all it must be remembered that a six foot man is only 25 mm. in height and there is correspondingly less depth in the relief. This is important in regard to the effects of light and shade. If the colours are simply painted on, it doesn't really work. The figure will look flat and doll-like. There will be no character — just colour. Therefore we have to compensate by exaggeration. The way to do this is to make those areas which will be in shade much darker, and those features which stand out — the highlights — much brighter. Not only does the end result look far more realistic, but the figure ceases to be a mere, coloured playing piece and becomes a work of art. The features of the best figures are already quite prominent. The object of the artist is to bring these out to the best advantage. Not only must parts be made lighter or darker, but it is also necessary to bring them out in outline for clear definition. The brush is a tool that can be used to bring out the flow of a wizard's robe, the glint of barbarian mail or the rough and revolting skin of a troll. The style is your own, but as a guide line exaggerate everything and you can't go wrong.

The Paint

I shall not give the subject a lengthy treatment here as each medium really deserves a separate article. The method of painting used to depend on whether the figures were for use or show. This is no longer the case.

White Undercoat Spray:
If you're using water soluble paints this is absolutely mandatory and should really be used as a key for oil and spirit based paints too. Not only does it bring out the colours, it also acts as protection from the dreaded lead rot. Although some people like pale green, I have found that matt white works best. *Humbrol, U-Spray,* and *Hobby Paints* are all quite suitable. Ordinary matt white paint can be used, but the advantages of a spray finish are considerable.

Enamels:
Generally speaking these are readily available and are the simplest to use. They are also cheap and dry fast. They are not to be underrated on this account as, if mixed properly, they present a very practical medium and can produce excellent results, even in the most specialised applications. Ideally, they should be used in combination with more esoteric paints as highlighting agents. The chief disadvantage of enamels lies in their tendency to dull when mixed — so try to get a wide range of colours.

The most common makes are *Humbrol* and *Airfix*. Of the former, it is their range of *Authentic* colours that are of the most obvious benefit to the figure painter. Apart from some of the *Railway* and *Aircraft* colours, they are a nice flat matt. They give the best possible covering power when judiciously thinned, and have a fine smooth consistency. Their ordinary range of matts is rather too thick for fine figure work but the gloss pots can be most useful. *Humbrol* also do a rather convenient range of matt sprays including a matt white which is excellent for undercoating.

Airfix are more common in the toyshops but tend to have a rather chalky consistency and are glutinous in comparison. However, the matt white makes a first class base undercoat for water soluble paints by virtue of these very qualities.

Neither of the two brands above are suitable for fine airbrush work, both having a tendency to clog. The paint for this is *Hales' Pactra*. It is of an entirely different consistency being more transparent in application and flexible when dry. Best of all, it is ultra fine and does not clog airbrushes. *Badger,* one of the airbrush manufacturers, recommends it.

For thinners use white spirit which is cheaper than turps, but keep it out of the paint pot whatever happens. Enamels should be stored in a cool place and used in a cool room.

Oils:
For the moment you can forget normal artists' oil colours. They take far too long to dry to paint 25 mm. figures, unless you are going in for a competition at two weeks a figure. There is an alternative. A range by *Windsor & Newton* called *Alkyd* has a relatively short drying time and is available from most good art shops. This gives you the best of both worlds. The range of colours in these is quite wide and you won't find yourself using much. These are still a paint for the expert, but their blending

and transparent qualities are extremely attractive. The range of techniques and uses for oils are far too varied for the present article but — briefly — thin with turps for a matt effect and linseed oil for gloss. When thin they are transparent (I have used thinned oils very successfully for shading enamels; and for subtle blending on the figure itself they are unbeatable).

The only criticism that one can level at oils in general is that some types tend towards lumpy pigmentation and that even the experts when blending cannot avoid what is for 25 mm a very rough texture.

Acrylics:
Like oils these really rate longer treatment so a brief note will have to suffice here.

Many modellers use acrylics exclusively and most of the artists I know like them. They are extremely flexible in use and are water soluable. Their brilliance makes them *THE* paints for colour highlighting over enamels and very bright effects. On the adverse side they can be tricky in use and tend to be rather too awkward for general application so experience is an advantage here.

Poster Paints:
Water soluble poster paints aren't really of much use to the miniatures' artist; they tend to be too thick with coarse pigmentation and a colourless medium. Even so I heartily recommend the fluorescent colours by *Rowney*. These are fine pigment acrylic type compounds, and are, as far as I know, the widest range of fluorescent colours available. They are ideal for torches, light sabres, and monstrous eyes, as well as highlighting applications.

Oil based poster colours are a classic modellers' paint. They are only obtainable from specialist model shops, and are ideal for clothing and tougher than the ubiquitous *Humbrol*, although they tend to be rather thick and come expensive.

Inks:
Artists' inks are indispendable to many of my special effects, for they are really the only truly transparent colours available, exceeding anything else in this respect. Properly used inks can be truly amazing but it does take experience to master the many possible effects. The best idea is to practice and experiment to see what effects you can achieve.

Designers' Goache:
Very good for horses, leather, and clothes with fine washes, but I don't use it widely because thinned down oils or enamels are as effective without the disadvantages attending a water soluble paint.

Varnish

Available from *Hinchliffe Models Ltd* in a spray can is a matt varnish which actually works. The wise painter will first cover his painted figure with a stronger and more transparent gloss polyurethene varnish and then give it a thin spray of the matt varnish. This gives a good matt effect and is preferable because a thick layer of the spray does tend to dull and yellow the colour.

When using varnish it is possible to employ the thinnest washes and softest paints without fear of their rubbing off. I also recommend bases if the figures are to be used in gaming.

The Brush

There's only one kind of brush for miniatures' work — fine sable artists' water-colour brushes. Even for covering large areas, they give significantly better results. Obviously the choice of makes is subject to local availability. *Rowney* and or *Windsor & Newton* are just the job. Japanese nylon brushes may be cheap and durable but they really aren't good enough. Whatever you do, don't waste your money on the so-called modellers' brushes that are marketed by a very well known paint firm. Frankly, I'd rather paint with a matchstick.

Sable brushes cost money, but if you think of them in terms of figures not ruined by bodged paint jobs, they don't seem so expensive after all. When buying, go for a variety of sizes. The really small brushes (00, 000) don't carry much paint at a time, whilst a 0 or a 1 will carry plenty. Remember it is not the nominal size of the brush that matters so much as the size of the point on the tip. If you can only afford one brush go for a good quality size 1 or 2. The better the tools the better the work (I use size 1 for just about everything). When you've chosen the size you want check the point by moistening the end and by all means have a chat with the assistant.

As I've just said the results you achieve depend on the class of your brush and a good brush will have all of the following qualities:

1: A fine tip that will deliver a very precise amount of paint exactly where it's wanted. Again you don't need an ultra small brush to do this.

2: Long, neatly bound hairs; a brush with scraggy bristles poking out in all directions is going to make a nasty mess of your tenth level Paladin. Keep it for dry brushing chain mail — as will be described in the concluding part of the article, next issue.

3: Newness. When your faithful brush has become worn or splayed out from use give the poor thing an honourable retirement. You can afford to be fussy because a bad brush can ruin a lot of figures and often the artist thinks that it's his painting that's doing it.

Brush Care
1: ALWAYS, ALWAYS, ALWAYS clean your brush with thinners between colours and with soap and water after use. If you leave paint to dry on the brush it forms a deposit on the root that causes splaying and will probably end up putting little particles of dried paint in the mixture which will give your masterpiece the subtle texture of a bomb site. Acrylics are notorious for clogging and are next to impossible to get out when dried.

2: Never leave your brushes in the thinners bottle unless you like painting sideways.

3: Keep two jars of thinners, one dirty and one clean. The reason should be obvious.

4: When painting never push the brush forwards. Always draw it across the figure trailing the hairs so that the paint flows from the root to the tip. This needs a very light touch when painting into cracks. If you paint the wrong way the root will become irreversably gunged, and you shouldn't even have paint that far up the brush anyway.

Preparation

As far as this article goes I shall assume that you are using *Humbrol* authentics or something similar. Whether you are blending your colours or using them straight, you are going to need a palatte of some sort. The best job for this is a piece of clean polythene as in plastic bags. You can get a wax paper tear off palette but these tend to disintergrate and are utterly useless for water based paints. You are also going to need a roll of kitchen paper for wiping the brushes and for cleaning up paint spills. Use a key or a screwdriver to lever the lids off the paint Finally, try and work in a dust free room with plenty of light and without interruption.

THE MAGIC BRUSH

Preparation

The Mix

Stir the paint with the wooden end of your paint brush or simply gouge out a bit of the sticky pigment in the bottom and deposit it on the palette. This is an operation that practice will make perfect. Too much pigment and not enough medium can make for a weak, flaky, finish. Too much medium can make the paint glossy and slow to dry. Obviously, wipe the end clean.
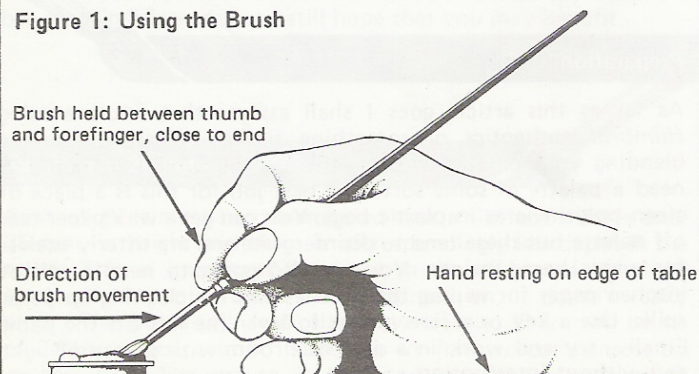
Thinning

Dip the brush into the thinners and add the liquid so acquired to the paint on the palette. When doing this always use the drawing motion, described last issue, so that the hairs are kept straight and the paint flows in the right direction. When mixing don't push the brush, splay the hairs or drive paint into the root. When the mix is fairly liquid but of a usable consistency wipe the brush, dip it in the thinners and wipe clean again. As a guide to the correct consistency remember that the paints will have to be thin enough to flow but thick enough to give a good cover all over, unless you are using a wash. With a clean brush you will get exactly the amount of paint you want to take up from the mixture in the right place which is, of course, the tip. Remember: too little and you have to keep going back; too much and the paint will go where you don't want it. It is best, perhaps, to err on the side of caution as it's easier to get another brush full than to go back to paint over your mistakes. Don't keep your mixes waiting too long as they get glossy and lumpy.

The Brush

The Use of the Brush

Whatever paint you are using, there is only one proper way to use a sable brush. Draw it lightly along the surface at an angle (fig. 1) so that the properly thinned paint flows naturally off the brush onto the surface in precisely the right place and quantity, without causing blobs or disturbing any paint that may be underneath. The necessity for care here cannot be overstressed.

Figure 1: Using the Brush

Brush held between thumb and forefinger, close to end

Direction of brush movement

Hand resting on edge of table

Holding the Brush

This is very much a matter of personal style, but it is most important to have both hands resting on the table for steadiness and precision. By doing this, and holding the brush close to the bristle, one can do the most intricate work with ease. Try to be as comfortable and relaxed as possible.

Painting

There are two basic ways to paint a figure. The first is simple and quick and only employs two coats apart from the undercoat. The second requires a great deal more attention to be given to shading, and many more blends. This more painstaking method is my own standard treatment of 25mm. Both require a matt white undercoat and the use of black line shading before colouring.

Undercoat

To start, spray, brush or otherwise deposit a matt white or pale green undercoat. Take care not to lay it on so thickly that it obscures the detail or so thinly that it will rub off when painted over. The most effective and economical way to accomplish this is to stand all your figures in a group and spray them from various positions at a distance of one foot. Short bursts are best here. Give the undercoat plenty of time to dry. If this isn't done, a spirit based paint will run, and a water soluble paint will form little globules covering the figure

Black Outline

This stage is probably as important as any other. The basic object is to outline and separate the shape of the various different parts by painting a matt black into the recesses that separate them and by blacking out those areas which would be in deep shade anyway.

No matter what sort of paint you are using, the best one for this particular purpose is a matt black *Humbrol* which flows easily, covers well and dries quickly.

Imagine that you are drawing a three dimensional line drawing — almost a cartoon. Obvious examples of those areas to be painted in figure 2:

1: The cuff of the robe where it meets the bare arm.
2: Either side of the belt.
3: Between the arm on the left and the body.
4: Between the legs.
5: Where the cloak folds over the body.
6: Around the buttons and belt plates.
7: Around the sword and its bindings.
8: Between the lips, under the hair and around the eyeball.
9: In the recesses of the helmet.
10: Between the fingers (unless using full technique).

Finally black out all armour, especially chain mail.

Figure 2: Black Lining
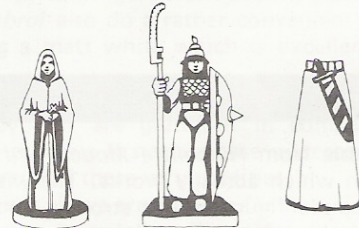
This should pick out the relief of the figure and make the different parts look separate, which they would not otherwise have done in a solid figure of this scale. This is the beginnings of a realistic 3-D effect.

Use a fairly thin mix for this because it flows into the cracks more easily. Also, unless dealing with really fine detail, it is best to err on the side of excess and make these black lines as bold as possible.

When you have done this, check to see that you haven't gone over areas that should stand out. If you have, just pick them out in white again.

You should now have a figure with clearly defined features and proper bordering. When dry, it is ready for the next stage.

'Painting by Numbers':

This is the easy way. I have called this technique 'painting by numbers' and here's why: at the simplest level you simply colour in the white areas with washes or a simple highlight.

Mix the first colour in a slightly darker shade on the palette than is wanted on the finished model. The reason for this is that thinned out paint is rather transparent, which will mean that the parts in relief will be considerably lighter and brighter because of the white underneath. When darkening, refer to the mixing chart (fig. 4) and remember that the thinner the blend the lighter the result. The right shade and consistency will enable the paint to run naturally into the creases and create its own shading effect. As always, keep the paint on the tip of the brush. Beware of swamping the wrong areas with too much or too thin paint.

Make sure that you paint in the white portions right up to the edge of the black lines. Do this with each successive area in its respective colour. Don't succumb to the temptation to soak the whole thing, including the blacked out bits, to save time. If this is done, the lighter paint will form pools in areas which should be blacked out. The final touch to this quick method is the highlighting. To do this make a very pale mix of each colour you have used and use them in small but bold strokes on those portions of the figure which stand out the most and would be brightest in a strong light from directly above, i.e. the tops of outer folds of cloth, tips of noses, upper cheeks and muscles. Do this lightly and take care not to brush up the previous coat.

Highlighting is one of the areas in which your own personal taste and style comes out most clearly. Bold highlighting looks particularly good on the playing board.

For the armour, simply brush a semi-dry mix of silver and black lightly over the parts where you want the effect to be.

Full Shade and Highlighting

This method uses the four basic elements of line, shade, normal colour and highlight originating from 54mm painting technique.

Primarily, with certain exceptions, washes are not used and the shading is done more gradually by careful blending of different hues (in oils the blending goes much further as the paint is actually mixed on the model).

To begin with, put on the undercoats and outlines in black as described. However, in this case, the black outline should be used far more conservatively and not at all in the lighter shaded areas — between the fingers for instance. The lines should be thinner as they will be supplemented by the darker shading.

For the first stage of shading make a very deep, dark mix of the desired colour. Refer to the table (fig.4). Simply adding black to the mix is no way to do this. It is lazy and looks bad. My colour chart should in no way be taken as gospel (I like it, but I'm not at all sure of it). However, it does seem to work. What I have done is to try and include the different elements that will lighten or darken the colours listed. The quantities and proportions in which you add them are dependent on the exact hue and your own personal judgement. Generally, to shade any colour, use a deeper version of that same colour, at least in the case of red, yellow, blue, green, etc. Highlighting is rather more complicated, especially as something light and whitish — the universal colour of reflected daylight — should be aimed for. But again a straight mix with white isn't really on.

The deep shading should be a fairly strong mix. Use it along the edges of the black line in a thick strip where the edge is recessed and a narrow one where it is slight. Next, use it in the deepest folds of the clothing and — in the case of the hands — between the fingers. Use it to exaggerate the facial features and as a general cover for the lower surfaces close to the ground.
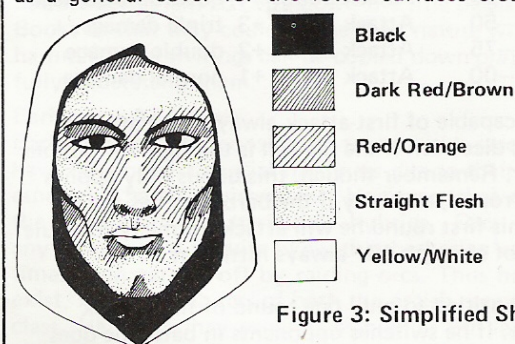

- ■ Black
- ▨ Dark Red/Brown
- ▨ Red/Orange
- ▦ Straight Flesh
- ☐ Yellow/White

Figure 3: Simplified Shading Example

As a guide, stand your figure under a strong light and watch where the shadows fall. Just try to continue picking out the three dimensional qualities.

Figure 4: Colour Chart

Base Colour	Deep Shade	Normal Shade	Highlight
Black	Black	Brown*/Grey/Black	Dark Grey/Light Blue* or Light Tan
Grey	Black	Black	White
Dark Blue	Black/Deepest shade of Blue	Deep Blue	Light Blue
Purple	Black/Dark Blue	Dark Red/Dark Blue	Scarlet/Dark Blue/White/Violet
Crimson	Black	Black/Dark Blue	White/Dayglo Pink*
Scarlet	Dark Red/Black	Dark Red	Orange/White/Dayglo Red*
Orange	Black/Scarlet	Scarlet	Yellow/White
Yellow	Orange/Scarlet	Orange/Light Brown*	White/Dayglo Yellow**
Light Green	Dark Green/Dark Blue/Black	Dark Green	Yellow/White
Dark Green	Black/Dark Blue	Dark Blue	Apple Green (Dayglo*)
Tan	Yellow/Red Brown/Black	Yellow/Red Brown	White/Lemon Yellow
Brown	Black	Black/Dark Red/Orange	Scarlet/White/Orange/Grey**
Flesh	Scarlet/Black/Dark Red	Scarlet/Orange	Yellow/White
Dark Flesh	Black	Dark Red/Black	Orange
Dark Leather	Black/Scarlet	Black/Scarlet	Orange
Ivory	Yellow/Brown	Yellow/Tan	White
Iron	Black	Gunmetal/Dark Blue	Silver
Brass	Black	Dark Brown (thinned)	—
Gold	Black/Dark Brown	Dark Brown/Orange (thinned)	—

* Optional depending on circumstances
**Dubious, depending on taste

Next, use the plain shading — a lighter blend of course — and use it to blend in the edges of the deeper shade. Always paint slightly over the edge of the preceeding, darker, shading, in order to avoid white patches and also to give a more gradual effect. This is the shade you want to use to emphasise the lesser folds and as a general cover for the remaining lower or shadowed surfaces. It is up to you how many stages of shading you use but in this scale you don't want to use too many. Obviously the unshaded colour will be over those areas that the shading has left out. When this is done, tidy up mistakes and leave to dry.

Highlighting

If you're in a hurry one stage of highlighting is usually enough to set the figure off but I prefer to build up an effect by the use of progressively paler mixes covering a smaller, more prominent area each time. The cumulative effect of this is rather impressive and works especially well on flesh. The best plan is to do a fairly dull highlighting on vertical areas and use a really light mix for features that would reflect the light such as on top of finger/knuckles and cheekbones. Allow plenty of time for separate coats to dry. Care taken in this stage pays dividends.

What to Avoid

The general causes of messy work are:
1. Ratty, mucky, cheapo or geriatric brush.
2. Crud in the paint pot; dust on the figure; sand in the palette.
3. Mucky fingers, or not holding the figure by the base.
4. Filthy thinners; putrid paint.
5. Impatience and not enough drying time.
6. Mix too thick to dry properly.
7. Exhaustion
8. Forgetting to put the top on the paint pot.
9. Continual alteration.
10. Inexperience.

Additional Points

These are just a few clues as to successful methods. For eyes in 25mm first of all paint out the whole eye in black and then put a spot of white each side of the pupil. This gives you eyebrows as well as whites and pupil. For fur and hair, a thin wash of the desired colour and then a very dry light mix of white brushed lightly over the top works very well. For metals, try painting on the metal paint straight out of a tin, allow it to dry very well, then paint over a thin mix of black and gloss varnish very carefully so as not to raise the previous coat.

For chain mail, paint black overall and then dry brush it with silver and black mix.

When highlighting and shading cloth try to use bold, straight strokes to reflect the way in which the material tends to fold. For leather, use a medium dark wash and leave — don't highlight it unless you have to — and use gloss varnish.

For the lighter shades of cloth and suchlike, except flesh, remember to shade very lightly as the lighter the colour the more it naturally reflects the light so the shading is less extreme.

For animals, blending and gradual shading are far more desirable. Don't do too much highlighting. Try an overall semi gloss finish instead.

Finally, if your using a matt spray varnish afterwards, don't forget to put a little dab of gloss over eyes, metals, leather, painted shields, etc.

The Barbarian character class was first published in White Dwarf 4, *before the publication of the* Advanced Dungeons & Dragons *rules. The current widespread use of these advanced rules necessitated some minor changes in Barbarians, published as an addendum in a later issue. I have taken the liberty of inserting these at the appropriate points in the original description to improve the continuity of the piece.*

The Barbarian

by Brian Asbury

While having many similarities to other character classes, barbarians comprise a separate character class of their own, and are not a sub-class of any other type. Prime requisite is constitution, because one of the barbarian's greatest assets is his sheer hardiness and capacity for survival. Thus a barbarian makes saving-throws as for clerics, but as though he is 4 levels higher than his actual level. Although anyone with a decent (i.e. average) constitution can become a barbarian, which should give players something to do with those useless-in-everything-but-constitution characters, for a barbarian to have full abilities, then a strength of 13+, a dexterity of 13+, an intelligence of 9+ and a wisdom of 14+ are needed.

Barbarians are twice as resistant to disease as other classes. This class, however, is rather limited as regards armour. Levels 1-5 may use a shield but no armour; levels 6-10 may wear leather armour and shield; and level 11 and above may wear chainmail and shield. Barbarians dislike plate armour and never wear it. Their natural instinct for self-preservation, though, gives them a better chance of dodging blows, regardless of dexterity. Therefore, they should always be treated as though one armour class higher than their actual class.

All barbarians have a number of basic abilities. These are:

High Resistance to harm (as explained above)
Listening for noise (as human thieves)
Tracking
Sensing Danger
Fearlessness

There are also a number of special abilities which a barbarian might have if he has the necessary requisities. These shall be explained later.

Levels		Experience Points	Hit Dice (6-sided)	Sign Lang.	Hear Noise	Sense Danger	Follow Trail	Catch Missile	Chance to Fall
1	Tribesman	0	1+1	10%	1–2	1	40%	5%	20%
2	Savage	1,500	2+1	20%	1–2	1	45%	10%	19%
3	Clan-brother	3,000	3+1	30%	1–3	1	50%	15%	18%
4	Hunter	6,000	4+1	40%	1–3	1–2	55%	20%	17%
5	Warrior	12,000	5+1	45%	1–3	1–2	60%	25%	16%
6	Brave	24,000	6+1	50%	1–3	1–2	65%	30%	15%
7	Elite Warrior	48,000	7+1	55%	1–4	1–3	70%	35%	14%
8	Headman	96,000	8+1	60%	1–4	1–3	75%	40%	13%
9	Chief	200,000	9+1	65%	1–4	1–3	80%	45%	12%
10	War-chief	325,000	10+1	70%	1–5	1–4	85%	50%	11%
11	Laird	450,000	10+2	75%	1–5	1–4	90%	55%	10%
12	Laird, 12th	575,000	10+3	75%	1–5	1–4	95%	60%	9%
13	Laird, 13th	700,000	10+4	75%	1–6	1–5	100%	65%	8%
		(+ 125,000 per level)	(etc)	(max)		(max)		(etc)	(etc)

Weapons

Most barbarians are limited to using sword, spear and hand axe. However, for every point of dexterity the barbarian has above 12, he may use 1 additional weapon — longbows, two-handed swords, slings and daggers being the most favoured. Also, barbarians of strength 13+ may use battle axes. The more sophisticated weapons such as the arquebus and compound bow are prohibited.

Explanation of Barbarian Abilities

Basic Abilities

Tracking: Like the ranger sub-class, barbarians have a chance of tracking most types of creatures. However, the figures given in the table represent the *base* chance of tracking, and must be adjusted as follows:

Conditions	Subtract From Chances To Track
OUTDOORS	
Hard ground	−20%
Raining or snowing	−30%
Quarry crosses water	−40%
DUNGEONS	
Trail runs through normal passage	−25%
" " " normal door	−30%
" " " a trapdoor	−40%
" " up/down a chimney	−50%
" " through a secret door	−55%

Fearlessness: Barbarians are hard men and do not usually panic and thus spells and other devices employing Fear will, 50% of the time, cause barbarians to become wild with battle-rage and fight as berserkers, rather than flee.

Sensing Danger: This does not detect anything specific, but it does tell the barbarian that something, somehow, is wrong. Any time a barbarian is walking into a situation which might endanger him, the DM should check, by rolling a D6 whether he senses danger. Range — about 20 ft, regardless of any obstacles (including doors and walls) in the way. The ability to sense danger is merely an instict. It is not directional, and does not give any clue to what form the danger takes. Thus a barbarian *cannot* walk up to a door and automatically say "Aha! Twelve feet beyond this door is an evil magic-user!" He would simply *feel* that something was wrong, but would have no idea of where the source of danger lay or what it was. A barbarian who fails to sense danger in a given situation *cannot* try again.

Special Abilities

Sign Language: This ability is possessed by all barbarians of intelligence 9 plus. Sign Language affords the barbarian a chance of communicating with any intelligent creatures encountered, by means of signs and gestures.

First-attack Ferocity: Barbarians of strength 10+ always hit at +1 because of their natural ferocity. In addition, if strength is 13+ and dexterity at least average, then they have 75% chance in any melee in which they gain the initiative, of using First-attack Ferocity. This is their chance of whipping themselves up into such a frenzy that their first attack *only* will be carried out at a bonus, and do double damage or better. All barbarians who succeed in striking with first-attack ferocity automatically do at least double damage if they roll 75 or less on percentage dice. Before the first-attack strike is made, roll percentage dice and consult the following table to see what the effects will be:

Barbarian Level	% Die-Roll	Effects
1-4	01–75	Attack bonus +2, double damage
	76–00	Attack bonus +1, normal damage
5–8	01–25	Attack bonus +3, triple damage
	26–75	Attack bonus +2, double damage
	76–00	Attack bonus +1, normal damage
9 and up	01–25	Attack bonus +4, quadruple damage
	26–50	Attack bonus +3, triple damage
	51–75	Attack bonus +2, double damage
	76–00	Attack bonus +1, normal damage

Thus a barbarian capable of first-attack always gains at least +1 on attack dice even if the die-roll is too high for double damage or greater. Remember though, this bonus only applies to the *first* melee round, and only if the barbarian has the initiative. After this first round he will attack normally; the rule about barbarians of strength 10+ always hitting at +1 is cancelled.

A barbarian is entitled to only one round of first-attack ferocity per battle. If he switches opponents in battle he does *not* gain any first-attack bonus on his new opponent. Similarly, if the barbarian's first-attack ferocity attempt misses, he does *not* get another attempt in the next round.
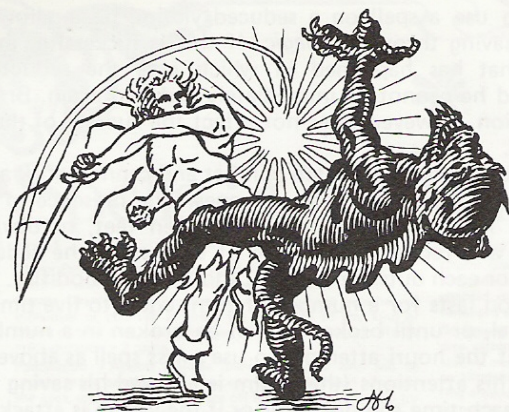
Climbing: Barbarians of dexterity 10+ can, like thieves, climb nearly sheer surfaces. However, their base chance to fall is 20%, not 13%.

Catching Missiles: Barbarians of above average dexterity have a chance of actually *catching* any missile aimed at them in mid-air. The chances of achieving this feat increase by dexterity, i.e.

Dexterity	Bonus to chances of catching missile
13-14	None
15-16	+5%
17-18 (01-50%)	+10%
18 (51-75%)	+15%
18 (76-90%)	+17%
18 (91-99%)	+20%
18 (00%)	+25%

Note that no barbarian is able to catch spell-generated magic missiles or bullets, and missiles with a magical bonus reduce the barbarian's chances of catching by 5% for every positive point of bonus (e.g. a +3 magic arrow would subtract 15% from the barbarian's chances of catching it but a -3 cursed arrow would actually *add* 15% to the barbarian's chances of catching).

Hiding in Shadows
Barbarians should be able to hide in shadows if they are to emulate the feats of the greatest barbarian of them all. However, the minimum requisites for the barbarian to have the ability are dexterity 11+ coupled with intelligence 9+. They do not gain bonuses on this ability for high dexterity as thieves.

Barbarian Magic
Barbarians may use any magical items usable to fighters or thieves, except for those items of weaponry or armour already prohibited to them. Few barbarians are literate (only those with a Wisdom score of 14+), and so most will be unable to use magical Books or Runes. However, this also means that they are immune to the effects of such items. This does not of course, apply to literate barbarians.

Illiterate barbarians *cannot* copy down magical writings which they cannot understand. To do this would be to set off any harmful effects which the writings might endow upon the reader, e.g. the damage done by a Book readable only by magic-users. This is because there have been cases of parties using non-literate barbarians to copy down the title pages of magical Books so that they could divine their nature without risk of harm. Magical writings can be copied down *only* by those who fully understand them.

Barbarians As A Race
Barbarians can be considered to be a sub-race of humans who have developed a special hardiness due to their upbringing in an especially harsh environment. However, that does not exclude the possibility of barbarian hybrids. Orcs will breed with anything, and it is quite likely that barbarian women have many times been carried off by raiding orcs. Thus half-orc barbarians exist, having attributes of both the orcish race and the barbarian class. Half-orcs may progress as high as 8th level as barbarians; also, they may elect to be split barbarian/thieves or barbarian/assassins, dividing experience equally between their two classes.

THE BEST OF TREASURE CHEST

POTIONS

POTIONS OF TRUTH
by James Meek

The effect of this potion will last 6 hours but will only become apparent when the drinker tries to tell a lie. As soon as the drinker is asked any question, the DM should hand him a note stating that he must answer in absolute truth. A possible sad example:

Huge Troll Chieftan: Oh tasty little hobbit, am I not the most handsome of all creatures?

Trapped Hobbit Thief: Actually, I think you are so disgustingly ugly that it is hard to see your blackheads for your acne, and I wouldn't be surprised if flies dropped dead on contact with your filthy skin, and I bet you can't see your feet because of your fat stomach, and aghhh..."

POTION OF ULTRAVISIBILITY
by David Bell

This potion causes the drinker, his armour, his weapons, and other equipment carried, to glow brightly. In darkness he will light the same area as a torch. In daylight he will glow visibly. The effect *commences* after 1d4+1 melee rounds and persists until the death of the victim or for 1d4 turns, whichever is sooner. Invisibility and hiding in shadows is impossible for the victim, and, because of the diffuse nature of the light, there is a 15% penalty for anyone else trying to hide in shadows within 40'. *Darkness* acts as a *dispel magic,* but remember that a potion counts as 12th level. (*Player's Guide* p. 47, *dispel magic* description).

The colour of the light has been known to vary with the victim's alignment. The clerical *prayer* spell has also been known to suffer from a similar side effect, so the potion may affect morale, especially of an enemy. In a melee such a source of light can be invaluable.

It is, of course, easily mistaken for a potion of *invisibility,* and vice versa, with possibly disastrous results in an emergency.

DRAGON BREATH POTION
by Kathryn George

The potion enables the drinker to breathe, once only, as one type of dragon (determine at random or DM's decision as to which type. (Dragon-turtle, gorgon, etc. can also be included). The potion must be used within 6 turns of drinking. If Alchemists are available, they may be able to tell what type of potion it is, but not what type of breath weapon.

POTION OF X-RAY VISION
by Jim Willoughby

This potion enables the drinker to see through doors, walls, etc to a maximum radius of 60'. He cannot, however, see through metal. The effect lasts one week. The potion is a purple liquid with a sparkle effect given off when held against light.

THE POTION OF MIND REST
by Stephen Bland

The drinker of this potion is only affected if he has psionic power. 25 psionic strength points will be restored and all psionic use in the following 3 turns will only cost half its theoretical amount.

The HOURI character class

by Brian Asbury

Houris, or Nymphs of Paradise to give a better description, are a very specialist sub-class of magic-user, their speciality being concerned with spells of charming and similar abilities. They also have the power to seduce single individuals and the ability to hide in the shadows as thieves.

Prime Requisite for an Houri is Charisma (their voluptuously alluring beauty being very evident), which must be at least 15. Intelligence and Dexterity must also be at least 10. Houris may use only daggers as weapons although at the referee's discretion they may also use long, thin pins such as hat-pins, which can be easily concealed on the houri's person and do 1-3 points of damage. They may wear no armour; indeed, the less clothing they wear, the more effective they are. Houris must be human, elven or half-elven.

Levels	Experience Points	Hit Dice (D4)	Spells and Levels					
			1	2	3	4	5	6
1 Novice	0	1	1	—	—	—	—	—
2 Flirt	2,000	2	2	—	—	—	—	—
3 Charmer	4,000	3	3	1	—	—	—	—
4 Allurer	8,000	4	3	2	—	—	—	—
5 Temptress	17,000	5	4	3	1	—	—	—
6 Enchantress	35,000	6	5	3	2	—	—	—
7 Vixen	70,000	7	5	4	3	1	—	—
8 Courtesan	150,000	8	6	5	3	2	—	—
9 Seductress	240,000	9	6	5	4	3	1	—
10 Houri	330,000	10	6	6	5	3	2	—
11 Nymph	420,000	11	7	6	6	4	3	1
12 Nymph, 12th	510,000	11+1	7	6	6	5	4	2
13 Nymph, 13th	600,000	12+1	7	7	6	6	5	3
14 Nymph, 14th	700,000 (+100,000 per level)	12+2 (+1 per level)	7	7	7	6	6	4

(etc)

Seduction

Seduction is an ability which is used against individual males of the same or similar race as the houri. The houri's percentage chance of seducing is given by the following formula:

$$\frac{\text{HOURI'S LEVEL}}{\text{VICTIM'S LEVEL} + \text{MODIFIER(S)}} \times 100$$

Modifiers:

Victim is a:				
Fighter	+3	Assassin/Ninja	+5
Thief	+3	Druid	+5
M.U.	+4	Barbarian	+2
Cleric	+5	Half-elf/Elf	+1
Paladin/Ranger	+7	Gnome/Dwarf	+2
Monk	+8	Hobbit	+3
Bard	+3	Half-orc/Orc	−1

These modifiers are cumulative, e.g. an elf-fighter has a modifier of +3 (fighter) +1 (elf) = +4.

Elven houris subtract 1 from the modifier, but are limited in progression to the 6th level (Enchantress).

A seduced male will drop his weapons, become oblivious to his surroundings, and attempt to engage the houri in a passionate embrace. In such a state he is extremely vulnerable to any of the *kiss* spells (see below). However, if the houri does attempt to use a spell on a seduced victim, he is allowed to make his saving throw vs. *magic*. If this is successful, then he realises what has happened in which case the seduction is broken and he cannot be immediately seduced again. Breaking the seduction, however, does not affect the success of the spell being used.

Seduction *cannot* be used in combat and cannot work against other females except homosexual ones. The presence of other individuals in close proximity (within ten feet, or obviously watching) will reduce the chance of success of the seduction attempt. For each outsider present, add 1 to the modifier.

Seduction lasts for a number of turns equal to five times the houri's level, or until broken. It can be broken in a number of ways, i.e. if the houri attempts to use a *kiss* spell as above, or if she resists his attentions (the victim is allowed his saving throw vs. *magic* each time she does so), or if the victim is attacked. In the latter case, the seduction is instantly broken.

Seduction can only be used on a single individual at a time; an houri may use the ability a number of times per day equal to her level.

Example of the use of Seduction

Lirona the houri (third level) is attempting to seduce Thaddeus Leaf the thief. The scene is the Red Dragon Inn. There are a number of other people present but no-one is paying any particular attention to the pair. Both are human. Thaddeus is 5th level.

Lirona's chance of seducing Thaddeus is equal to 3 (her level) x 100 divided by 5 (Thaddeus' level) + 3 (modifier for a thief), i.e. 300 ÷ 8 = 37.5%. Lirona rolls 30. Success! Thaddeus is taken in by her charms. However, a bar is no place for a romantic liaison. Eagerly he accompanies her upstairs to her room, his arm around her slim waist, not suspecting the fate that awaits him when he gets there . . .!!

Optionally, the houri's state of dress can affect seduction. Add 1 to the modifier if she is heavily clothed, subtract 1 if she is scantily or provocatively clad, and subtract 2 if nude. (The latter state, however, will not be terribly practical under most circumstances, and might well lead to arrest for indecent exposure).

Houri Spells

Level 1
1. Charm Person
2. Ventriloquism
3. Detect Charm
4. Fascination*
5. Silvertongue
6. Impotence*
7. Kiss of Healing**
8. Kiss of Sleeping**
9. Kiss of Waking**
10. Read Languages

Level 2
1. Charm Normal Animals
2. Influence
3. Transfer Charm
4. Jealousy
5. Ecstasy*
6. Dispel Charm
7. Kiss of Strength**
8. Kiss of Weakness**
9. Kiss of Wounding**
10. Communicate

Level 3
1. Hold Person
2. Love Spell
3. Resist Charm
4. Suggestion
5. Charm Giant Animals
6. Bodyguard
7. Kiss of Slavery**
8. Disguise

Level 4
1. Charm Monster
2. Resist Charm, 10'
3. Lovesickness*
4. Confusion
5. Hate Spell
6. Enchant Female
7. Kiss of Paralysis**
8. Kiss of Linking**

Level 5
1. Change Sex
2. Hold Monster
3. Kiss of Disfigurement**
4. Kiss of Death
5. Kiss of Change**
6. Stop! Spell**

Level 6
1. Heartbreaker
2. Mass Charm
3. Blown Kiss
4. Kiss of Regression**
5. Geas
6. Kiss of Life

*Spell affects only male humanoids.
**No saving-throw allowed.

Notes

Houris *cannot* be lawful.

As an option, male equivalents of houris may be used, as the Gigolo character class. Simply read "male" for "female" and vice versa.

As a second option, the referee may give the houri a 15% chance per week of contracting one of a variety of somewhat unpleasant, contagious diseases!

Elven houris and human houris with 15+ dexterity have the option of operating as split houri/thieves, gaining the abilities of both but retaining the houri's limitations as regard weapons and armour. Of course they will need to gain the combined experience required by both classes to progress up the levels.

✳ HOURI ✳

Spells & Magic Items

Level 1

Charm Person : As per magic-user spell.

Ventriloquism : As per magic-user spell.

Detect Charm : Enables the houri to ascertain whether an individual or creature is under the influence of any kind of *charm* or *hold* spell, including *geas, quest, suggestion,* etc. Range = 6", duration = 2 turns.

Fascination : Affects a single (male) individual who will be unable to do anything at all except follow the houri wherever she goes, unable to take his eyes off her. If attacked he will try to beat off any opponents including his own comrades, in a berserk fury, in order to continue moving towards the houri. Range = 12". Duration = 20 turns.

Silvertongue : Enables the houri to lie so convincingly that the recipient will believe anything he says (unless, of course, his senses tell him otherwise; he will not, for example, believe the houri if she tells him that a monster is attacking unless he can see it). Affects 1-6 individuals. Range = 10". Duration = 6 turns.

Impotence : The recipient of this spell becomes impotent for 24 hours. During this period he will attack at −2, and make morale and saving throws at −2. Wisdom, Constitution and Charisma scores will all be lowered by 1-3 points each for its duration, and the character will feel downright miserable.

Kiss of Healing : Like most *kiss* spells, there is no saving-throw against *kiss of healing.* This works as a *cure light wounds* spell, restoring 2-7 points of damage to an injured character.

Kiss of Sleeping : The victim of this spell falls into a deep coma for 1-10 turns plus the houri's level and cannot be awakened by normal means.

Kiss of Waking : The reverse of the above. This spell will also negate a *sleep* spell.

Read Languages : As per magic-user spell.

Level 2

Charm Normal Animals : This affects any normal animals, e.g. wolves, bats, lions, elephants, etc, but not giant animals or monsters. It will affect 1-20 small insects, 1-8 small animals (bats, rats, small birds), 1-4 medium-sized animals (dogs, lions, leopards), or one single large animal such as a rhino or elephant. Range = 12". Duration = 6 turns + level of Houri.

Influence : A very subtle variation on *charm person.* The recipient of this spell is completely unaware that he is charmed and behaves normally in all respects *except* that he must obey any order the houri gives him. (Exception: orders to the victim to kill or harm himself will be ignored. He will simply not hear them.) The victim will obey the orders cheerfully and believe he is doing so because he *wants* to. *Influence* is so subtle that it can be detected only by an houri of the same level or greater than the one who cast it. Range and duration are as per *charm person.*

Transfer Charm : This spell transfers control over a charmed individual to another person, e.g. if the houri encounters someone who has been charmed by another magic-user, she can use this spell to transfer control over that person from the original caster to herself (or, indeed, to someone else). Range 12". Duration as per the original *charm* spell used.

Jealousy : This affects 1-6 persons causing them to become jealous of each other to the extent that they will ignore the houri or any other source of danger present and quarrel amongst themselves for 2-8 turns. There is a 20% chance of such an argument leading to blows and, if it does, there is an additional 20% chance of the fight being to the death. N.B. if the fight is *not* to the death, then the combatants will come out of the spell when hit. Range = 6".

Ecstasy : This affects 1-8 levels of male, humanoid characters. The lowest level characters are affected first, then the next lowest, and so on. Victims fully affected sit down and stare at the houri, completely entranced and offering no resistance to anything she does to them (short of actually running them through). Partially affected characters are affected in a similar manner, but are allowed a saving throw, whereas fully affected characters are not.

Example: Lirona, using this spell on three 1st level and one 3rd level character rolls 5 on a D8 and so can affect 5 levels. The 1st level characters go under immediately, but the 3rd level one is only partially affected and is allowed a save vs. magic. Range = 4". Duration = 1-6 turns + houri's level.

Dispel Charm : Removes any kind of charm if successful. However, the recipient has a saving throw against it. Range = 2".

Kiss of Strength : This works exactly as a *strength* spell.

Kiss of Wounding : Affects the victim as would an *inflict light wounds* spell doing D6+1 damage with no save.

Kiss of Weakness : This removes 2-8 points of strength from the victim for 24 hours. After receiving such a kiss, the victim will be completely helpless for 1-10 turns.

Communicate : A spell to enable the houri to communicate with any intelligent creature in its own language. Duration = to houri's level.

Level 3

Hold Person : As per cleric spell.

Love Spell : This spell requires some item belonging to the intended victim for it to work such as a lock of hair, nail parings or the like. The spell is chanted over the item and it will cause the character to whom it belongs to fall in love either with the next person that he/she sees, or with a person of the houri's choice. Duration as per *charm person.*

Resist Charm : This hedges the houri around with a protective aura which makes her immune to any kind of *charm* or *hold* spell including *geas, quest, suggestion* and *bardic charm.* Duration = 6 turns.

Disguise : Similar to the *change self* spell of illusionists in that it causes all creatures failing to save vs. spells to believe that the houri is a female of their own race or species. This spell also enables the houri to be able to seduce *any* male creature believing the disguise spell. Duration = 4 turns + the houri's level.

Suggestion : As per magic-user spell.

Charm Giant Animals : This affects any giant animals of any kind, including enchanted types such as Phase Spiders. Such enchanted giant animals save vs. the spell at +3; otherwise, it functions as *charm normal animals.*

Bodyguard : This affects *all* characters and creatures of 1-3 hit dice within a 30 ft radius of the houri. Any of these who fail to save vs. magic will immediately disregard their previous purposes or allegiances, leap to the houri's side, and form a protective ring around her from all assailants, even their own comrades. Note, however, that they are not actually charmed. After they have sucessfully protected the houri from immediate danger they will become catatonic for 1-4 turns before returning to normal. Range = 6".

Kiss of Slavery : This is actually a *charm person* spell with no saving throw. Checks to break such a charm are made at *twice* the normal duration. A victim of this spell will obey *any* order unquestioningly.

Level 4

Charm Monster : As per magic-user spell.

Resist Charm, 10' Radius : As *resist charm,* except that it protects all persons or creatures within a 10 ft radius of the caster. Duration = 6 turns + level of houri.

Lovesickness : Affecting a single male victim, this spell makes its recipient become so much in love with the houri that as soon as he loses sight of her, he begins to waste away, he goes off his food, turns to drink and becomes a general wreck, fighting at −7. As a result he will die of malnutrition in a number of days equal to his constitution score plus 4, and there is also a 10% chance of him committing suicide. What's more, if the houri tells him to go away, he is compelled to do so. This unpleasant condition may wear off as *charm person,* but otherwise must be treated by *cure disease* or a *love spell,* which will make him fall in love with someone else instead. Range = 6".

Confusion : As per magic-user spell.

Hate Spell : This works in a similar way to *love spell,* but has the reverse effect, i.e. the victim will hate either the first person he/she sees, or the person of the houri's choice. The victim will then either attack that person, or plot to kill him/her. After the object of the victim's hate has been killed, he/she will revert to normal. Otherwise the spell wears off as *charm person.*

Enchant Female : This spell must be used in conjunction with a spell which would normally be effective only upon a male victim, e.g. *fascination* or *lovesickness,* and enables the houri to work that spell upon a female victim. It would also enable an houri to seduce a female . . . Range and duration are the same as the spell it is used in conjunction with.

Kiss of Paralysis : This causes a paralysis which lasts 1-4 game-days or until the houri removes it with a second kiss, whichever is shorter.

Kiss of Linking : This links the mind of the houri with that of another character for 2-8 game-hours, and during this period the two will think and act as one person. The houri will be able to speak through the other person, and even cast spells through him/her. There is, however, a 10% chance of their minds ending up in the wrong bodies when this spell wears off. The spell must be allowed to last at least two game-hours, or the chance of a mind-switch increases to 50%. Should one of the two linked characters die, then both minds will end up permanently in the body of the survivor, i.e. he/she will become a sort of "split personality".

Level 5

Change Sex : A spell to alter the sex of any humanoid creature. This is such a traumatic change that, unless the victim has submitted to it voluntarily, he/she/it will be automatically confused for 1-10 turns, and also there is a 5% chance that it will cause permanent insanity. Range = 12". Duration is permanent, unless dispelled or reversed.

Hold Monster : As magic-user spell.

Kiss of Disfigurement : This permanently reduces the charisma of the victim to zero, i.e. he grows horns, an extra nose, becomes covered in warts, develops a vile body stench which makes a skunk seem like Chanel No. 9, gains an impossible speech impediment, etc, and is rendered generally repulsive. As a result the victim becomes shunned by humanity. Anyone whom he tries to approach will instantly attack him, including his friends and relatives. Small children will follow him about throwing stones at him . . . pigs will cross the street to avoid him . . . etc, etc, etc, ad nauseam.

Kiss of Death : The only *kiss* spell for which a saving throw is allowed. The result of *not* making the saving throw is obvious. Victims successfully saving vs. *magic* merely lose half of their remaining hit points.

Kiss of Change : This spell affects its victim as *polymorph others* except that it is not permanent. As with most other *kiss* spells there is no immediate saving throw but the victim may be able to break free of the spell after a period of time, depending upon his constitution. Checks are made on the following basis, and if the character then saves vs. *magic,* he reverts back to his normal form:

Constitution	Check Every:
up to 6	3 weeks
7–9	2 weeks
10–11	week
12–15	2 days
16–17	day
18	12 hours

Stop! : In casting this spell the houri performs some action such as suddenly removing all her clothes which causes *all* activity by living beings within a 20 ft radius of her to cease immediately for 1-4 melee turns. Note, however, that this spell is *not* equivalent to *time stop* for only living things are affected and any creature touched whilst the spell is in operation immediately breaks free of it. There is no saving throw against this spell and protection devices do not work against it.

Ross ~
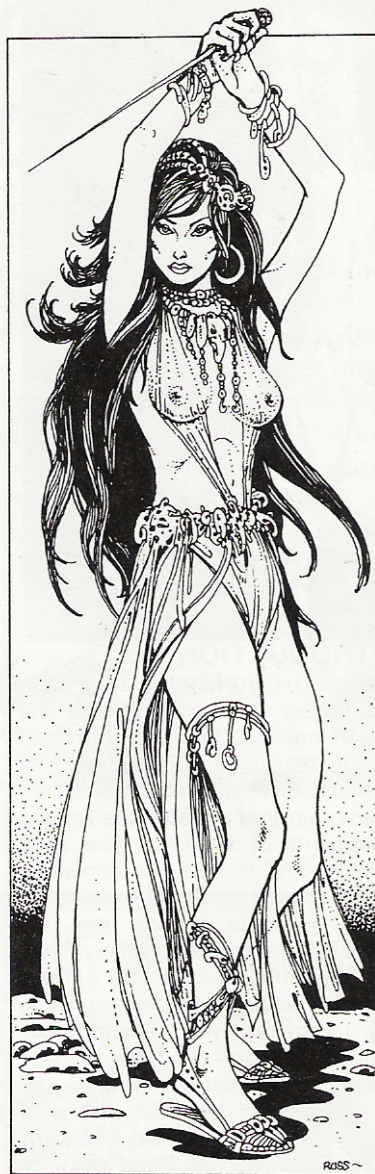
Level 6

Heartbreaker : A spell to induce a sudden heart attack in its recipient. A save vs. *magic* is allowed. If the saving throw is not made, the character then rolls under "probability of surviving spells" as per *Greyhawk p9.* If the character does not survive, he or she is dead. If he/she survices, the character will be totally incapacitated for 6 + D6 game-weeks. He/she will also permanently lose a point of strength and a point of constitution, and will have a 5% chance of a further heart attack every time he/she exerts his/herself from then on. Range = 6".

Mass Charm : As per the magic-user spell, except that it works as a clerical *hold* spell rather than *charm person.* Range = 18". Duration = 9 turns + level of houri.

Blown Kiss : This enables the houri to use any *kiss* spell of levels 1-5 at long range without physical contact. It must be used in conjunction with another spell. Range = 12".

Kiss of Regression : This causes its victim to regress, both physically and mentally, into an infant. It can, however, be used to negate the effects of a Staff of Withering. Duration = permanent unless dispelled.

Geas : As per magic-user spell.

Kiss of Life : The houri equivalent of a clerical *raise dead* spell with the usual limitations of that spell. The usual check against constitution must be made to determine whether the character is raised successfully.

Houri Magical items

Houris can use any items of magical jewellery including rings, necklaces, scarabs, etc, plus magical daggers and items usable by all classes. They may not use wands, staves or rods of any sort, and they are not allowed to use other magic-user items except those concerned with charms or charming.

A *Manual of Advanced Lovemaking* will enable any houri reading it to instantly gain one full level of experience. However, anyone else reading it will suffer 2-16 points of damage *plus* the effects of a *kiss of weakness* spell.

A *Lipstick of Irresistibility* gives its wearer a limited *kiss of slavery* ability, the effects lasting as a double-duration *hold person* spell. Each stick is good for 5 applications and each application lasts for 1-6 kisses.

the Barbarian
By Ian Livingstone
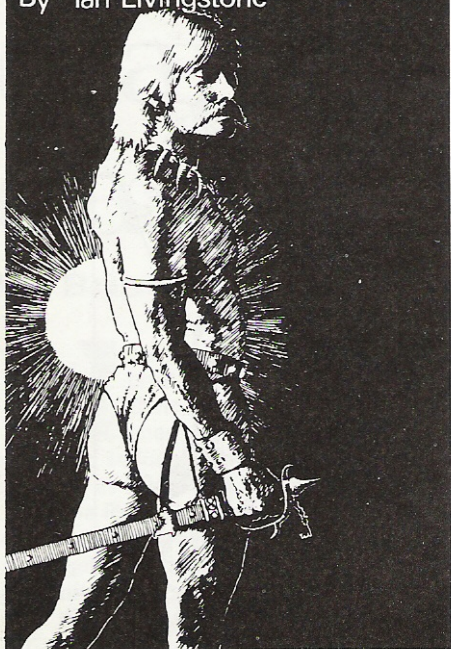
1.00 INTRODUCTION

1.01 History. The world was chaos. Mankind was losing its battle against the onslaught of mutated beasts and undead creatures of the night. Civilisation had long since disappeared, and it was brawn rather than brain that dictated the actions of the remnants of mankind. One such man of might and muscle was known as Vaarn. For many years now he had been on a lone quest to recover the lost magical artefacts of the Old Fathers. With the sword and shield of the Old Fathers in his hands, Vaarn intended to bring about the reunification of mankind. The task was not easy for the lands outside the villages were infested with foul beasts, and the trail behind him was red with blood. But Vaarn was unafraid and went on for he was a barbarian, and possibly the last if he did not succeed . . .

1.02 Object. The Barbarian is a two-player game representing the conquests of a lone barbarian, Vaarn, in his attempts to find the magic sword and shield of the Old Fathers in the creature-infested outlands.
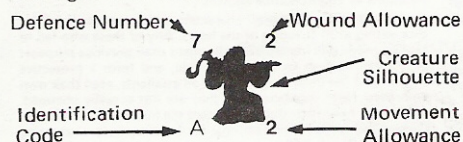
1.03 Description. The Barbarian is an introductory game for the newcomer to hexagonally-gridded boardgames, but can be fun for people used to such games. Whilst strategy does play a significant part in the game, the outcome of the game will be affected by the inevitable luck factor in such a relatively simplistic game.

2.00 PLAYING PIECES

2.01 General. The mapsheet, counters and tables are printed on the centre spread and this should be pulled out, mounted on card, and cut into individual components. The game can be visually enhanced by replacing the counters with metal miniatures available from most games and hobby shops.

2.02 Mapsheet. The mapsheet represents regions found in the outlands through which runs an ancient, but little travelled road. A hexagonal grid has been superimposed on the mapsheet to govern movement.

2.03 Counters. The counters represent the barbarian and the individual creatures found in different outland regions. The information printed on each piece is arranged as follows:

Defence Number — 7 2 — Wound Allowance

Creature Silhouette

Identification Code — A 2 — Movement Allowance

The *defence number* is the minimum number which must be rolled with two six-sided dice in order to wound the creature represented on the counter. (This number may be modified in the case of the barbarian — see 4.02).

The *wound allowance* is the number of times the creature must be wounded before it is killed, e.g. the barbarian must be injured 20 times before he is killed.

The *movement allowance* is the maximum number of hexes a piece may move in each movement phase. This will be modified in the case of the barbarian as he enters different regions. When moving through more than one region during his movement phase, the barbarian's movement allowance is dictated by the region through which he moves slowest.

The *identification code* is purely for the identification of creatures of the same type in order to keep a record of wounds.

3.00 BEGINNING THE GAME

3.01 General. The player in control of the creatures sets up first. The sword, shield, curse and decoy counters should each be placed separately, face down, with one in each of the six regions. Once placed, these counters cannot be subsequently moved except when picked up by the barbarian. These counters should then be "guarded" by placing the various creatures in their respective regions (see *Terrain Effects Chart*). No stacking of counters is allowed. Creatures are not allowed to enter a hex in which the sword, shield, curse or decoy counters are placed. The creatures are not allowed to leave their own regions but may combine in an attack against the barbarian if he is in a hex where different regions adjoin.

The player in control of the barbarian then rolls two six-sided dice to decide on which hex of those numbered on the Great West Road the barbarian starts his movement phase.

3.02 Sequence of Play. A turn is divided into a number of phases, as follows:

Barbarian movement phase
Barbarian attack phase
Creature defence phase
Creature movement phase
Creature attack phase
Barbarian defence phase

3.03 Movement. The barbarian player moves first, and should consult the *Terrain Effects Chart* prior to each subsequent movement phase. The barbarian may move up to his maximum movement allowance. He must be in the same hex as the inverted sword, shield, curse or decoy counter to examine it. This action prevents any further movement or combat during the barbarian's turn.

The player in control of the creatures may move some or all of his pieces up to their maximum movement allowance, but is not required to move any.

3.04 Combat. After a creature movement phase is completed, each counter which is adjacent to the barbarian may attack once. However, the barbarian may only defend himself, i.e. make an attack, against *one* attacking creature. After the barbarian movement phase, only one creature may be attacked even if more than one creature is adjacent to the barbarian. However, only the creature attacked may defend itself, ie. make an attack on the barbarian. To attack, the person attacking should roll two six-sided dice. If the number rolled is equal to or greater than the defence number of the piece under attack, a wound is inflicted. A record of these can be kept on the *Wound Record Charts*. In the case of Wild Hill Men and Goblins, immediate death will occur if a wound is inflicted. Combat is simultaneous, and a creature even if "killed" by the barbarian may carry out its defence phase.

4.00 COUNTERS

4.01 Heroes and Villains. The barbarian and creature counters are identified as follows:

Werewolf   Barbarian   Wild Hill Man

Wraith   Zombie   Goblin   Giant

4.02 Treasure and Trouble. It is the role of Vaarn the barbarian to roam around the outlands in search of the sword and shield of the Old Fathers. These together with the other special counters affects his abilities as follows:

DECOY
No effect
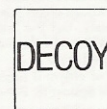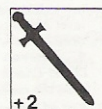
+2
Adds +2 to the barbarian attacking die roll

+1
Adds +1 to the barbarian defence number

Barbarian movement reduced to 2 hexes in all regions and on the road. No modifications further apply.

These ability modifications take effect immediately they are discovered, and are permanent.

5.00 WINNING

5.01 The Winner. The barbarian wins if he leaves the mapsheet at either end of the Great West Road in possession of the sword and the shield. The creature player wins if he kills the barbarian.
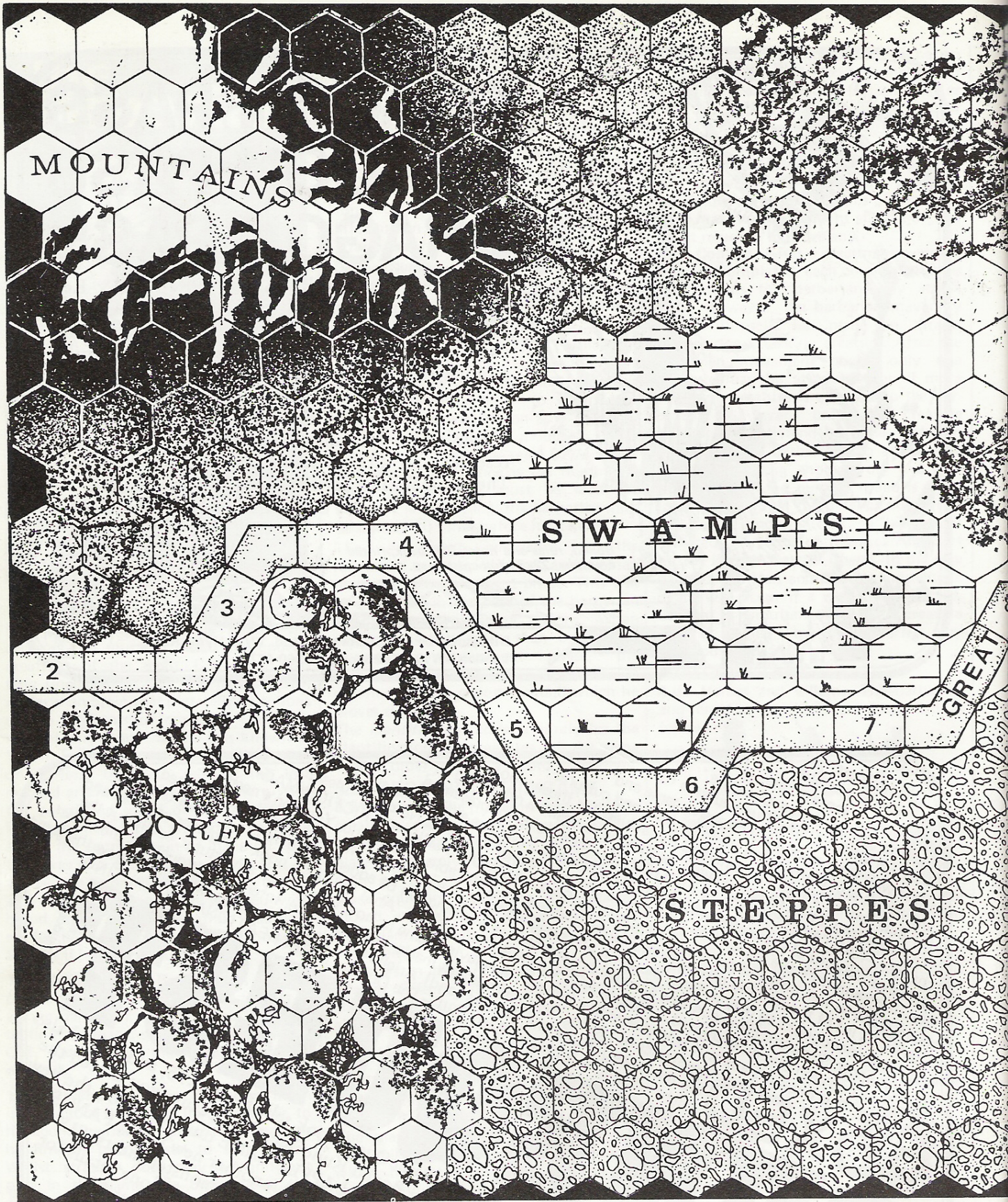
TERRAIN EFFECTS CHART

CREATURES	REGION	EFFECT ON BARBARIAN MOVEMENT	CREATURES	REGION	EFFECT ON BARBARIAN MOVEMENT
Wild Hill Men	Hills	−1	Giant	Swamps	−2
Goblins	Forest	0	Wraiths	Desert	−1
Zombies	Steppes	0	Barbarian	Great West Road	+1
Werewolves	Mountains	−1			

H I L L S

WEST ROAD 9   10   11   12

D E S E R T

DECOY   DECOY DECOY

DECOY

The BARBARIAN

Creature Wounds Table

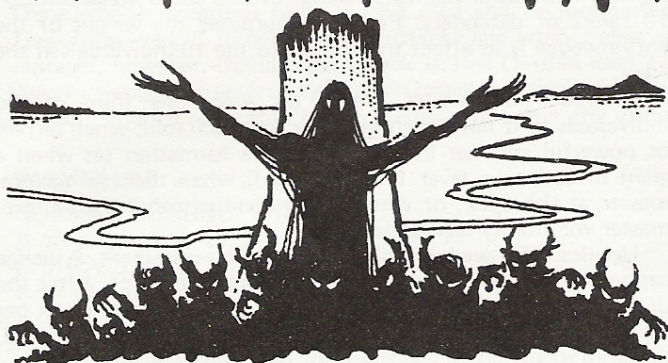| CREATURE	WOUNDS	1	2	3	4	5
Zombie	A / B					
Werewolf	A / B					
Wraith	A / B					
Giant	C					
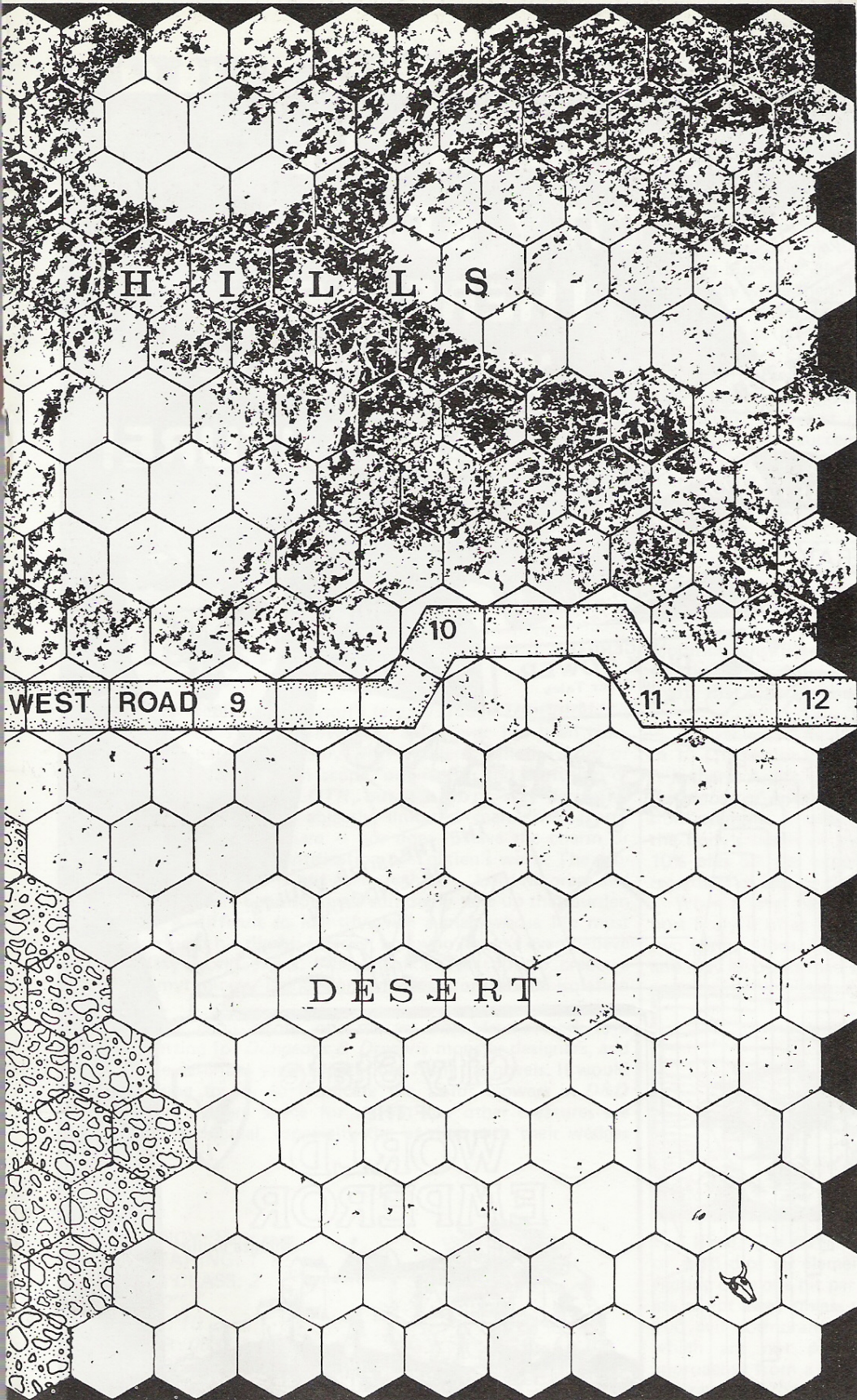
Barbarian Wound Record Chart

20	19	18	17	16
15	14	13	12	11
10	9	8	7	6
5	4	3	2	1
				DEAD

CHRONICLE MONSTERS

by Lewis Pulsipher

Stephen Donaldson's fantasy trilogy *The Chronicles of Thomas Covenant, Unbeliever* has been compared favourably with Tolkien's familiar *Lord of the Rings*. In scope, originality, and profusion of imagination it matches *LOTR*, but it is in no way derivative — certainly not in the abjectly imitative manner of Terry Brooks' *Sword of Shannara* — nor does it have the charm or (quite) the character identification of Tolkien's work. The protagonist of *Chronicles* is not even the hero — Lord Mhoram and the giant Saltheart Foamfollower admirably take up that burden — and it is difficult to identify with a man whose life must revolve around his illness, leprosy, and who doesn't even believe the fantasy world exists. Where Tolkien set out to create a modern mythology, Donaldson wrote a story about isolation and faith.

Whatever comparisons one makes, Donaldson's work is a fruitful setting for *Dungeons & Dragons* monster designers, and this article describes some adaptations from the novels. It would be confusing to try to duplicate the Lords' powers in D&D terms, nor is there space for it, but the other creatures are unusual and original, especially the ur-viles with their wedges and loremasters.

RAVER

FREQUENCY: *Very rare*
NO. APPEARING: *1*
ARMOUR CLASS: *2*
MOVE: *12"*
HIT DICE: *10*
% IN LAIR: *05%*
TREASURE TYPE: *F*
NO. OF ATTACKS: *1*
DAMAGE ATTACK: *1-8 or by weapon type*
SPECIAL ATTACKS: *Possession*
SPECIAL DEFENCES: *See below*
MAGIC RESISTANCE: *20%*
INTELLIGENCE: *Genius*
ALIGNMENT: *Neutral evil*
SIZE: *As body possessed*
PSIONIC ABILITY: *Nil*
    Attack/Defence Modes: *Nil*
LEVEL/X.P. VALUE: *VII(min)/ 2850 + 14 per hit point (min)*

The ravers may once have been a race, but now only three exist. A raver is able to possess a humanoid body. While in possession of a body a raver may attempt to leave it and possess another body. The original personality of the abandoned body regains control if the raver successfully leaves. Generally, the raver has the physical characteristics — hit dice, attack, etc. — of the body it inhabits, but always at least the values listed above. When the host body is killed, the disembodied raver must return to its lair, where it remains until a suitable creature comes near enough to be possessed. In this non-corporeal and invisible form it can do nothing but wait. The only way to kill a raver is to destroy its host body while the centre of its lair is surrounded by a circle of *protections from evil* or *protection from magic*. The centre of the lair is a jet black star-shaped stone weighing about 50 pounds.

Powerful creatures may resist raver attempts to possess them. The table below gives the percentage chance of successful possession. Roll just once for each paired raver and victim; either the raver succeeds immediately or it can never succeed, though another may be able to do so. If the raver carries a fragment of the Illearth Stone, or a fragment is within 10 feet, add 25% to the percentage chance.

Possession Table

Number of dice or experience level:	less than 1	1	2	3	4	5	6	7-8	9-10	11+
Percentage chance of possession:	100	90	75	50	40	30	20	10	-5	-25

Modifications: Bloodguard −50%, magic-user −20, cleric −30, elf, dwarf, or druid −5, evil alignment +5, Illearth Stone +25. (Note that the dash above (−) is a *minus* sign.)

A raver may attempt to possess any humanoid creature within 1" (10 feet or yards) of it, or from the centre of its lair when it is there. A circle of *protection from evil* or *magic*, or one of *the globes of invulnerability,* protects those inside from possession attempts. A raver may be driven from a host body only by the body's death or by an *exorcise* spell — chance of success 10% plus 5% per experience level of the cleric above seventh, regardless of casting time.

When a raver carries a fragment of the Illearth Stone, and its host body is of at least 8 hit dice, it may perform the following two conjurations. Each requires a full day without interruption and may be performed outdoors only.
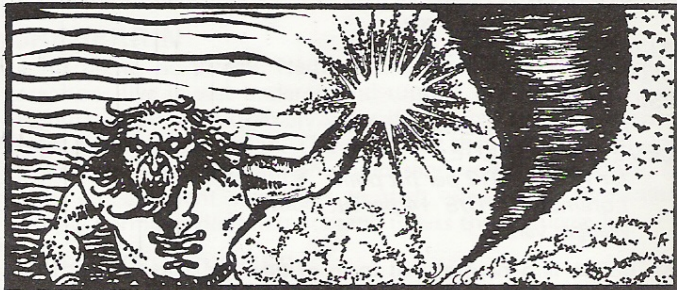
Evil Wind: The raver summons a whirlwind equal in size to that of a 16 dice air elemental but with an hour's duration and inflicting only one hit per round. Creatures of less than one hit die are swept away unless under cover. About this wirlwind are 10-100 evil cormorants (see below) which attack any creatures which are not part of the raver's party. The whirlwind approaches from a random direction until it is 1,000 yards from the raver; at that juncture the raver begins to direct it, but it stops whenever it is more than 1,000 yards from the summoner.

Stone Dead: 100-1000 sandstone analogs of dead animals rise from a ditch which must be dug in deep sandy soil, at least 20' by 5' by 5'. They attack anything in the direction ordered by the raver. To simplify matters, treat monsters as equals regardless of their appearance (horse, lion, wolf, pig, etc.). All are AC 3, 4 hit dice, attack for 1-8, and move 6''. They are enchanted monsters; moreover, *sleep, charm, cold,* and *hold* spells have no effect on them, but *lightning* or *fireball* automatically disintegrate the target(s). When "killed" the monsters become piles of sand.

EVIL CORMORANT

FREQUENCY: *Very rare*
NO. APPEARING: *2–20*
ARMOUR CLASS: *7*
MOVE: *3"/18"*
HIT DICE: *1+1*
% IN LAIR: *Nil*
TREASURE TYPE: *Nil*
NO. OF ATTACKS: *1*
DAMAGE/ATTACK: *1–4*
SPECIAL ATTACKS: *Nil*
SPECIAL DEFENCES: *See below*
MAGIC RESISTANCE: *Standard*
INTELLIGENCE: *Animal*
ALIGNMENT: *Neutral evil*
SIZE: *S*
PSIONIC ABILITY: *Nil*
    Attack/Defence Modes: *Nil*
LEVEL/X.P. VALUE: *II/36 + 2 per hit point*

Evil cormorants are a cursed relative of the normal cormorant. Their blood is a weak (1–6 hp) acid. If a character hits a bird, 10% of the time the blood splashes on him; 50% if the striker is directly below the bird. These are enchanted monsters and are not subject to the *sleep* spell.

UR-VILE

FREQUENCY: *Rare*
NO. APPEARING: *10–100 (5% loremasters)*
ARMOUR CLASS: *7*
MOVE: *9", 12" on all 4s, 6" in wedge*
HIT DICE: *2 (loremasters 4)*
% IN LAIR: *50%*
TREASURE TYPE: *D*
NO. OF ATTACKS: *1*
DAMAGE/ATTACK: *1–6 with short sword (loremasters 1–8 with staff)*
SPECIAL ATTACKS: *See below*
SPECIAL DEFENCES: *See below*
MAGIC RESISTANCE: *See below*
INTELLIGENCE: *Low (loremasters: average)*
ALIGNMENT: *Neutral evil*
SIZE: *M*
PSIONIC ABILITY: *Nil*
    Attack/Defence Modes: *Nil*
LEVEL/X.P. VALUE:
    Ur-vile: I/20+2 per hit point
    Loremaster: III/6 +4 per hit point
    Wedge: varies

An ur-vile is a neutral evil form of devil or demon, that is, an enchanted monster. They are black-skinned and have no eyes, but their wide-nostrilled noses and other, unhuman senses enable them to "see" well in dark or light. They normally move very quietly on two legs, but drop down on all fours for greater speed. All limbs are of equal length, short compared to the long torso. Ur-viles bark when fighting, and use a barking language. They are apparently sexless, being spawned in vats.

Loremasters are able to render prisoners unable to communicate specified information after their release, either by spoken or written word. For example, the prisoner might be unable to warn his rescuers of a trap..

Individually ur-viles are not very dangerous, but when they form wedges their combined power is formidable. The ur-vile wedge may include anywhere from 10 to hundreds of individuals. A small, 10 creature wedge takes the same form as 10-pins in a bowling alley, or balls racked up on a pool table. In large wedges the symmetry of place is lost in the rear, which becomes a shapeless mass, but the apex (point) retains an orderly pattern.

While in a wedge the point loremaster may wield several forms of magic. The wedge form gives magic resistance to all individuals in it, and armour class and attack values also increase; but remember that only the creatures on the edges of the wedge are able to attack, and the wedge formation must be maintained.

Wedge Modifications

Number in wedge	Wedge "level"	Magic Resistance	Attack	Armour class vs.: Melee	Armour class vs.: Missile
10–21	1	10%	1–6	3	4
22–50	2	20	1–8	2	1
51–200	3	40	1–8	1	–2
over 200	4	60	1–8	0	–5

Large wedges have high cohesiveness and momentum. A wedge of 21 individuals would break through a single line of fighters without difficulty. A wedge of 200 could break through 10 ranks of defenders. For such purposes the weight of the entire wedge is in effect transferred to the 10 individuals at the apex.

A wedge of ur-viles breaks up when one third of the individuals in it have been killed or incapacitated, when terrain or powerful enemies literally break the formation (as when a giant dives into a level 1 or 2 wedge), when there is no loremaster at the apex, or when any individual other than a loremaster voluntarily leaves the wedge.

Ur-viles form wedges only when battle is imminent. A wedge cannot be formed without a loremaster at the point. After the ur-viles are in the right places to form a wedge, one round per 20 creatures is required to effectively form a functional, movable wedge.

The loremaster at the apex of the wedge (only) gains additional powers, as follows:

Additional Loremaster Powers

Wedge Level	Armour Class	Attack (staff)	Hit Dice
1	2	2–12	6
2	0	3–18	8
3	–2	4–24	10
4	–4	5–30	15

Hit dice changes affect hit probability as well as hit points. If the wedge breaks, damage remains the same though the loremaster's hit points revert to normal, so it may die. If the wedge is voluntarily unformed, the damage is transferred as a percentage of total hit points — in other words, it is reduced proportionally as hit points are reduced.

Magic Powers Gained by Loremaster at Apex of Wedge
Acid: The loremaster projects a strong acid from his staff. Range is 1" times the wedge level. Enough acid is produced each round to strike one individual only. The number needed to hit is listed in the table below. A miss may hit another individual depending on how closely packed the targets are. The victim attempts to save vs. poison, suffering half damage if successful. The damage depends on wedge level:

Acid Damage

Wedge level:	1	2	3	4
Damage:	2–12	4–24	6–36	8–48
Number to hit:	10	8	6	4

The number needed to hit is unaffected by the target's armour class, but is modified by a target's high dexterity. If the loremaster is hit in a round then he cannot produce and project acid; unsuccessful attacks on him do not disturb acid production. Acid projections occurs at the end of a melee round.

Ur-vile acid eats away rock, but large quantities are required. In the trilogy, loremasters filled iron catapult cups so that the acid could be thrown against castle walls.

Forbidding: The loremaster establishes a field of force, a forbidding, which resists passage of material objects as well as energies. Whether a creature can break through the forbidding depends on its hit dice; if it has more than the level of the loremaster's wedge, the creature breaks through and the forbidding is dissolved. Similarly, a spell breaks through if its level is higher than the wedge level, but the forbidding itself is not broken.

A single loremaster and wedge can create a field with a surface area of 100 square feet, up to 50 feet away. The field must be a plane. If several loremasters and their wedges combine

to form a field (strength equal to lowest wedge level) the area is 500 feet per wedge, but the loremasters must use their staves as poles for the forbidding so that it will be one long, more or less straight, line.

While a loremaster maintains a forbidding, he and his wedge cannot engage in other activity. Missile fire will not distract the wedge, but melee attack will. A forbidding lasts up to one turn. An hour's rest is required before the participating ur-viles can help form another forbidding.

VILES

These smaller creatures have one hit dice and no loremasters. They form wedges to gain magic resistance and armour class advantages, however. Damage per attack is 1—4 (1—6 in level 2 or higher wedge), treasure type C. Otherwise they resemble ur-viles, though no one could mistake one for the other.

WAYNHIM

NORMAL CHARACTERISTICS:
½ hit die, attack for 1—3, armour class 7
CHARACTERISTICS IN WEDGE:
1 hit die, attack for 1—4, armour class 4

A neutral type of enchanted monster related to viles and ur-viles, the waynhim also form wedges to fight, but more than one or two individuals will be found together only in dire emergencies. Waynhim normally stock and maintain travellers' shelters (waymeets) formed of living trees.

CAVEWIGHTS

FREQUENCY: *Uncommon*
NO. APPEARING: *10—100*
ARMOUR CLASS: *5*
MOVE: *9"*
HIT DICE: *2 to 4*
% IN LAIR: *50%*
TREASURE TYPE: *D*
NO. OF ATTACKS: *1*
DAMAGE/ATTACK: *1—8 or 1—10*
SPECIAL ATTACKS: *Nil*
SPECIAL DEFENCES: *Nil*
MAGIC RESISTANCE: *Standard*
INTELLIGENCE: *Low*
ALIGNMENT: *Neutral evil*
SIZE: *L*
PSIONIC ABILITY: *Nil*
    Attack/Defence Modes: *Nil*
LEVEL/X.P. VALUE:
    2HD: I/20+2 per hit point
    3HD: II/35+3 per hit point
    4HD: III/60+4 per hit point

Cavewights are large, humanoid, cave or tunnel dwelling creatures. They are extremely good stoneworkers. They can detect new construction, sloping passages, and shifting walls 60% of the time. Strong and in some ways agile, a cavewight can gain a climbing handhold by sinking its claws into stone, or it can run, jump and grab a partial handhold in rough stone, and vault higher, to a height of 20 feet or occasionally more depending on the size of the creature.

KHRESH

These are yellow wolves, a few growing to dire wolf size; the latter can carry one ur-vile each. The khresh prey on the Ranyhyn.

RANYHYN

These noble horses, ridden only by the bloodguard and the lords by choice of the ranyhyn themselves, equal heavy war horses but move 24". A ranyhyn appears immediately its chosen rider whistles for it, regardless of where he is, unless the horse has been killed en route. The horse magically knows where and when it will be called and starts for the place ahead of time! Ranyhyn have low intelligence, understanding what they are told even though they cannot talk.

RAMEN

The ramen guard and tend the ranyhyn, but will never ride them. They are normal men except for those who patrol the plains looking for khresh. These "cords" move silently and out of sight outdoors 75% of the time. The lengths of rope they use for attack do 1—6 damage, and can (75%) break the neck of a running animal (such as a khresh) surprised by a hidden cord. Cords have 4 hit dice (d8). A manethrall, who commands 2—4 cords, has 8 hit dice (d8) and 100% chances in both cases above.

BLOODGUARD

The sworn bodyguards of the Lords, now sleepless and immortal but once human, move 18" and can walk silently when indoors. They attack with hands twice for 3—18 damage, with stunning but not killing chances as for a ninth level monk. Though they know weapons well, they never use them in battle. A bloodguard can dodge or knock away any missile weapon directed toward him if he makes a saving throw of 6 or more. Although they wear no armour, bloodguard are armour class 2 owing to their monk-like combat prowess. They have 8 d8 hit dice.

SEAREACH GIANTS

FREQUENCY: *Very rare*
NO. APPEARING: *1—4*
ARMOUR CLASS: *2*
MOVE: *12"*
HIT DICE: *10*
% IN LAIR: *50%*
TREASURE TYPE: *E*
NO. OF ATTACKS: *2*
DAMAGE/ATTACK: *3—18*
SPECIAL ATTACKS: *Nil*
SPECIAL DEFENCES: *See below*
MAGIC RESISTANCE: *20%*
INTELLIGENCE: *Very*
ALIGNMENT: *Neutral good*
SIZE: *L (12' + tall)*
PSIONIC ABILITY: *Nil*
    Attack/Defence Modes: Nil
LEVEL/X.P. VALUE: *VII/2350 +14 per hit point*

These giants are both seafarers and stoneworkers. They rarely have more than two children per family. Non-magical fire does not damage them, but it causes pain as though there was damage.

JHEHERRIN

1 hit point, no attack, Neutral. These small, mud or clay-like creatures live in wet underground tunnels. Sunlight turns them to dust. They are extremely wary if not cowardly, with reason since they cannot attack. The only way they may harm anyone is to pull someone floating in quicksand under the surface, for they are excellent swimmers in such quagmires. (Remember, people normally float in quicksand unless they struggle.)

UNFETTERED ONES

These humans have chosen to go into the wilderness to study one aspect of the world, rather than become Lords. Each has unique powers. For example, one is equal in fighting ability to a bloodguard, and can summon "harmless" forest animals in large numbers, for they are his subject of study. Another studies history as mystically revealed in rock strata, but has few powers beyond great stamina.

A few physical aspects of Donaldson's world can also be translated into *D&D* terms:

Arrows made of *lor-liarill wood* explode on impact, causing 2—12 damage plus starting a fire in inflammable material 50% of the time.

Diamondraught is the giants' drink. It increases endurance and restores strength but when its effects wear off (in 6—24 hours) the user falls into deep sleep.

Hurtloam is a healing clay or soil, applied when moist. An application of hurtloam has the effect of the "laying on of hands" of a third level paladin. Hurtloam is quite rare, of course, and won't be found at all in areas frequented by evil creatures.

EXPANDING UNIVERSE
by Andy Slack

ADDITIONS TO TRAVELLER RULES:

Since Expanding Universe *was originally serialised in* White Dwarf 13—16, *continued play, refereeing, research, discussion and letters have revealed a number of errors in the original articles. Simpler, more accurate rules came to light for many of these erroneous sections.*

Further, Traveller *itself has expanded.* Mercenary, High Guard, *and various supplements have filled many of the gaps I initially sought to fill.*

So in preparing Expanding Universe *for this* Best of White Dwarf Articles *compendium, I have taken the opportunity to correct my mistakes as best I can, simplify rules wherever I felt they would benefit from it, and prune out all the dead wood — areas that I feel GDW has since covered better than I did.*

The result is very different from the original. I find it more accurate, and more fun, to play and to referee. I hope you do too.

I would like to thank all the people whose characters have lived and died by these modifications; and all those who wrote in or collared me in person to ask awkward questions. I also apologise to all the umpires and rules-writers I must have unwittingly plagiarised in the original and this revised version.

There are undoubtedly still mistakes in here; so I remind you of my final comment of the series:

If I really knew how starships worked, I'd be writing to the Patents Office — not White Dwarf!

DICING UP CHARACTERS

Skills

A character which is not being diced up under the rules set forth in *Mercenary* or *High Guard* will appear somewhat shortchanged in skills by comparison. So, dice them through as normal, but instead of receiving one skill per term, a character rolls 1D6 for each term of service. A character rolling 1, 2, 3 or 4 receives that number of skills, determined normally; on a roll of 5, he may dice once on any skills table not normally accessible to him, even normally used by another Service; on a roll of 6, no skill is received.

Skills are acquired for commission and promotion as per Book 1, and automatic skills such as the Scout's Pilot—1 are also received as normal.

Characters dicing up Gun or Blade Combat as skills should choose the expertise from the types listed in *Mercenary* or *High Guard,* as the referee feels appropriate.

K.I.A.

When a character is Killed In Action (i.e. fails his Survival roll), he may opt to make a saving throw against death. If he rolls his Endurance or less on 3D6, he is revived; he immediately loses one point each of Strength, Dexterity, Endurance and Intelligence, and musters out at once. If he fails to make this saving throw, he has actually died. A new character is then commenced.

SKILLS AND THEIR USE

General Use of Skills

Normally, for combat, 8+ on 2D6 must be rolled to succeed, with a positive Die Modifier (DM) equal to expertise level in the relevant skill. Thus a throw of 6 plus expertise level 2 gives 8 — a success. For consistency, it would be best to adopt this system throughout, as the existing rules produce a great variety of DM's in other skills.

Parrying can be introduced into blade combat; the defending player simply subtracts his expertise level from his opponent's attack roll.

Similarly, if for any reason another character has booby-trapped or jinxed an item, the dice are rolled, the expertise level (hereafter denoted by EL) of the operator is added and the EL of the jinxer is subtracted; a score of 8+ after all other modifiers have been taken into account, means the device will operate correctly.

Persons Without Relevant Expertise

A person attempting something he has no skill in is subject to a DM of —3, additionally he may well use the wrong tools or technique. So the player rolls 3D6: if the result is less than or equal to his personal Intelligence, then he has guessed the correct tool or technique to use. If the result is greater, he has picked the wrong way to do it, and is subject to a further DM of —2, making —5 in all. (Referees may prefer to use Education, not intelligence, or two dice instead of three.) Either way he adds to this his EL (if any) in Jack-of-Trades, as a positive DM.

This makes J-O-T expertise very valuable, especially if a player should reach a high level. So the J-O-T skill should be considered to be an inborn ability, as I believe it was intended. Thus it cannot be learnt after leaving the Services, or increased by most normal means.

The Invention and Design of Devices.

The total number of appropriate expertise levels of those present in the research group must equal twice the tech level of the proposed device, as set by the referee for any chance of success. The referee must work out how long it will take them, and whether additional expertise over and above that required will help or hinder the effort.

To succeed, the group must roll its average intelligence or less on 3D6. Computer Aided Design can save a lot of wasted effort, so subtract from the roll the sum of the model numbers of the computers used, divided by the number of people involved — effectively raising the average intelligence.

Repair and Maintenance of Devices.

This aspect of skill use is similar to *Invention and Design* (*Culture Shock* is particularly relevant) and one expertise level is required in the repair crew per tech level of the device, e.g. Level 5 device needs one man of EL5, or two of EL2 and one of EL1, and so on.

Skills and Experience

Each time a character attempts to use one of his skills during the course of an adventure, whether he is successful or not, he acquires a number of experience points equal to his Intelligence. A separate total is kept for each skill, and when one thousand e.p. have been amassed, the character's level of expertise in that skill increases by one level.

If a character attempts to use a skill he does not possess, the same procedure is followed; once one thousand e.p. have been amassed, the character acquires the skill at expertise level one.

In long-term situations, for example where a character is hired to act as Navigator, Pilot etc. on a ship, or engages in similar gainful employment, he may claim one "lot" of experience per week of such activity.

To balance this gaining of expertise, the following rule is suggested: If, having left the Services and begun adventuring, a character does not use a skill during a given four-year period — this being determined by whether or not he has accumulated any experience in that skill during that time — then at the end of that period his EL in that skill is reduced by one. The EL may not be reduced below level one by this means.

Two points should be born in mind: firstly, that given this experience system it makes sense to treat psionic talents in the same way as normal skills rather than dicing for improvement monthly; and secondly, that for reasons fo playability Jack-of-Trades skill cannot be affected by either experience or lack of practice. A character with Jack-of-Trades may not amass experience in it; nor need he fear losing his expertise if he does not use it. A character without Jack-of-Trades may not learn it by experience.

Language

An amusing way to use education is in languages. A character speaks his native language with fluency 5. For each point of education over 5, the player gains another fluency level, to use as he pleases. Thus he may hold it in reserve or learn another tongue. The more fluency levels devoted to a language, the better it will be spoken. Level 5 is only just distinguishable from a native. Level 1 is suitable for "Help!", "Me hungry", and so on. Fluency level can be used as a DM on a roll to understand jargon or whispers, or when attempting to communicate something unusual — in which case a very low roll might be insulting to the listener!

If languages are used, it is advisable to have some patois which is vaguely understood by all spacemen and starport officials so that players can speak to someone. (According to our dice, many patrons are Serbo-Croatian, and how many players pick that to learn?) This also gives more point to education, which didn't seem much use originally.

POISONS AND CHEMICAL WARFARE

Saving Throws
The basic saving throw is successfully achieved by rolling endurance or less on 3D6. This must be done three times. Those failing to save at all take the Tertiary effect of the poison or agent, those saving once take the Secondary effect. Those saving twice take the primary effect and anyone saving three times in a row has completely avoided any effects of the poison.

The reason for using 3D6 in these throws is to allow for persons with characteristics over 12. If the referee feels this is too harsh, alternatives are to use two dice, or give a blanket DM of −3 to all saves, thus moving the range of the scores from (3−18) down to (0−15), which is a bit gentler or a blanket DM of −2, which means there is a slight chance of a 1 endurance surviving unharmed, and an equal chance of a 15 endurance being poisoned.

Saving Throw Modifications
Persons in vacc suits are immune to all gaseous poisons; persons in filter masks or respirators gain a DM of −3 to their saving throws against gaseous agents. First aid has the effect of an additional DM to each saving throw of plus or minus the attendant medical expertise, depending on the Medic's feelings about the person he is treating. If several medics are involved, sum their expertise levels to get the DM. Assorted wide- or narrow-spectrum immunisations and antidotes of varying DM may be made available by the referee.

Masking when under Gas Attack
To successfully mask himself the individual must throw his dexterity or less on 3D6.

Poisons and Agents
In general, a poison will have previously been rated by the referee in the following:

Dosage: This is a relatively simple matter; it is suggested that dosages range from 1-15, where they can usually be determined by a roll of 3D6−3.

Effects: All three effects of a poison — that is, primary, secondary, and tertiary — must be specified. The referee should draw up a random determination chart or specify all his poisons before commencing play. Possible effects are:

Death	Euphoria	Insanity	Paralysis
Stimulant	Sedative	Hallucinations	Corrosion
Confusion	Tranquiliser	Convulsions	Twitching
Nausea	Choking	Fever	Blistering
Acute pain	Weeping	Blindness	Irritation

Alternative effects are to add or subtract from strength, dexterity, endurance, or intelligence, either permanently or temporarily. Death should always be a Tertiary effect. Stinging animals will generally use some poison that leaves their victims amenable to digestion, such as a sedative or paralysing agent. Persons with expertise in untested skills such as chemist or bio-

chemist might be allowed to design their own agents for chemical warfare.

Speed of Action: This is given by a simple formula and the characteristic of the poison. The formula is:

$$Time = \frac{Factor \times Target\ Mass \times Target\ Endurance}{Dosage \times Attacker's\ Mass}$$

Where *Time* is the time until the effects of the poison are felt; *Dosage* is as detailed above; *Target Mass* is the victim's mass in kilogrammes (about 70 for an average human male); *Attacker's Mass* is either the weight in kg of the munition delivering the chemical, or the mass in kg of the attacking animal, or the amount in kg of poison introduced into the victim by any other means; *Target Endurance* is either the player's endurance or the amount of damage required to stun an animal.

Factor is another item to be specified by the referee; normally roll percentile dice and call this the *Factor* in seconds. Then by working out the formula the referee can warn the adventurer when he first feels something is wrong. It is suggested that the player then has a while to get medical aid before being incapacitated. For example, the referee rolls the player's saves in secret and fails to save at all. Then after the period denoted by *Time* the referee will inform him that he is feeling the primary effect; after another period — not necessarily the same — he is told that he is feeling the secondary effect; and finally after a third period of time he is told he has suffered the Tertiary effect. The process should not be irreversible until the tertiary effect is felt. Until that point, help is still possible; if the victim is hospitalised or given medical aid by a medic called in, a fresh set of saves should be made against whatever effects remain to be felt.

Cumulative Poisons
If a person has, for example, been fed small quantities of a cumulative poison in his feed, or been repeatedly exposed to cumulative toxins, the *Dosage* is regarded as being equal to the sum of the individual *Dosages* the individual has previously received. The same process can be used with catalytic poisons, where one substance has no effect until a dose of a second chemical is administered, whereupon the product of the reaction between the two becomes poisonous.

Burst Radii of Chemical Munitions.
Anyone caught within the burst radius of a chemical munition is regarded as being affected by the agent; he must commence saving throws. If outside the burst radius, he is assumed to escape the effects of the chemical agent. Such agents seem to persist in the burst area for periods of several hours to several days before becoming harmless. Anyone passing through the area in that time must save or take the effects of the agent. Generally, rain will clear an area more quickly, and the effects will persist longer in vegetated areas. The effects will also be more efficient in confined spaces. Decontaminants are normally available as they may be improvised from such materials as bleach; fire will almost always decontaminate. Military Chemical Warfare Officers can normally specify roughly the *Factor* and *Dosage* of their agents.

After the initial bombardment the agents will naturally tend to spread and thin out saves for each additional 'radius' the victim is away from the burst point. Also, persons outside the burst radius will almost certainly have time to mask themselves.

"Antique Equivalents" of Chemical Agents
Information on these is surprisingly easy to find, and a trip to the library would well repay the effort. Here are brief details for several war gases:

Phosgene: A few hours after exposure, the lungs begin to fill with fluid, rendering breathing difficult; this leads eventually to death by anoxia.

Nerve Gases — Tabun, Sarin, Soman: These are very similar in effect. In only a few minutes, the victim develops influenza-like symptoms, accompanied by twitching and vomiting followed by confusion and drowsiness, convulsions, and death. The entire process seldom takes more than 15 minutes, and is normally considered irreversible without immediate first aid (injection of

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atropine tartrate, I am told) and subsequent hospitalisation. Even so, recovery is doubtful.

Hydrogen Cyanide: Persons affected by this have an increased respiration rate, and generally die within a few minutes at most.

Cyanogen Chloride: This takes several minutes to affect a person. The lungs and exposed skin become irritated; this is followed by a decrease in the respiratory rate and choking, then death.

Arsine: Taking up to several days to show its effects, arsine causes headaches and uneasiness, followed by chills and nausea; its victim does not normally die, but remains anaemic thereafter.

Mustard Gas: Several hours after inhalation/contact, the victim's eyes and skin become inflamed. Blisters and ulcers on exposed skin follow; then, finally, inflammation of the lungs, throat, and so on, which can prove fatal.

Nitrogen Mustards: A group of gases with similar effects; up to three or four days after exposure are required for the full effects to show. First the eyes and skin become inflamed, followed by the blisters characteristic of all mustard type gases, and irritation of the lungs, nose and throat. Then, as a result, loss of voice, followed by fever and severe diarrhoea.

Lewisite: A much improved(?) type of mustard gas that acts within a quarter of an hour, first producing blisters and ulcers, then blindness and irritation of the lungs, followed by death.

Vomiting Gases: A group (e.g. training and riot control gases) which, like tear gases, are not normally fatal but can be so in confined spaces. They take effect in a few minutes, irritating the eyes and nose; then a headache and symptoms of a cold appear, followed by acute chest pains, nausea, and vomiting.

Tear Gases: There are several of these, all with similar symptoms. They take effect within half a minute normally, irritating the eyes and lungs and causing weeping. Continued exposure results in itching and an effect similar to sunburn on exposed flesh. Severe exposure will cause blisters and nausea.

STARSHIPS

Failures & Breakdowns

Many things may go wrong with such a highly complex mechanism as a starship. The percent chance of a failure in a given day is calculated as follows:

$$\% \text{ chance of failure per day} = E \times \frac{\text{Hull Displacement}}{100 \text{ Tonnes}}$$

Where E is the environment weighting, which is 1·5 for civil vessels and 4 for military vessels. Some players may build ships of standard types with second-hand military engines in order to reduce the chance of misjumping when running on unrefined fuel, in which case the chance of failure is increased by 10%. If the % chance of failure exceeds 100, as it well may for large vessels, each 100% indicates a certain failure that day, and any remaining figure under 100 is the percent chance of an additional failure.

Percentage dice are rolled once for each day when not in port; if the result is less than the calculated chance a failure has occurred. Next, for each failure that has occurred, roll 2D6 separately to determine the severity and repairability of the fault.

Die	Severity	Repairability
1, 2, 3	Fail-Operational	Spare carried.
4, 5	Fail-Safe	Spare can be fabricated onboard.
6	Single-Point Failure.	Cannot be repaired.

DMs: For Severity, −1 if standard design, +1 for each annual overhaul which has been missed.

Fail-operational results indicate that the failure, while inconvenient, does not affect the movement or combat abilities of the vessel.

Fail-Safe results indicate that the failure does reduce the capabilities of the vessel (how depends on where it is), but that

backup systems can maintain the life-support function of the vessel, so that the crew have time to effect repairs.

Single-Point Failures are those where a vital component fails in a new and unexpected way. A character may not attempt to repair such a failure unless he has at least one level of *Jack-of-Trades* expertise.

If spares are carried for the failed component, but one ten-minute turn is required for each attempt to repair the damage.

If a spare can be fabricated, several days will be required to do so using the ship's stores.

Persons with *Jack-of-Trades* expertise may always attempt to fabricate a spare, even if the Repairability roll states that repair is impossible.

Computer failures are not rectified by the physical replacement of spares, but require equivalent amounts of time to 'repair''.

For the location of the fault, roll percentile dice and consult the table below.

Starship Fault Location

01-40	False Alarm; the testing circuitry is faulty.
41-60	Computer Crash
61-64	Structural Failure in the Hull
65-72	Life Support System failure
73-76	Power Plant Failure
77-78	Manoeuvre Drive Failure
79-80	Jump Drive Failure
81-82	Fuel Supply Failure
83-92	Sensor Failure
93-98	Throw twice ignoring 93-00
99-00	Throw thrice ignoring 93-00

Acceleration Damage

If the ship's artificial gravity is turned off, the following table should be consulted:

Acceleration	Endurance Drain	Dexterity Reduction
1G	0/—	0
2G	0/—	−3
3G	1/10	−5
4G	1/4	−5
5G	1/1	−6
6G	2/1	−6

Characters may train intensively to increase their G-tolerance; this enables them to a modifier of −1G on the table immediately above, but they must make one additional saving throw per term to avoid the effects of aging for as long as they so train.

Endurance Drain — The figure before the slash is the number of Endurance points lost due to the acceleration, the figure after the slash the period between losses in combat rounds. Thus a character accelerating at 3G without the benefit of the ship's artificial gravity loses one point of Endurance per 10 combat rounds. Remember that there are 40 15-second combat rounds in a 10 minute space combat turn.

Strength and Dexterity Reduction — the amount by which acceleration reduces a character's effective Strength and Dexterity. Thus the character above, if he had a UPP of 9A8BC6, would count as if his UPP was 458BC6 while under 3G of acceleration.

All effects of acceleration are treated in the same way as wounds in *Book 1;* the Endurance Drain and Reductions are exactly equivalent to wounds with the same effects.

These values assume the character is quiescent in an acceleration couch. If this is not the case, apply these modifiers:

Circumstance	Effective G is
Character lying flat on wall or floor	+1
Character lying on rough or angular surface	+2
Character surprised by sudden acceleration	+1
Character upside down	x2
Character sedated by Medic	−1

All the above modifiers are cumulative.

Vacuum Damage

A character exposed to vacuum, by explosive decompression or otherwise, takes one point of damage per 15-second combat turn that he is so exposed. This damage is treated exactly as a wound except that the character may not choose how it is deducted from his characteristics; Endurance is reduced first, by one point per turn until it is zero; then Strength; finally Dexterity likewise.

In addition, a character who is explosively decompressed takes an extra 2D6 damage, treated as a normal wound (not a First Strike). If, however, the decompresseion is a result of being hit by some kind of weapon, that weapon's strike does double damage instead.

ENGINEERING

Nature of Manoeuvre Drive

Manoeuvre drives operate on an antigravity principle, as this does not vaporise everything within several miles and render beam weapons pointless.

Misjumps

Any engine making a misjump will use up fuel for the misjump or the maximum normal jump possible, whichever is the larger. For each jump number that the size of the misjump exceeds the maximum possible normal jump, the jump drive will take one hit of damage.

Blowing the Drive

A pilot or engineer on a doomed vessel can elect to blow the drive. (This tactic can be used to take some enemies with you or to blow up starports if you are dying and cannot leave). When the drive is blown, it explodes with the force of a strategic nuclear device (see below), the size of which depends on the power plant size.

Tractor Beams

To generate a tractor beam, 20 tons of additional control gear are required. It has the effect of making the target ship behave as if it were being accelerated by the M-drive unit attached to the tractor beam device in a direction indicated by the wielder of the beam, in addition to any other acceleration it undergoes. Extra manoeuvre drives and power plants may be built in so that the wielder's own engines are free.

Warp Scramblers.

These operate on a similar system to tractor beams. Another 20 tons of controls are required, and the effect is that the target ship misjumps immediately the next movement phase comes around under the normal or amended misjump rules. The operator of the scrambler pays the fuel cost for this, as he does for tractor beams.

Matter Transporters

These require another 20 tons of control gear and behave as laid down in the teleportation rules under psionics. Their equivalent psi strength is determined by the class of power plant driving them: A type A has psi strength 10, a type B — 20, and so on.

GUNNERY AND MISSILES

Types of Missile

Missiles can be constructed using the following table:

Price Factor	Guidance	Propulsion	Detonation	Warhead
1	Unguided	Unpowered	Contact	CBW agents, leaflets etc.
2	Command	Constant	Proximity	High Explosive
5	Semi-Active	Limited	Command	Tactical Nuclear
10	Passive	Discretionary	Intelligent	Enhanced Radiation
20	Active			Strategic Nuclear

Explanations

Unguided missiles have no guidance mechanism at all.

Command guidance missiles are guided by commands from the launching vessel. A gunner who fires a command guidance missile may launch no other ordnance and may not fire any other weapons until the missile has either impacted or been destroyed.

Semi-Active homing missiles home in on signals such as radar beams which are generated by the launching vessel's sensors and relected off the target. The launching vessel must be actively scanning the target for these missiles to home in.

Passive homing missiles are those which home in on signals emitted by the target, such as the familiar heat-seeking Sidewinder. However, this class also includes such weapons as the Brazo, which home in on the enemy's sensor scans. A ship must voluntarily "blind" itself to avoid the attentions of the latter type, thus losing control of any *Command* or *Semi-Active* guidance missiles currently in flight. The launching vessel need take no further action to control a *Passive* homing missile.

Active homing missiles are similar to *Semi-Active*, except that that they carry their own sensors and do not rely on a target paint from the launch vessel.

Unpowered missiles have no motive power of their own.

Constant acceleration missiles accelerate at a constant rate.

Limited propulsion missiles may accelerate at any rate possible to them desired by the launching player, but this rate may not be changed once the missile has been launched.

Discretionary propulsion missiles may be manoeuvered in the same manner as starships.

Missiles normally have a maximum acceleration of 6G and enough fuel onboard for a total vector change of 6".

Contact detonation missiles explode on contact with the target. They do normal damage for whatever warhead they are carrying.

Proximity detonation missiles explode when at a preset, non-zero distance from the target, and do half damage for whatever warhead type they are carrying.

Command detonation systems explode on command from the launching vessel, and may at the moment of explosion be specified to be *Contact* or *Proximity*.

Intelligent detonation systems are preset to detonate if — and only if — they are closing on a specified class of vessel. They will ignore all other types. They may be specified as *Contact* or *Proximity* types at that point.

CBW Agent warheads carry gas or germs, and do 1 hit of damage to a starship if they hit.

High Explosive warheads are the standard type, and do 1D6 hits of damage. (Book 2.)

Tactical Nuclear warheads are the nuclear missiles of *High Guard*. If *High Guard* is not used, a Tac Nuke does (1—6)D6 Hits, and in addition if they are employed in atmosphere, a hit indicates that the ship's streamlining is destroyed; spallation attacks all crew members as if a shotgun had been fired at them.

Strategic Nuclear warheads are very large devices mostly used for demolishing cities. If used against vessels in the *High Guard* system, each successful attack with a Strat Nuke will cause the effects fo 1D6 Tactical Nuclear missiles; if it is used on the *Book 2* system, each successful attack causes (1—6 X 1—6)D6 of hits. If used in atmosphere, Strat Nukes have the same effects as Tactical Nukes, and in addition jam all radio and radar in the neighbourhood for 1—6 turns. A Strategic Nuclear device is normally reserved for the destruction of a city about the size of London — one is required, though normally two or three will be used to allow for defences and failures.

Enhanced Radiation warheads (commonly called "neutron bombs") have the same effects as Tactical Nuclear warheads in space combat.

The effects of radiation will be dealt with later.

Cost of Missiles

The cost of a missile is found by multiplying together the price factors for its component parts, and multiplying the result by Cr. 100. Thus prices range from 100 to 4,000,000 Credits.

EXPANDING UNIVERSE

The standard shipboard missile has *Semi-Active* homing, *Limited* propulsion, *Contact* detonation and a *High Explosive* warhead. It's cost is therefore:

5 X 5 X 1 X 2 X 100 = 5,000 Credits.

Types of Sandcaster Ammunition

Sand: Straight from the book, this costs 400 credits, weighs 50 kg and imposes a DM of −3 on any laser fire through it.

Window: This costs 400 credits for a 50 kg cannister. Its effect is a DM of −3 on missile fire.

Gravel: This is just what it says — gravel. (Or scrap iron and other such junk). Its cost is 100 credits for a 50 kg cannister and it is the best sandcaster weapon normally available. Missiles passing through it are total write-offs and fail to explode. It does damage on ships as follows: calculate the velocity vector of the target relative to the gravel as it hits. For each 1'' (1,000 miles) of magnitude this vector has, the gravel does one Hit of damage. A ship orbiting through gravel around a planet takes Hits, as would one leaving orbit or lifting off.

Example: A vessel in a low orbit around an Earth-sized planet is doing about 17,500 mph, perhaps more; this is about 2·9 inches per turn, so a stationary cloud of Gravel — i.e. one tossed up so that the vessel hit it when it had no relative velocity toward the target, just before it fell back — would do 3 Hits of damage; one orbiting the opposite way entirely would do 6 Hits. If the target were attempting to leave the planet, it must reach at least 25,000 mph for an Earth sized world, which is about 4·2 inches per turn. If it ran into a "stationary" cloud, it would take 4 Hits, and by dropping some Gravel over the side from a great height one could probably score up to 8 Hits.

Use of Radar for Ship Defence

Ship's radars are very powerful, capable of detecting a ship many hundreds of thousands of miles away. So men not within ships or hard cover can be attacked by radar as if by a shotgun and all men within range will be affected together, i.e. simultaneously. Electronic devices not protected by ships' hulls or similar will burn out unless specifically designed for this contingency at quadruple cost.

EFFECTS OF NUCLEAR WEAPONS

For the purposes of the game, I shall consider four kinds of nuclear device and two delivery modes. The weapons are Strategic, Tactical, Battlefield and Enhanced Radiation. Strategic devices may be 1 or 10 Megatonnes in yield; Tactical devices will be assumed to be 10 Kilotonnes in yield; Battlefield devices, 1 Kilotonne. Battlefield devices are those delivered by Mercenary artillery systems.

The delivery modes are Airburst and Groundburst. They may be specified by the detonating player prior to detonation. Airbursts increase the burst radius of a nuclear munition by 25%.

The devices have the following burst radii:

Device	Burst Radius
10 MT Strategic	18 kilometres
1 MT Strategic	9 kilometres
Tactical	1200 metres
Battlefield	400 metres
Enhanced Radiation	200 metres

Immediate Effects

All persons in the open, soft-skinned vehicles, lightly constructed buildings and so on are destroyed automatically if within the burst radius.

Persons in AFV, starships, heavily reinforced buildings or similar are automatically destroyed if within half the blast radius along with their vehicles or dwellings; within the blast radius, they must make a saving throw of 8+ on 2D6 to survive. If they survive, or are within 1½ times the blast radius, persons take 1−6 D6 damage.

Radiation Effects

Persons surviving the Immediate Effects are subject to the radiation effects of the explosion if within twice the burst radius.

Persons subject to the Radiation effects must make saving throws as they would if poisoned. The basic saving thrown is successfully achieved by rolling the character's Endurance or less on 3D6. This must be done 3 times.

Number of Successful Saves	Radiation Poisoning Class
3	Class 0
2	Class I
1	Class II
None	Class III
	Class IV
	Class V

Modifiers

If inside AFV or protective suit, vac suit, battle dress, combat armour or C.E.S., starship, ship's boat or bunker . . .	Decrease Class by 1.
If device was an Enhanced Radiation weapon . . .	Increase Class by 2 if exposed to detation; otherwise decrease Class by 1.
If Airburst . . .	Decrease Class by 1.
If "Crew−n" result is obtained in *High Guard* combat system . . .	Increase Class by n.

Use this section also in space combat where a hit by a nuclear weapon occurs, when characters are affected by meson weapons or particle accelerators, and if characters wander into a highly radioactive area such as the fallout cloud downwind of a Groundburst.

Explanations

Class 0 Radiation Poisoning or less: The character may have suffered slight genetic damage, but is essentially OK for game purposes. No medical aid required.

Class I Radiation Poisoning: Beginning 4D6 hours after exposure, the character will begin to suffer from nausea and general malaise. He will, however, recover in 1−3 days even without medical aid. When the time comes for his next set of aging rolls, he must make an additional saving throw for each characteristic.

Class II Radiation Poisoning: After 4D6 hours, the character will suffer from nausea and general malaise. In 1−3 days, this passes. However, anaemia and leukopenia gradually set in, without revealing themselves except to the trained medical eye (Medic 2+). After 14 + 2D6 days, the symptoms return, accompanied by internal bleeding and slight hair loss. A character suffering from Class II Radiation Poisoning requires extensive treatment to recover, typically Medic −4 or better must be in attendance and equipment of TL 6+ will be needed. Recovery takes (16 − Character's Endurance) weeks, during which time the character is not allowed any saving throws against disease or poison. The treatment must begin within a number of days equal to the character's Endurance to be successful. The character must make an additional set of saving throws on his next two aging checks, if he survives.

Class III Radiation Poisoning: After 4D6 hours, the character feels general nausea and malaise. For 1−3 days, the character will be prostrated with a fever, and finds even the thought of food abhorrent. He then appears to recover; but after 1−10 days, all his hair falls out, the rough field guide to an incurable lethal dose. 10 + 1D20 days after the beginning of the posioning, the earlier symptoms return in force, accompanied by spontaneous internal and external bleeding and delirium. The victim passes into a coma and dies.

Class IV Radiation Poisoning: Beginning shortly after exposure, the victim suffers from the nausea and malaise typical of the onset of radiation sickness. This progresses to a state where the victim alternates between an incoherent stupor and what appear to be epileptic attacks; he dies in 1−3 days.

Class V Radiation Poisoning: The character suffers the effects of Class IV poisoning, but is so heavily irradiated as to die

in 1—6 hours. In this case symptoms will manifest themselves within a few minutes.

Less squeamish or more scatologically-inclined referees may care to note that the nausea of Classes III—V is usually accompanied by prodormal diarrhoea.

WORLDS

My view of space and habitable systems is different from that of GDW in that I see worlds as far less common. In my view, the best way to reflect this scarcity of habitable planets is simply to multiply all distances on the star map by a factor of 10. Each hex is then 10 parsecs across, Jump—1 is 10 parsecs (still 1 hex), and so on.

The use of this scale, however, implies that each and every hex has about 40 star systems in it, roughly 10 of which are suitable for wilderness refuelling. So there is no real need for anything in excess of Jump—1 unless you're in a hurry. All systems within a hex are considered to be Jump—1 apart.

For each hex, roll 2D6.

Dice	Result
2—7	No habitable systems in hex.
8,9	One habitable system in hex.
10	Two habitable systems in hex.
11	Three habitable systems in hex.
12	Four habitable systems in hex.

DMs:

In globular cluster region (3D6 hexes across)	+2
In open cluster region (1 hex across) or in association region (4D6 hexes across)	+1
In spiral fringe region	−1
In interspiral space	−2
In spiral arm	No DM

For each habitable system obtained, roll 2D6. A roll of 10 or less indicates there is one habitable planet in the system; if the roll is 11 or 12, there are two. If there are two, a repeated result of 11 or 12 on 2D6 means a third is present; if this is so, a final roll of 11+ means a fourth is present. There are never more than 4 such planets in a system.

For each habitable system, dice the type of star which is the primary: (1D6)

Die	DM on Temperature roll	DM to World Size	Spectrum of Star
1	+1		F
2			G
3			G
4			G
5		+1	K
6	−1	+1	K

For each habitable planet, determine Starport, Size, Atmosphere and Hydrography as outlined in *Book 3*, remembering to add the DM if any for the star's Spectrum.

Then, before determining the remaining characteristics, roll 1D6 to discover the world's Temperature, bearing in mind the DM from the Spectrum table above.

Die	Temperature	Illuminance	DM on Population Roll
1	Very Cold	Very Dim	−3
2	Cold	Dim	−2
3	Normal/Cool	Normal	−1
4	Normal/Warm	Normal	−1
5	Hot	Bright	−2
6	Very Hot	Very Bright	−3

Note: Population DMs are intended to replace the blanket DM of −2 given by *Book 3*.

Any planet diced up using *Book 3* and this system will be suitable for colonisation if its size is in the range 3—10; otherwise, it will only be used for such purposes as mining, and will have no large permanent population.

The rotation period of a habitable planet is given by:

Rotation period = 2 X (12 − Size)D6 hours.

Also in the system in addition to any habitable planets will be 2D6-3 non-giant worlds, and 1D6-1 gas giants. The habitable planet will have 1D6-4 moons, each of Size 1D6-3.

The *Traveller* character should also feel affected by the differing gravities the various worlds; the following simple table simulates this. Cross-reference the Size of the character's home world with that of the world he is currently on:

Home World Size	Local World Size					
	0—2	3—4	5—6	7—8	9—A	B
0—2	0	−1	−2	−3	−4	−5
3—4	+1	0	−1	−2	−3	−4
5—6	+2	+1	0	+1	+2	+3
7—8	+3	+2	+1	0	−1	−2
9—A	+4	+3	+2	+1	0	−1
B	+5	+4	+3	+2	+1	0

The figures in the table above affect a character's Strength, Dexterity and Endurance for all purposes except wounding.
Strength and Endurance: Add the number if positive, subtract it if negative.
Dexterity: Always subtract the number.

Example: A character has UPP 486746. His home world has a Size of 4; he is currently adventuring on a planet of Size 9. His current UPP for all purposes except wounding is therefore 153746.

ALIEN LIFE

One of the most frequently asked questions when an animal is first encountered is "What does it look like?". Here is an optional system for determining this, used when the creature is first encountered. Roll 1D on each table, and apply common sense as required:

Basic Type/Shape of Most Animals:

1	Insectoid	4	Avian
2	Ichythoid	5	Mammalian
3	Reptilian	6	Other (i.e. Ref's Specials)

Symmetry of Most Animals:

1	Asymmetric	5	Rotational of order 2—6
2,3,4	Bilateral	6	Other

Number of limbs: 1D6—1 pairs of limbs, but refer to the symmetry and use common sense (e.g. you can't have four legs and rotational symmetry order 3).

Main Sense of Most Animals:

1,2	Visual	5	Olfactory
3	Audio	6	Other
4	Tactile		

Note for vision that it will be most acute at the predominant colour of the star; i.e. beings from a red star's planet would see into the infra red a short way but might well be blind to blue, seeing it perhaps as blackness.

Characteristics: Determine type, weaponry, size etc. as in *Traveller* book 3.

Intelligent Aliens

These are first diced for as if an ordinary animal, biasing the results slightly towards the 50 — 200 kg mass range and away from herbivorous types. Then characteristic DMs are diced for.

All characteristic DMs are generated by 2D6—7, followed by applying common sense.

Primary characteric DMs are applied to the UPP of a character, and consist of DMs to strength, dexterity, endurance, intelligence, education and social standing, therefore. Secondary and tertiary DMs are applied to 2D6 rolls for secondary and tertiary characteristics; however, provided he could have diced it, a player may always specify his own secondary characteristics.

Secondary characteristics (with apologies for plagiarism to Tony Bath) are Disposition, Morals, Generosity, Loyalty, Courage, and Ambition. The way in which they are used is as follows: The higher the score, the more socially correct and "nice" is the character's behaviour in that area. Thus, should a police officer be offered a bribe, throw 2D6 in secret; if the score is less than or equal to his Morals, he has done the socially correct thing and refused the bribe. If a beggar accosts a character whose player is not present, dice — a roll equal to or under his Generosity indicates he has given alms; and so on.

Tertiary Characteristics are largely individual; they start with Appearance and Activity, but then the remaining four are "held" for use in describing organ-playing ability, shoe size, etc., as is required by the individual character.

Quaternary DMs for each species should also be diced. These are applied to the Population, Government, Law and Tech Levels of planets inhabited by that species. (An example is the blanket —2 on human populations.)

SOCIAL STATUS

Income

The social status score determines the character's net income in long-term situations. Thus a player getting a job as say a clerk, or any non-player in a civilian job, would have this much money left after living expenses were deducted:

Social Status	Net Income p.a.	Social Status	Net Income p.a.
less than 0	0	9	19,683
0	1	10	59,049
1	3	11	177,047
2	9	12	531,441
3	27	13	1,594,323
4	81	14	4,782,969
5	243	15	14,348,907
6	729	16	43,046,721
7	2,187	17	129,140,160
8	6,561	18	387,420,480

This may also be used to indicate the amount offered by a patron initially — perhaps 2-12% or 20-120% of the patron's annual income, depending on the danger involved. Also it may represent the income accruing to a noble player due to his ancestral fief.

Special Levels of Social Status

Social Status	Situation
—5 or less	Condemned to death
—2 to —4	Slave
—1	Imprisoned
0	Wanted criminal
1	Suspected criminal
2—10	Normal
11—15	Nobles
16	Prince — next-in-line to rule a planet.
17	King — ruler of a planet
18	Emperor — ruler of more than one planet.

Ancestral estates may be portions of large worlds, or small worlds in their own right. The population level of an ancestral fief is equal to the controlling noble's social status less 9, so perhaps the player has a small world waiting for him when his eight older brothers drop dead!

Social Status and Crime

When infringing the law, roll over the law level on 2D6 to avoid arrest, DM: + social status —7 (you can get away with it, you just have to be rich! This gives some meaning to law levels over 12.

If arrested, throw law level or under to be convicted, DMs: subtract the prosecution's law expertise, add the defence's law expertise. Forged papers, etc., give additional DMs at umpire's discretion.

If convicted, penalties are in the form of losses of status. One status level will be lost for minor offences; 1D6 status levels are lost for such things as theft, fraud, forgery etc; 2D6 levels are lost for mugging, burglary and assault; and 3D6 levels for murder, treason etc.

These penalties are most effective in reducing income and seldom result in jail unless something really nasty is done. (A player in jail is an unhappy player.)

Lawyers may be hired at the following costs per case:

Lawyer—1	3,000 Cr	Lawyer—4	81,000 Cr.
Lawyer—2	9,000 Cr	Lawyer—5	243,000 Cr.
Lawyer—3	27,000 Cr	Lawyer—6	729,000 Cr.

Incrementing Social Status Level

It is recommended that players retire characters of social status 16+, though they may still participate by being burgled, generating commissions, etc.

Adventurers may increase their family's status by accumulating Status Experience Points or SEP. When a character accumulates a number of SEP equal to his current status level, his status level is increased by one and he loses all SEP so far gained.

SEP may be gained as follows:
1 SEP per 1,000,000 credits amassed
2 SEP per 1,000,000 credits wasted
1 SEP per level of glamorous skill acquired, e.g. Pilot, Leader.
1 SEP per promotion.
1 SEP per year served as a slave or prisoner.

PSIONIC SPECIAL TALENTS

It is rare for someone to acquire only a special talent, so it is suggested that special talents enhance the other ones. Below are given some examples of additional tricks a psionic can perform if he has the stated talent and a special talent. These extras can only be used when the talisman is to hand; the talisman also confers 1D6 extra psionic strength points, but these do not in any way affect the maximum level attainable.

Clairvoyance and Special Talents

Persons with this combination may use their clairvoyant abilities through time as well as space; count one second forwards or backwards as equivalent to one metre of range. In game terms, the player may ask the umpire a number of questions equal to his clairvoyance level, which the umpire must answer truthfully "yes" or "no". (See Frank Herbert's *Dune* trilogy for a well-handled account of such abilities.) Due to the mechanism of the hyperspace Jump, persons with this combination, whether or not they have their talisman are likely to feel nauseous and confused for 1—6 days after such a Jump. Roll 2D6, DM —7, + endurance. If the score is lower than or equal to the psionic's clairvoyance level, he has fallen ill.

Telepathy and Special Talents

This combination enables the psionic to affect reaction tests. One creature or person per level can be affected, and a DM equal in size to the number of strength points expended is added or subtracted to the reaction test at the psionic's discretion. (This is from an idea in Larry Niven's *A Gift from Earth.*) Further, such combined talents may be used to penetrate telepathic Shields; when penetrating a Shield, count psionic strength and level as half normal, rounded down.

Telekinesis and Special Talents

This combination gains the ability to affect temperature. Instead of telekinesis on an object in the normal manner, they may choose to raise or lower its temperature by one degree centigrade per telekinetic level per strength point expended. This can be used as a lethal weapon by raising the temperature of the brain by a few degrees — ten should be enough for death. The brain weighs one to two kilos.

Teleportation and Special Talents

This combination gives the power to do two new tricks: First, to teleport another being or object instead of oneself; and second, to teleport forwards or backwards in time. Count one second as equivalent to one metre for range costs. As with normal teleportation, it is up to the player to specify possible hazards and how he will avoid them. This is the hardest talent to umpire, so it's just as well it's the rarest. (The idea comes from Poul Anderson's *There Will Be Time*, and reading that will show the best way to handle the talent).

These persons suffer from Jumps in the same way as *Clairvoyance and Special Talents*.

Awareness and Special Talents

Such persons may enhance dexterity on the same terms as strength. Further — and I like to think this is part of the reason for anti-psionic prejudice — instead of expending a psionic strength point to enhance one of their own physical characteristics, they may "drain" points from another intelligent being's strength, dexterity or endurance in order to gain an equal number of psionic strength points. However, the range cost must still be paid so this works best at close range.

The user fo this talent may "drain" a number of points in one combat round equal to his psionic level or less. All points "drained" in one combat round are lost from one of the victim's characteristics at random.

The "drainer" must roll less than or equal to his Intelligence on 2D6, or he will continue until the victim dies regardless of how many points he actually needs from the victim.

THE BEST OF TREASURE CHEST

Tricks & Traps

CHARMEES by George Scott

Traps involving spells, especially illusionary spells, are generally easy to create and can be deadly. The Charm spell, however, can also be used to good effect in setting up traps depending on the charmee. A charmed and suitably pre-instructed Paladin established in a room (secretly observable by the controlling MU) is especially likely to catch players unawares. After all, who is not going to trust a friendly Paladin who heals wounds etc. Similarly, Rangers and Lawful/Good Clerics can be used to advantage as charmees.

REBOUNDING RESCUES by George Scott

This kind of trap involves setting up a situation where the players will probably perform a rescue that will result in another fight when they are least prepared. For example, a beautiful Chaotic/Evil female is kept in a drugged sleep in a bed-chamber by another chaotic MU and, if rescued, will eventually attack her rescuers.

The Electric Chest
by Stephen Home
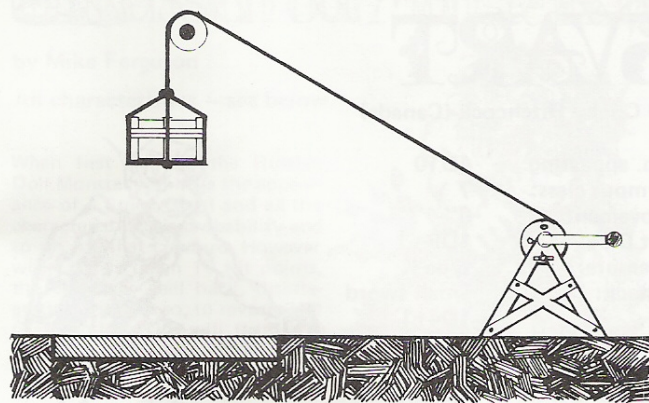
A treasure chest is suspended by a steel cable over a beam. The cable cannot be cut through by normal weapons and is attached to a winch, which is made of metal, with a handle, also of metal. In the floor, directly under the chest, is a metal plate which is charged by a strong electrical current. The plate cannot be seen directly from the winch. When the chest is lowered it will make contact with the plate sending a nasty shock through the cable to the unlucky holder of the winch. The damage is up to the DM.

Frozen Food!
by David Bradbury

A stall in the dungeon, run by an almost invincible monster (e.g. a 20th level M.U.), sells food for extortionate prices. The special offer is deep-frozen troll's flesh (the wizard will claim it's beef). Once the meat has defrosted, it starts to regenerate and eventually becomes a whole troll, hell-bent on revenge. This could be unfortunate if the adventurers had left it to thaw overnight!!!

The Pit and Rope Trick
by Roger Musson
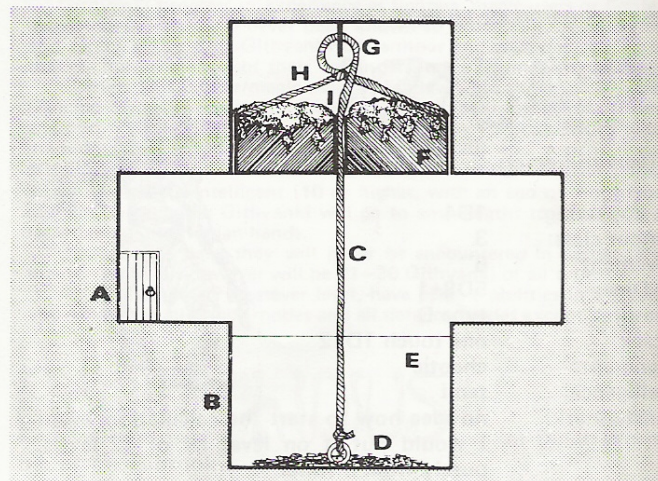
Party enters the room through door (A) and sees a 10' x 10' x 10' pit in the centre (B) and also the rope (C), which is stretched taut between the iron ring in the floor of the pit, and a hole in the ceiling through which it vanishes. (This hole is very narrow.) On the floor of the pit is some treasure scattered about (D). What they don't see is that the whole pit is filled by a large Gelatinous Cube (E). Some DMs rule that these are naturally invisible in poor dungeon light, others that Cubes are only translucent rather than transparent. This Cube has had Invisibility cast upon it for good measure! The rope is coated with chemicals to protect it from dissolution — these chemicals are also highly inflammable. Once the Cube has been discovered, since it is very difficult to hack at something below foot level, the party may decide to burn the thing with oil. Alas! The ceiling just above the pit is a large loose block (F) which is supported by the rope (C) which loops over the pulley (G), and is knotted at (H) into four strands, one to each corner. When the rope burns, down comes the block, squelch into the pit, sending up a shower of pulverised Cube over everybody standing round. And if getting paralysed by the shower wasn't bad enough, there is a colony of Yellow Mould (I) on top of the loose block, which will not take kindly to the violent fall.

THE FIEND FACTORY

Dahdi

by Mervyn Lemon

No. appearing:	1D4
Armour class:	3
Movement:	6''
Hit Dice:	5D8+1
Treasure:	type D
Attack:	one touch 1D12
Alignment:	chaotic
Intelligence:	semi
Monstermark:	no idea how to start the calculation, even! I would put it on level IX of 12 levels, purely from instinct.

The Dahdi is a mutant Mummy who was turned out of the pyramid when it tried to wear the trousers and control the purse-strings. It cannot be distinguished from a normal Mummy except that there is a 25% chance that the bandages on its face will have slipped allowing one black eye (a present from the Mummy who turned it out) to be seen. Some of its bandages may no longer be present and it may present rather a tatty appearance.

It cannot be affected by charm, sleep or mind-controlling/reading spells, but unlike normal Undead is impervious to magical and silver weapons. Only normal weapons affect it. If fire is used, the flaming oil or fireball is hurled back at the attacker with base score of 12 or better to hit (fireball damage as spell; flaming oil etc. 1D8 first round, 2D8 second round, then fire goes out). Holy Water is repelled towards the attackers and converted to acid (damage as fire). Any liquid containing alcohol, beer or wine etc., thrown at the Dahdi adds 1 to its Hit Dice each time. Only plain, non-holy water can injure or kill it (damage as fire).

Turning away by Clerics is reversed from normal. 1st, 2nd and 3rd level Clerics automatically turn a Dahdi away; a 4th level requires greater than 2 on 2D6, 5th level greater than 4, 6th level greater than 6, 7th level greater than 8, 8th level greater than 10, 9th level and above have no effect.

A bandage from a Dahdi, when used to bind wounds, heals 1D10 points of damage in (20 minus constitution) turns. The DM should roll for the number of bandages the Dahdi still has intact when first encountered. A bandage can only be used once. The healing properties of the Dahdi last only 5 turns after the Dahdi has been killed.

Obviously the rot of the Mummy's touch does not apply to the Dahdi.

THE NEEDLEMAN

by Trevor Graver

No. appearing:	1—50
Armour class:	6
Movement:	8''
Hit Dice:	3D8+4
Treasure:	type G
Attack:	1—6 needles (1D4 each)
Alignment:	Lawful/Evil
Monstermark:	38.3 (level III in 12 levels).

This beast looks rather like a spined Zombie but is not a member of the Undead. It originated as the result of a Raise Dead spell imperfectly executed on a corpse in a shallow grave on a bed of pine needles; these became imbedded in the flesh. Within a range of 20' it can fire 1D6 needles, for 1D4 damage each, with the accuracy of a short-range arrow (12 or more to hit AC2). It takes triple damage if hit by magical means and attacks Elves on sight.

HOOK HORROR

by Ian Livingstone

No. appearing:	2D6
Armour class:	3
Movement:	9''
Hit Dice:	5D8
Treasure:	type P
Attack:	two talons, 1D8 each
Alignment:	Neutral
Intelligence:	low
Monstermark:	45 (level IV in 12 levels)

Large, powerful humanoids, Hook Horrors have vulture-like heads and a hard plated exoskeleton which is mottled grey in colour. Though their vision is very poor (they inhabit deep underground caverns) their hearing is extremely acute and there is only a 10% chance of surprising them.

Their arms end in sharp, hooked talons which they use in melee.

They cannot speak but communicate by making clacking noises with the exoskeleton — an eerie sound which can alarm the unwary as it echoes round dungeon corridors.

SVART

by Cricky Hitchcock (Canada)

No. appearing:	4D10
Armour class:	7
Movement:	6''
Hit Dice:	1D8—1
Treasure:	type K
Attack:	Small sword 1D4+1
Alignment:	Chaotic/Evil
Intelligence:	Average
Monstermark:	1.3 (Level I 12 levels).

These small creatures (3' tall) have bright blue skin with orange eyes. They are mediary between Goblins and Kobolds and generally attack the latter, though they will unite against their common foe — Hobbits. Hobbits delight in staging combats between groups of Svarts and Kobolds.

In a group of 5 Svarts, there will be one carrying a net. In a group of 20 Svarts, one will be a strong leader-type, ranging from 3'6'' to 5' in height and from 8 to 11 hit points. Leaders use a hand-axe, mace, battle-axe, morning star or flail with damage by weapon type. No Svarts have magic use.

by Nick Louth

This is a whole family of creatures with characteristics as follows:

Colour	Hit Dice	Armour Class	Attacks	Gems value
Black	1D8+1	4	1 (as +1 light crossbow)	1D100
Green	2D8+1	3	2 (as +2 light crossbow)	2D100
Red	3D8+1	2	3 (as +3 light crossbow)	3D100
Yellow	4D8+2	1	4 (as +4 light crossbow)	4D100
Silver	5D8+2	0	5 (as +5 light crossbow)	5D100

Spines have 60' range

|	
Movement:	12" (18" flying)
Treasure:	Nil (but see description)
Attack:	as above, spines doing 1D6 damage. Red, Yellow and Silver Urchins also have 1D4 poison on the spines.
Alignment:	neutral or non-aligned
Intelligence:	semi
Monstermark:	Black 3.6 (Level I in 12 levels)
	Green 24.9 (Level III in 12 levels)
	Red 139.6 (Level VI in 12 levels)
	Yellow 404.4 (Level IX in 12 levels)
	Silver 1000 (Level XI in 12 levels)
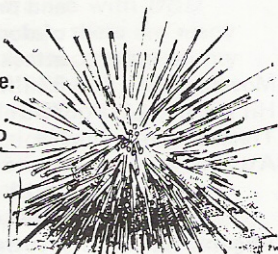
These creatures look like 3' diameter balls of various colours with thousands of radiating spikes. The more hit dice they have, the more spines they can fire in a single melee round. When killed and broken up, they reveal gems at their centres. They hunt with clairvoyance.

Russian Doll Monster

by Mike Ferguson

All characteristics — see below.

When first sighted, the Russian Doll Monster will have the appearance of a Stone Giant and all the characteristics, hit probability and so on, of that creature. However when it has taken 10 hit points, the skin will peel back, disintegrating as it does so, to reveal a Hill Giant inside. This will fight as a standard Hill Giant until it has taken a further 10 hits, where upon the skin peels back and an Ogre appears. This process continues on the following lines:
10 hit points later, a Bugbear;
9 hit points later, a Gnoll;
8 hit points later, a Hobgoblin;
7 hit points later, an Orc;
6 hit points later, a Goblin;
5 hit points later, a Kobold with 4 hit points.

Here, one would think is the logical end to the sequence, but no! Springing from the dying remains of the Kobold, like a bullet from a gun, comes the Leprechaun which has been operating the whole Doll. It will immediately turn invisible, grab the nearest item of value (preferably a magical one) and do its best to escape with it.

Needless to say, these creatures will only be found as wandering monsters and will attack on sight.

Comments: I like to include an 'oddball' monster from time to time, and this is a good laugh. Mike calculates the Monstermark as 219.3 which makes it pretty tough — level VIII in 12 levels, and a whole level higher than the initial Stone Giant. Which only goes to show that, inside every Giant, there's a Leprechaun trying to get out . . .

GITHYANKI

by C. Stross

No. appearing:	1D4
Armour class:	variable
Movement:	variable
Hit Dice:	variable (upper limit of 11D8)
Treasure:	individuals type R, lair type A
Attack:	by weapon type
Alignment:	variable but never good and always evil
Intelligence:	average — genius
Monstermark:	variable
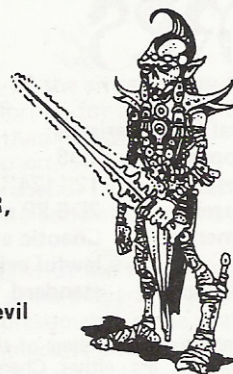
Long ago the Mind Flayers enslaved a race of evil humans — the Githyanki — as slaves and food. Gradually the Githyanki grew in strength and powers, finally throwing off their rulers' yoke and gaining their autonomy. They dwell in the Outer Planes but frequently project themselves to the material plane (an innate ability common to all members of the race) and from time to time will set up temporary refuges deep underground from which they mount raids on humans and Mind Flayers alike. They worship a Lich-Queen said to have powers at the 24th level of magic-use.

Githyanki progress in experience as fighters, magic-users or fighters/magic-users. They have never been known to progress above 11th level and rarely above 8th. Githyanki use armour and weapons as men do, though the ornateness of their design is often a distinguishing feature.

Fighters and fighter/magic-users of 5th level and above usually carry Dancing Swords of at least +1 bonus. A Githyanki fighter of 7th level and above will usually carry a Silver Sword — a +3 broadsword with a limited vorpal property (sever on a roll of 20) and which, if used astrally, has a 20% chance per melee round of cutting the Silver Thread. Silver Swords are intelligent (10 or higher, with an ego of 7 or higher) but are non-aligned; Githyanki will go to any lengths to prevent them from falling into human hands.

Outside their lair, they will never be encountered in parties larger than 4; in the lair however will be 21—30 Githyanki of all types.
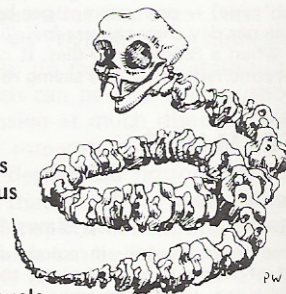
All Githyanki, of whatever level, have psionic abilities in the range 150—250 with all attack modes and all defence modes except J.

NECROPHIDIUS

(or Death Worm)

by Simon Tilbrook

No. appearing:	1
Armour class:	2
Movement:	9"
Hit Dice:	2D8
Treasure:	Nil
Attack:	1 bite (1D8 plus paralisation) plus special
Alignment:	Neutral
Monstermark:	33.8 (=2½A) — level III in 12 levels

This fearsome addition to the ranks of the Undead was first created by that most imaginative of experimenters, Karalkan (who was later to 'see the dark' and build the temple of the archdemon Kong). The animation spell is 6th level (optionally available as a 5th level anti-cleric spell) and produces one worm per level of Wizard above 11th (so a 15th level Wizard could create four worms). Each worm requires the intact vertebrae of a giant snake and a man-sized humanoid skull.

It is totally silent, immune to Sleep, Charm and mind reading spells, immune to poison and never checks morale. It achieves surprise on a roll of 1—3 on D6 and if it is not itself surprised it will execute the 'Dance of Death' — a hypnotic, semi-magical swaying which rivets the attention and allows the worm to advance and attack without opposition. Save against magic required; failure means inability to act (treat as hypnosis).

THE FIEND FACTORY

▶ The Necrophidius is created for one specific purpose and is therefore generally met as an assassin or guard — never as a wandering monster.

Its bite causes paralisation unless the victim makes his saving throw against magic (this is a magical effect, not a venom). It is treated as a Wight on the 'Clerics v Undead' matrix.

IMPS

by M. Stolery
General characteristics:

No. appearing:	1D8
Movement:	12" (24" flying)
Treasure:	2D6 PP each
Alignment:	Chaotic evil or lawful evil
Intelligence:	standard

These additional members of the Imp class (see the *Monster Manual* and *Dungeoneer*) are either Chaotic Evil or Lawful Evil, depending on whether they serve Demons or Devils. They are all about 5' tall with functional wings and fangs. These four types are known as the "Imps of the Flame".

FIRE IMPS

Hit Dice:	3D8+1
Armour class:	5
Attack:	two claws 1-3 each plus special

These mischievous creatures attack with their claws and a breath weapon. The latter is either a jet of flame 15' long and 1' in diameter (2-9 points of damage to a victim who fails his saving roll, damage halved if he does save) or a flame 'blanket' 5' square directly in front of the Imp (4 points flesh will cause 1 point of damage.

They can *heat metal* and use *magic missile* (2 missiles) once per day and have a 25% chance of gating in another Imp of the Flame (equal probability each type) — one attempt per hour.

They are red in colour and their bodies are surrounded with wisps of flame.

SMOKE IMPS

Hit Dice:	3D8
Armour Class:	4
Attack:	two claws 1-2 each plus special

Like the Fire Imps, these creatures attack with their claws and a breath weapon, the latter being the discharge of a sooty ball of smoke which does 1D4 damage to a victim (no saving roll — automatic hit on a single victim within 20') and blinds him for 1-2 melee rounds.

They are black in colour and have smoke oozing from their bodies. They inhabit smoky areas and never emerge into bright light if possible.

The Smoke Imp can gate in 1-2 Imps of the Flame (equal probability each type) — one attempt per hour which has a 20% chance of success. Once per day they can use *invisibility* and *dancing lights*.

When a Smoke Imp dies, it coughs up 1 hit point of flame damage to everyone within 10' (no saving roll).

STEAM IMPS

Hit Dice:	3D8+3
Armour class:	7
Attack:	two claws 1-4 each plus special

These Imps are grey in colour and constantly drip hot water, leaving a trail of water behind them as they move. In addition to attacking with their claws, the Steam Imps can direct a jet of scalding water at a single victim within 20' (1-3 points of damage —no saving roll —and a 50% chance of stunning the victim for one melee round). Touching a Steam Imp with bare flesh delivers 1 hit point of damage and a 50% chance of stunning for one round.

Once per day the Steam Imp can perform a *rainstorm* of boiling water —treat as *ice storm* with 2-12 damage for all victims (no saving roll). Once per hour they may *contaminate water* (as the first level Druid spell).

Once per hour they may attempt to gate in 1-2 Imps of the Flame (equal probability each type) with a 30% chance of success.

MOLTEN IMPS

|	
Hit Dice:	3D8
Armour Class:	6
Attack:	two claws for 1 point of damage each plus special

These Imps appear red-hot and constantly ooze molten lava. Anyone touching them with bare flesh receives 1-8 damage.

They can claw and use a breath weapon, the latter consisting of a molten blob of lava, automatically hitting a single target within 10' for 1-6 points damage (no saving roll). If the encounter takes place in a volcanic region where molten lava is available, these Imps can regenerate 2 hit points per round simply by keeping in contact with the lava (although this power ceases if they are killed).

Once per hour they may attempt to gate in 1-2 Imps of the Flame (equal probability each type) with a 25% chance of success. Their touch automatically dissolves materials (as Green Slime) and they may *shapechange* into a pool of lava.

Comments: A welcome addition to the ranks of a very useful class of monster. A DM will have to give careful thought to interaction between the Imps of two or more different types appear in the same encounter (as a result of gating, for instance) —the STEAM and MOLTEN variety, for instance, may not be entirely compatible.

I have not worked out all the Monstermarks, but would place all these creatures in levels I-I Vin 12 levels.

VOLT
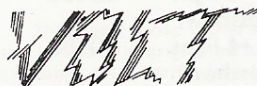
by Jonathan Jones

No. appearing:	2D12
Armour class:	9, but treat as AC3 to hit because of its high dexterity and probability of dodging an attack
Movement:	6" ('flying')
Hit Dice:	2D8+1
Treasure:	Nil
Attack:	1 bite (1D4) and 1 tail (2D6) — see description
Alignment:	Neutral
Monstermark:	57.5 (level IV in twelve levels)
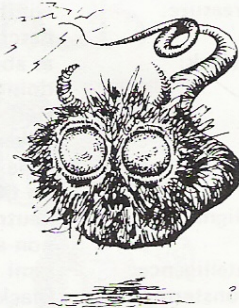
A Volt is a bundle of bristly hair with two bulbous eyes, small horns and a 3' long tail. It floats as though on an air cushion. It first attacks by propelling itself towards its victim's neck and bites for 1D4 damage if successful. It then locks onto the neck and cannot be detached until it is dead, or it will detach itself if its victim dies. During the time it is attached, it will bite for 1D4 each round and also lash its victim with its tail for 2D6 each round; both attacks are automatically successful when the Volt is attached — no die roll being required for a hit. The tail attack is in the form of an electric shock.

D&D Campaigns

by Lewis Pulsipher

Part 1 : Philosophy

Dungeons and Dragons is probably the most popular game in the USA produced in the past five years. As more sets reach Britain it is approaching a similar level of popularity. D&D campaigns are very rare here, however, because most referees are insufficiently experienced to set one up. This series ought to help those who have some refereeing experience but are unfamiliar with campaigns, but is aimed at players who want to start refereeing on the right footing. It is based on wide reading and experience with D&D campaigns in the United States. Of course, there are many ways to play D&D. I must of necessity concentrate on my way. Readers who are entirely unfamiliar with D&D are strongly advised to first read Games Workshop's D&D introductory pamphlet. That introduction will help immensely, but the following is written for someone who has at least played the game or read the rules.

Some abbreviations are commonly used when discussing Dungeons and Dragons (D&D). Rather than say 'six-sided die', 'D6' can be used, and so on for each type. Character class and level may be abbreviated as 4F (fourth level fighter), 6MU (sixth level magic-user), and so on. 'Monsters' means all non-players, including men. 'Creatures' usually means any living thing. In the following I will often refer to character levels by 'low', 'middle', and 'high'. These terms mean respectively about first to third level, fourth to sixth, and seventh to ninth. In a long campaign characters higher than ninth may be developed, but this should not be common.

This article is divided into three sections, Philosophy, Mechanics, and Rules Recommendations. The first concerns how the referee wants to characterise his game, what style he intends to adopt; something referees seldom think about but ought to. The second concerns the actual mechanics of setting up a campaign and running a game, going beyond the vague brief suggestions in the rules. The third section concerns rule clarifications and some recommended interpretations of ambiguous rules, with explanations of their impact on a campaign. For reasons of space I have omitted a multitude of minor subjects.

D&D Styles

D&D players can be divided into two groups, those who want to play the game as a game and those who want to play it as a fantasy novel, i.e. direct escapism through abandonment of oneself to the flow of play as opposed to the gamer's indirect escapism — the clearcut competition and mental exercise any good game offers. There are two subdivisions in each division. The game-players may emphasise player skill in players-vs-monsters (and sometimes vs other players) or they may prefer players-vs-puzzles (riddles, traps, mazes, etc.) to monster slaying. Of course no D&D campaign is purely one or the other. The escapists can be divided into those who prefer to be told a story by the referee, in effect, with themselves as protagonist, and those who like a silly, totally unbelievable game. In either case, there are two ways this can be accomplished. One is by innumerable dice rolls and situations which call for chance, especially magical decks of cards, buttons, levers, and so on — lottery

D&D. The other is by manipulation of the situation by the referee, however he sees fit. In California, for example, this leads to referees who make up more than half of what happens, what is encountered and so on, as the game progresses rather than doing it beforehand. In either case the player is a passive receptor, with little control over what happens.

There is nothing inherently wrong with the silly/escapist method, but it is a strange way for game players to act, and many White Dwarf readers are presumably game players as well as SF fans. Gary Gygax has made it clear that D&D is a wargame, though the majority of players do not use it as such. I personally consider the silly/escapist style to be both boring and inferior for any campaign, though all right occasionally for a weird evening. I hope to expalin my reasons in this series. I also prefer monster fighting to puzzle solving, and won't say much about the latter. The principles are the same, just the opponents are changed.

I prefer to use the printed game rules whenever possible. The fewer changes made in the rules directly affecting players, the less the referee needs to explain to new players. In the innumerable ambiguous cases, I interpret rules so as to promote player skill and restrain high-level MUs, even though I prefer to be a magic-user.

Although enough D&D material has been published in magazines and supplements to fill several books, a referee should try to be self-consistent in what rules and monsters he uses. In other words, just because TSR has published reams of rules for gods in their last supplement doesn't mean you must or should use any of them. In most cases it will be more consistent to use one's own ideas of what the gods are like. Again, just because the psionics rules are there doesn't mean one must use them. They are confusing and require a complete overhaul of a world in order to add the psionic monsters which make the psionic character's life dangerous, compensating for its advantages. If you cannot or will not make the necessary changes, you shouldn't use the psionic rules. Or, if you think psionics smell of science fiction rather than fantasy, you are under no obligation to use them. Think about what you want, don't simply throw into the game any new D&D rules or monsters you can lay hands on. There is also no reason to retain old rules, such as monster tables, which can be improved without putting players new to your campaign at much disadvantage.

This idea of self-consistency or integration must be pursued further. One of the most destructive notions I've encountered in D&D is the belief that 'anything goes'. This is fine for a pick-up or silly-fun game, but contributes an air of unreality and recklessness which can be fatal to a campaign, and which in any case is offensive to many players. Inevitably, an 'anything goes' campaign tends to be one in which player skill counts for little, for two reasons. First, players have no foundation to base decsions on; never knowing what to expect, they cannot plan a rational response. Second, the 'anything goes' game tends to be dominated by dice rolls or referee manipulation. A great deal usually depends on the saving throws of characters. For example, one of the favourite ploys of the 'anything goes' referee is to devise panels of buttons or decks of cards similar to a Deck of Many Things, often involving more far-reaching changes. Players push buttons cr pick cards and great things occur. Players seldom do much to earn the rewards or penalties — the cards are easy to find, and the dice determine results.

One may protest that the skillful player can avoid picking from the card deck, or fooling with the lever or button, and so on. Unfortunately, the structure of this kind of game is such that, if a *player* (not a character) wants to get ahead, he must take his chances. The reasoning is simple. A player can always roll new characters. In a luck-dominated game, even if half the time a player's character is seriously harmed, the rest of the time he benefits to the same degree or more. Consequently, the player who chooses not to take the ridiculous risks may die less often, but his characters will often be mediocre compared to those who dared and were lucky. The player who trusts to fate will lose many characters, but his other characters will prosper. In other words, the 'law of averages' works against the cautious player. The key is that the *character* run by the player does not have to act rationally because it has no separate existence. In many cases, only an insane person would accept the risks involved in cards, buttons, and levers. It's too much like Russian Roulette. But the *player* isn't the one who may die or be maimed; in fact, if his character is crippled, he can easily get him killed and start a new one. Thus this form of the game forces players to depend on luck and at the same time contributes an air of unreality to the entire proceeding. Even fantastic fiction, despite the name, possesses an internal self-consistency, and the characters in fantasy fiction usually act as rational, though brave, people. In *Dungeons and Dragons,* if the campaign is not designed correctly it becomes unbelievable, for a *D&D* player may, along with the fiction reader, say 'I don't believe men would do this'. Each referee must ask himself as he sets up his campaign what rules and items would seem believable if he read about them in a fantasy novel.

Even in a fantasy game, moderation and self-discipline are virtues necessary to top refereeing. While campaigns may be run on other bases, I believe that a skill-game campaign is likely to satisfy people more in the long run. Some people prefer luck and passivity, but they are seldom game players. If you feel a need to get drunk and/or stoned, however, try lottery *D&D.* The similarities are surprising.

Referees must not forget that the fun a person has is relative to what he expects. One group of science fiction fans I know of is accustomed to beginning characters at third or fourth level, parties of eighth to twelfth level and higher, innumerable magic items, and super-monsters which make dragons look like child's play. In a less powerful game these people will often be bored, for obvious reasons. On the other hand, players accustomed to a more subdued campaign might be delighted or terrified by the rewards and dangers of the situation which would bore the supergamers. A person accustomed to painstakingly working his way up from first level over a long period will feel great power when he can finally cast a fireball; one who begins at third or fourth level and works up rapidly will need to reach ninth or tenth level to get the same thrill, if he ever can. From the referee's standpoint the subdued group is much more manageable. Players stay at lower levels longer, giving the referee more time to become accustomed to rules and typical spells. For the same reason the referee will not need to devise situations which will give superparties difficulty, a very trying job at best.

I must point out before I continue that skill and experience are not synonymous. I have known people who played *D&D* for months but could never do well on their own. Others have shown remarkable aptitude in their first game, within the limitations of their knowledge of the rules. *D&D* is a simulation of life, a life we believe could exist though it does not. This real-life element permits even the inexperienced to play the game well through application of intelligence and alertness.

The Referee in a skill Campaign

The referee must think of himself as a friendly computer with discretion. Referee interference in the game must be reduced as much as possible, because the referee is neither infallible nor completely impartial. Effectively, this means that the referee should not make up anything important after an adventure has begun. He should only operate monsters encountered according to logic and, where necessary, dice rolls. The type of monsters, numbers (through a formula depending on the size and strength of the party), treasure and so on should be determined by the referee before the adventure starts, so that he won't be tempted to change or add things in mid-game. Occasionally an adventure will be dull, because players take the wrong turns or check the wrong rooms, while others may be 'milk runs' because players are lucky. Referees *must* resist the temptation to manipulate the players by changing the situation. Every time the referee manipulates the game on the basis of his omniscience, he reduces the element of skill. Nevertheless, the referee should not depend on dice throws to determine what monsters will do. Many monsters are intelligent, and should act intelligently; the easiest way to ruin a campaign is to run all monsters as though their intelligence was three. Dice can be rolled to insure that the monster's personality is not identical to the referee's, but it is better that monsters be very smart than very foolish. Of course, every referee must become accustomed to making decisions for the monsters on the basis of what the monsters can see, not on his own exact knowledge. This is not easy, but experience helps. When in doubt the dice can save the day. Say you think a wandering Chaotic 7MU might throw a fireball at a party. If this is in the dungeon, he probably didn't memorize the spell because it can seldom be used safely in enclosed spaces. If it is outdoors, he almost certainly memorized one. Since a successful fireball may destroy the magic possessed by the victims, the magic-user might be reluctant to use it. Roll percentile dice to see how greedy he is — high roll and he's greedy, desiring to take the magic rather than burn it, low roll and he's more interested in getting away or killing the party (which one depends on morale?). Morale can be determined by throwing two D6. Morale checks can be taken when the monster first sees the party, unless they obviously appear weaker, and whenever something happens that might change the monster's mind about fighting — he is wounded, a bodyguard is killed, reinforcements for the enemy appear, etc. For a morale check roll two D6 again, and if the number is higher than the first roll, morale breaks, usually resulting in flight. The monster may recover later and return. Pips can be added to a morale check roll to reflect a deteriorating situation, but I prefer to make checks more often to reflect this. However you choose to run things, be logical and consistent.

The desirable attributes of a campaign are simplicity, rapidity of play whenever this doesn't reduce skill, participation by all the players, a sense of control by the players of their own fate, and believability. Much of this is accomplished by avoiding wholesale rule changes and reducing referee interference. If the referee has properly set up the game beforehand, rapidity is also easily obtained. If the players are given sufficient decision-making opportunities then the sense of control can be established. No skill-oriented campaign can succeed if the players are unable to make decisions which significantly alter the course of an adventure, and they cannot do this if they are unable to obtain information before they act. This is why detection spells are so important (see below). Also, if players believe that the referee's decisions are unfair or illogical or that he manipulates them or makes things up, or if they find themselves rolling saving throws against instant death or permanent crippling each adventure, the campaign will not be successful. The importance of believability was discussed earlier.

The referee must maintain good relations with the players. Any referee can kill any party if he really wants to; sadists have no place in *D&D* refereeing. If players suspect that the referee is 'out to get them' the game can deteriorate into players vs. referee, not fun for either. The referee who, for example, schemes to take a magic item away from a player is incompetent. If the player doesn't deserve the item he shouldn't have obtained it in the first place. Don't lie to the players when speaking as referee. If players can't believe what the referee tells them they are cast adrift without hope. If one doesn't want them to know something, avoid the question

was not intended, but I believe it would otherwise be satisfactory.

As an example let's say that a party casts both *ESP* and *detect evil*. They stand for at least a one-fourth turn and detect all around. The referee tells them that they detect evil northwest at medium range and southwest at close range. He does not reveal the strength or numbers of the evil gorup, just the location and approximate distance. Then he tells them they detect thoughts at close range to the southwest (the same place as the evil, most likely). If the players ask how many or what general type (animal-like, low grade, man-like intelligence) he tells them. This may take extra time. They can concentrate on a single set of thoughts and the referee will tell them what the creature is thinking (I do not consider language difficulty) — probably something basic like 'I want to find some nice human flesh for supper.' Remember that over two feet of stone blocks *ESP*. Remember also that some creatures might be asleep, thus not registering on *ESP*. A minor suggestion; either leave enough space between levels that detection spells won't reach between them, or arbitrarily limit detection to a plane.

These rules enable players to have some control of the game. The most basic of all *D&D* player decisions is the decision to fight or avoid a fight. If there is no way to avoid a fight, for lack of information, players are hamstrung. It is astonishing how many players fail to use detection spells, even in tournaments. In a campaign where using such spells is a reasonable tactic, those who fail to do so die sooner or later. And they deserve it.

Alignment

Referees who run all alignments the same are shortchanging their players. Different rules for division of treasure, experience, and so on help change the game depending on the alignment of the party. Mixed parties can be interesting, too, but don't mix Law and Chaos! Each person has a different idea of what alignment means. My own come more or less from Michael Moorcock's apocalyptic fantasy novels, almost certainly TSR's source for Law/Chaos as well. Lawfuls are not goody-good types, nor are Chaotics entirely evil or entirely chaotic. The universe is dominated by an eternal war between Law and Chaos which resembles a modern total war in many ways. Adventures are in the front lines, but civilians are subject to death if found by the other side. Lawfuls tend to be good, but they also hate Chaotics, and sometimes the war is more important than other values — they are good, but religious fanatics. Chaotics are more or less mirror images, but evil rather than good and inclined to individualism rather than teamwork. They have no scruples against taking advantage of or even killing their own kind. They will sometimes cooperate to kill Lawfuls, both to preserve their ways of life and to please their Lords. Neutrals are not committed to any gods — there are no major gods other than the Lords of Law and Chaos — and their objective is either to make money from the war or to be left alone. Some Neutrals lean towards Law, as a matter of expediency, while others tend to act chaotically. Lawfuls may not attack Neutrals (including Charm and Hold Person), nor provoke attack, unless the Neutrals are definitely hostile. Lawfuls may never attack their own kind except to save the victim's life. Chaotics may attack anyone. Neutrals, as usual, fall somewhere between.

It is important to forcibly change the alignment of Neutrals who consistently act in a Lawful or Chaotic manner; otherwise everyone tends to act neutrally, regardless of nominal alignment.

Four-way alignment, allowing such combinations as Lawful/Evil and Chaotic/Good, requires a complete restructuring of the game. Even if this were practical, the effect of the four-way is to reduce alignment differentiation to nil. Only Law/Good and Chaos/Evil are automatically hostile, as most referees interpret it, and few players choose either of these pairs. Virtually anyone can be in any party, and all act about the same regardless of alignment. If automatic hostilities resulted whenever Law met Chaos or Good met Evil, regardless of the other member of the pair (four mutually

hostile alignments), this would be greater differentiation and no doubt quite interesting. But I know of no one who runs it this way.

Part II: Mechanics

This part discusses some practical aspects of constructing dungeons and setting up a campaign, and may not be of much use to veteran referees.

The first thing any referee or prospective referee should do is acquire a small notebook in which to record (and expand upon) his ideas as they come to him. Enough good ideas have been thought of, and then forgotten, to make hundreds of dungeons and wildernesses. Have this notebook handy whenever you're involved with *D&D,* and when you get an idea write it down immediately. You'll save hours in the long run.

Whenever possible, organize copies of the various charts and tables in compact and accessible form to avoid interminable thumbing through the rules. While you're doing this it is useful to expand the two attack matrices. Notice that the number required on a 20-sided die for a successful attack differs by two or three from column to column. Many referees divide two columns into three, say, so that the first Men column might include first and second level fighters, first-third level clerics, and first-fourth level MU, requiring a 17 vs. AC 2 for a hit; the second column might include third and fourth fighters, fourth and fifth clerics, fifth and sixth MU, needing 16 vs. AC 2; and so on. Using this method players gain in attacking prowess more often, but less abruptly.

I recommend that every referee add one combat rule — a 20 rolled on the die is always a hit. Otherwise one may find players with magic armour who are invulnerable to weak monsters, which makes for exceedingly boring "battles". Of course, even a 20 is not a hit if a necessary weapon (say, magic or silver vs. a werewolf) is not used.

Board and Counters

Some people refuse to play *D&D* without miniature figures, but an alternative and perhaps convenient method is to use cardboard or plastic game counters and square (dungeon) and hex (wilderness) battle-boards. The counters can be colour-coded by character class or alignment, and letters or numbers on the counters indicate the character's race, level, name, or whatever the ref prefers. Counters don't fall over, don't need painting, are much cheaper, and give more information than figures. When monsters need to be represented counters are infinitely better. They can be made in different sizes for unusually large monsters, and the numbers on them enable the referee to differentiate hits and wounds without confusion. Figures may be more "atmospheric", but imagination comes from the players, not the equipment.

By using counters (or figures) with a battle-board one elimi-nates much of the unrealistic goings-on of many D&D game melees. A square can be about a metre, with one character per square allowed. Movement rate can be converted from "inches" to squares easily enough. The referee can see exactly where everyone is and can be sure they don't move farther in a round than humanly (or elvishly?) possible. The players can see exact-ly where the monsters and walls are rather than depend on vague repeated referee mutterings. "Walls" are cardboard strips placed by the referee when an encounter begins. The time need-ed to set up is saved many times over, and the referee avoids many headaches. For the wilderness a hex board at a larger scale is best.

Monsters

There are so many monsters that it is convenient to put all the characteristics for each monster on card. Looking through one card deck is much easier than thumbing through books, supplements, magazines, etc.

No player wants to wait while a referee rolls for wandering monsters. The type, formula for number appearing, and other relevant details of wanderers should be rolled before the game. (Don't bother with ability numbers for humans unless you need one for a particular purpose.) On a time chart divided into one-move segments and placed in a page protector the

referee can record with a china marker the times when wanderers will appear, again dicing before the game begins. This also prevents players from figuring out whether a monster has been placed deliberately or is a wanderer. The time chart is also useful for spells with long duration — *ESP, detect evil,* etc. Just count ahead and mark the move-segment when the spell will expire. A time chart won't help much for the wilderness. To hide the nature of an encounter — placed or wandering — roll at the beginning of each day for the time of day/night when an encounter might occur, and roll a D6 and record the result to compare against terrain at the appropriate hex of movement.

If the referee writes a particular number along with each placed or wandering monster he may find that there are too few or many for the strength of the party — it is too hard to control the strength of every party entering the dungeon. On the other hand, if the only means of deciding how many monsters there are is whim, the referee probably will become guilty of manipulating the game unfairly. Some formula should be used to govern the number of monsters appearing. I calculate the experience points the players would be worth to someone who killed them, roll a die, and multiply the resulting percentage by that value to determine the experience point value of the monster group. The following is an example:

Die roll

	1	2	3	4	5	6
Placed	70%	80	90	100	100	110
Wanderer	35%	40	45	45	50	50

If a party worth 500 EP encounters wandering monsters worth 20 EP each, and a 4 is rolled, $\frac{500 \times .45}{20}$ or 11.25 monsters appear (.25 means 1 chance in 4 of a 12th monster).

Setting up the Campaign

All that is required for a campaign is a multi-level dungeon. The second thing to construct is a wilderness, but unless the wilderness rules are radically altered one won't be needed until players have advanced several levels. Wilderness exploration is suicide for parties lower than third level, and unusually dangerous even for fifth level parties, unless magic items are very common. The last major element of a campaign is a city or town. The city often exists in abstract form, since the players must buy equipment and live somewhere, but it is the element least needed for adventuring. A well-developed campaign includes all three elements and more, such as legends, history, other cities, dungeons, tombs, etc.

It is a big mistake to try to anticipate the players while constructing the dungeon or wilderness. Many referees try to predict how players will react and force an encounter into a pre-set pattern based on the prediction. When the players arrive they have a magic item the referee didn't consider or they think of some strategy he missed, giving them an easy victory. In such situations the referee is tempted to manipulate things so that the conquest is not so easy—in other words, because he erred initially he now 'breaks the rules' and changes things about. This is unfair to the players, who should be rewarded for their efforts, and it violates the first rule of skill-style *D&D*, which prohibits referee interference and so improves play. An extreme example of false prediction was the referee who placed a room with thick *diamond* walls in his dungeon, expecting that if someone managed to get there they wouldn't be able to pry the diamond off the walls. Eventually someone got through — with a *Ring of 3 Wishes.* One wish was enough to garner some thousand million gold pieces worth of diamond from the walls.

What can the referee do, then? First, when placing treasures, *never* assume that the players won't get through. In fact, assume they'll get through with no casualties — then you'll never be caught off guard, and your campaign won't be ruined. Second, be realistic. Just because *D&D* is a fantasy game doesn't mean you can forget logic. Don't put five Balrogs 20 by 20 foot lair. Don't let a magic-user live without guards unless he is well hidden by secret doors and alarms. Pretend you're the monster looking for a lair that is convenient and

defencible, but you don't know specifically what might attack —men, animals, monsters, who knows? Third, don't get bogged down in details. It is impossible to foresee every contingency, so why bother to try to foresee dozens? Adding detail is a lot of work which isn't likely to make the monsters or situation any tougher. When placing monsters and traps, briefly specify the major points and forget details. When the encounter occurs, secretly roll dice to determine colours or whatever irrelevant details the players want to know. Fourth, set up situations which seem to be difficult for the party strength appropriate to the level or wilderness area. It doesn't hurt to make some place too powerful, so long as players don't get trapped and there aren't lead wall-linings about to nullify detection spells. There ought to be places on a level which are too difficult for a typical party. The latter then have the opportunity to refuse to fight, where an unwise group may fight and die. Skill is important only when there are two or more alternatives in a situation which all seem plausible, but where some are worse than others. The skilful players will pick the best and prosper.

When setting up the city, abstract or mapped, *don't* establish a magic-store, magic drink tavern, or other odd enterprise that can radically change a character's ability. Magic should be rare enough that no one will trade a magic item for mere gold. The only magic sale I have ever seen was elven boots for 25,000 gold, and only because a character was in debt. Of course, a Wizard or high level non-player of some other class may have a few magic items he's willing to trade, but the referee must be sure that the trade favours the non-player. Follow the principle that magic has value to the non-player regardless of his character class. Don't let a non-player cleric trade a staff of wizardry for +3 armour just because he can't use the staff and can use the armour—a staff of wizardry is worth much more. (For that matter, a cleric probably wouldn't have a magic-user's staff anyway.) Also, players must go to places where powerful non-players live in order to have a chance to swap. If it's not clear what a magic item is worth, try to use the chart under 'Characters' in *Volume I* to determine what the cost would be to a Wizard making the item—and remember that the time spent in labour is the most important element of the cost.

The Dungeon

The first consideration in planning the dungeon for a campaign should be reasonable accomodation of higher level characters. I believe the intention of the *D&D* designers is that a party of fifth level characters, say, should go down to the fifth level. Such a party could stay in the first level, but members would gain almost no experience—one fifth as much as a first level character, when about ten times as much is needed to move from fifth to sixth level as from first to second. Unfortunately the *Greyhawk* tables force rational players to prefer less than full experience to almost certain death, one reason why the monster tables ought ot be revised. My view, reinforced by the designer's articles, is that to reach 100,000 experience points should require at least 50 adventures, but this is a matter in which each referee must please himself.

Many referees use index cards, one per room or corridor, to record the key to the dungeon map. This is bulky, but is much easier to change a room if you can replace the card rather than rearrange things on crowded notebook paper. Develop a colour or letter code key to indicate the presence of things which can be detected by spells or magic items: evil/good, metal in large quantities, magic, gems, thoughts. Otherwise you'll find yourself thumbing through your key again and again to check the contents of rooms when players begin to use detect capability. While refereeing an adventure put the map in a page protector and mark party location and other pertinent details with a china marker.

Construct two or three levels at first, connecting them with the usual stairs, chimneys, ladders, descending passages, and so on. These will be sufficient for the first few months of the campaign. As the campaign progresses add more levels, down to about the seventh after six or seven months. Don't get too far ahead; you may have to revise your ideas as you gain experience. When drawing a level, remember that there ought

to be unblocked access to most of the monster-occupied rooms. Many dungeons are full of occupied rooms which can be reached only through other occupied rooms. One wonders why none of the monsters fight each other—they've got to go out sometime, after all, to find food, water, and mates. I have yet to hear a believable reason why they wouldn't fight; usually the excuse is that a thirtieth level something-or-other runs the entire dungeon and won't let them. This is tantamount to saying that God Almighty has ordained that they shall not fight each other and shall only fight intruders. Why? No, it does not seem real.

Consequently, a basic dungeon configuration should be built of corridors through which inhabitants can reach the outdoors, or at least other levels, without necessarily encountering other inhabitants. Guards and guardrooms are reasonable in some situations. Sometimes rooms will be accessible only through other rooms, but seldom will more than one of these be occupied. Remember that some rooms will be empty, and don't crowd things. If the dungeon is so packed that there are few sqaures of solid stone, then players will spend all their adventures on that level killing things they detect nearby. They won't reach other parts of the level unless there are entrances from above placed near main throughways. It's no fun to have groups going through the same areas while parts of the dungeon are never explored — a waste of effort, in fact. A sprinkling of traps, rotating and sliding rooms, chutes, and so on will keep the players alert and add variety without boring them. Some of the best adventures are those on which the players become lost. Remember that there is nothing worse, for many players, than to walk 1,000 feet and encounter five traps before discovering an occupied room.

Gary Gygax has suggested choosing some theme for each dungeon level, say a level inhabited by dragons or one in which the various Chaotic humanoid races are at war. I tried this on one level of my original dungeon and found it too limiting. It is better to have a primary dungeon with as much variety as possible, and then make subsidiary levels or other minor dungeons with themes. The same can be said for the entire world-wilderness. Don't base the main wilderness on any particular fantasy story or series, because this artificially limits what can be used. Of course, if you are at a loss for ideas of your own, this method might be better. But beware of players who have read the stories more carefully than you have! It is always possible to construct separate wildernesses based on this or that idea, accessible from the main area by teleporter or 'gate'

Because the wilderness includes no provision to deal with parties of varying strength, the referee must change the rules extensively or be willing to accept some one-sided encounters. Because it is just as likely that dragons will be encountered as orcs, a weak party is probably dead unless quite lucky; sooner or later those dragons or other powerful creatures will turn up. On the other hand a strong party can march through the wilderness laughing as their megawatt lasers destroy the cannon-fodder encountered. Three or four magic-users above fifth level are sufficient for most encounters, backed up by an insect plague. Solutions to this problem follow, in part III. The basic idea is to introduce a governing rule similar to dungeon levels, so that parties will meet appropriate situations.

PART III : Rules Recommendations

Single vs. Multi-World Campaigns

Perhaps the most important question about any campaign is whether characters will be permitted to participate in adventures under more than one referee. Some campaign referees require that all characters operate exclusively in one world. Other campaigns consist of several worlds with the same set of characters, moving from one world to another depending on who is refereeing. The first method, of course, puts the referee burden on one person or forces play of several campaigns in turn. The advantage is that the referee will know exactly what powers and magic items the characters may have and can plan accordingly. For example, if he likes

to use undead he may be certain the players have no *undead control potions* by placing none in his treasures. If the characters play with another referee they may find *undead control* and ruin the first referee's plan. On the other hand, it is not often good practice to plan in such detail — situations which seem reasonable and take into account most of the problems the monsters might foresee are preferable. Moreover, a referee in a multi-world campaign can prohibit introduction of certain magic items from other worlds if he wishes. If someone finds a *vorpal blade* guarded by a few gnolls, another referee may decide that the player didn't earn it, and not allow it to exist in his world. In extreme cases even experience points doubtfully earned may be barred. If one referee is acknowledged final authority, and if referees all use the same system with individual variations, this will seldom be a problem.

There are several advantages in a multi-world campaign. First, players need not become accustomed to several sets of characters, one for each referee. Second, characters will advance visibly. If four separate campaigns are running, one adventure per month for each, then a character in any one campaign might not advance beyond third or fourth level in a year of play. Even though the same character won't be used on every adventure, in a year a well-played character might reach sixth or seventh level in a multi-world campaign. Third, the multi-world campaign permits those with only partial worlds, as little as one dungeon level, to referee in a campaign. The difference between a pick-up game and a campaign adventure must be experienced to be understood; a campaign is far more exciting for all participants. This is the ideal way for a person to be introduced to refereeing, particularly if he isn't willing to spend innumerable hours setting up the world.

If characters are permitted to adventure outside the established world group, there is no way to check the player's story of what occurred, and sometimes the player will get into a giveaway game which would unbalance the campaign if results were counted.

Single Character vs. Multiple Characters

According to the rules, each *D&D* player receives one character plus a number of followers determined by the charisma of the leader. A few campaigns are played without followers, one character per player. In either case the player must use this character every adventure until it dies permanently, whereupon he must start a new character (or, preferably, adopt one of his followers as his new character). The majority of *D&D* campaigns, however, permit a large number of characters, without followers, for each player. The followers method is unfair to a player who rolls a low charisma, permitting only one or two followers compared to an average of four.

Unless a player has a very high charisma he has only a limited number of people to use. One or more major character classes may be entirely absent from his group owing to unsuitable rolls. Of course, no player can expect to have one of each of the numerous sub-classes, but he should be permitted a broad choice. In particular, he is stuck with whatever class he chooses for his main character. If he is inexperienced or has bad dice rolls he may discover sooner or later that he doesn't care for his character class. In that situation he really has no choice but to get himself killed and start a new character, wasting all his previous effort. In a variation of this, the player may not find out how much fun it is to be some class he doesn't have in his small group. Many players favour one character class for personality reasons — one who pictures himself as a swashbuckler may prefer fighter types, one who is cerebral and dislikes violence may prefer the magic-user, one who is clever and sly may prefer the thief.

The solution to this problem is to permit each player to roll several characters, say six to start with. To avoid the popular ploy of rolling a character and then never using it, or using it only once, because the abilities are less pleasing than they might be, insist that each player advance his initial six characters at least to second level before he may roll an additional one. (Of course, replacement of dead characters is permitted, but obvious suicide is not allowed.) After the initial ▶

▶ group work up, a player is seldom permitted to have more than one new first level character. If a fussy player advances many characters to second level and then doesn't use them, hoping finally to roll a monk or ranger, he must work some up to third level in order to maintain a reasonable balance. Each player may have this 'family' of characters for each alignment, but Lawfuls are best for beginners.

A couple of additional rules should be used. Even though players will often have two or three characters along on an adventure, only one should gain full experience, and the others half, duplicating the effect of the original system. Furthermore, no weak character should be permitted to gain full experience when in company with a much stronger party; this is a cheap way to gain levels fast, unless countered. Consequently, any character more than three levels lower than the level of the strongest character in a party may only receive half experience; any more than six levels below may receive only one-fourth experience. Note that this also discourages players from taking along one very powerful character with a weak party as a 'guardian angel', because all the weak ones will gain less than full experience. Also, a player must not be permitted to freely transfer treasure and magic items from one of his characters to another. When a player receives a magic item he must assign it to one of his characters on the adventure, at random if the referee desires. Trades may only be made with the referee's approval. Otherwise magic is concentrated in the hands of a favourite character, or is passed about depending on which characters are going on an adventure. Magic items may be used only when the owning *character* is present.

Alignment

Referees who run all alignments virtually the same way are shortchanging their players. Different rules for division of treasure, experience, and general conduct help vary the course of play. Each referee has a different idea of what alignment means, but the important thing is to make each alignment significantly different from the others. Otherwise alignment, a unique and fascinating aspect of the game, may as well be abandoned.

For example, experience point awards can be modified according to alignment. Good characters receive experience for 'good deeds' such as rescuing damsels or harassed villages while Evil characters receive points for more or less the opposite (1 point per murdered peasant?). Lawfuls split experience equally among party members; they should by nature work as a team, and this method encourages teamwork rather than bickering. Chaotics, on the other hand, are uncooperative individualists. Experience is awarded to them individually, based on whatever they've done during an adventure. The braver and stronger ones get more points; teamwork is not encouraged. Which system Neutrals use depends on how they're acting and whether they accompany characters of another alignment.

Treasure

Treasure division rules also differ. In a Lawful party players should work together to test magic items, putting them aside and splitting the entire boodle by die roll at the end of the adventure, dicing for order of selection, *not* for each item separately! While the adventure continues characters should be allowed to use items without regard for who may ultimately own it, but only considering the best distribution at the time. When everyone is afraid to test something a character may ask for first choice if he volunteers to test it and finds it satisfactory. In a Chaotic party, unless someone manages to dominate the rest the grabbers-keepers 'rule' is suitable. But no rule means much to a Chaotic! For Neutrals any method is reasonable, depending on their inclination. They might most logically dice for each item separately when it is found.

Resurrection

Another means of differentiation is resurrection. While there won't be any seventh or higher level player clerics early in a campaign, non-players of that level will be about, even if a

wilderness trek is required to reach one. Interpret the resurrections of the character, but with another try permitted— in other words, the character is raised, but the strain is so great he immediately dies again, and another resurrection must be attempted. In this way even the character cursed with a low constitution may be successfully raised once or twice. When a character is resurrected he loses six to ten percent of his experience and gets none for the adventure during which he died. Alternatively, or additionally, he loses one constitution point. Remember that Lawful non-player clerics will seldom resurrect a person for free—the Cosmic Balance Must be Maintained. The fee may be in the form of a Quest, a magic item, or a large contribution of gold to the Church. If a character has a past record of somewhat Chaotic deeds perhaps the cleric will refuse to resurrect him. A Neutral will have to pay very heavily to persuade someone to resurrect him, and even this won't help if he has an evil background. Evil characters have no means of resurrection.

Time-Keeping

A time record is necessary to regulate activities which are alternatives to adventuring that require large amounts of time. The easiest way to keep track of game time is to count one real week equal to one game week, regardless of what adventures go on during the week. (I've tried different methods, but weeks-long wilderness adventures have always thrown them out of kilter.) If a character goes on no adventure during the week he can spend the time learning a language (assuming someone/ thing is available to teach it) or attending to his magic. This also makes it easy to keep an account of living expenses as per Volume 3 — I interpret it as 5% of experience points worth of gold every five weeks.

Language

Don't let a player merely state which languages he will know (owing to high intelligence). It takes time to learn a language, so at best a person new to adventuring will have learned one language, and of a common sort such as *orcish* rather than *unicornish*! It should not be possible to learn another alignment language fluently, if at all.

Magic

The revised rules explain the magic system clearly, thank heaven, but some points are not considered and one major change must be compensated for: any MU can make a scroll, not just a Wizard, of a spell he can use. First, this forces a referee to keep a time record, like it or not. Second in campaigns with more than one character per player, only one MU per player should be allowed to borrow a book or lend his, or make a scroll, in a week (not both). (This also prevents players from having their characters learn spells from each other—it's too easy if they can.) Third, the cost of scroll-making should be drastically increased. In the King's College (London) campaign, which is the stingiest I have ever heard of (c. 35 adventures, 7 magic items, 47 dead excluding resurrections, and no one near 5,000 EP) we've taken the cube of the spell level and multiplied by 100—e.g. 800 GP for a second level spell, 2,700 for third level, etc., with first level arbitrarily raised to 200 GP.

What the rules don't say is how one can learn more spells. For obvious reasons it's not impossible, but if it were easy everyone would know all the spells he desired. Try this system: a week per level of spell is required for a MU to transfer a spell from a scroll (if he can read magic) or magic book to his own magic book. If he can't read magic he can't use scrolls, but he still can use another book—otherwise the non-magic reader could never memorize spells from his own book! Lawful characters can lend their books to other Lawfuls (law/evil under duress only, of course). Good/chaotic might—you never know. No one would lend a book to a chaotic, good or otherwise—he might never get it back. Neutrals will *not* lend their own magic books under any circumstances. Remember that magic books are like life itself to an MU, and only great pres-

sure, or certainty of their safety (as law/good lending to law/good) can persuade them to part with their own. If a book is lost, replacement is very expensive and the new book comes only with the original spells, not the newly learned ones. Magic books of dead enemies become valuable items using the full *D&D* system this way.

A minor but interesting restraint on MU's is to require one to know the language of anything he's charmed in order to tell it what to do. Of course, if someone else knows the language he can tell the MU how to say *simple* commands, but this doesn't help in the middle of a melee! If no one can speak the language, all the players can do is push the charmee along ahead of them and hope it will fight if attacked. Another minor restraint is to roll another save for the charmee whenever he touches something magical (excluding stuff he carried when he was charmed.) This makes players reluctant to use charmees to touch unusual treasure.

The new rules don't say how one may awake the victim of a sleep spell. I suggest that a sleep-victim is in a very deep but natural sleep, so that noise alone won't wake him but two melee rounds of strong shaking/kicking will. If a much longer interval is required, parties will be wiped out by the first or second smart and fast MU they fight—the MU sleeps a crown and his minions clobber the rest (if another sleep isn't available—but it usually is.) This will be true even if you rule that dwarves and hobbits can't be slept. On the other hand, the players won't be able to mow down dozens of enemies by successive sleep spells because the enemy will be waking each other up. It forces players to choose carefully where and when to cast sleep against a large force, so that they can get forward while the MU's slit sleepers' throats behind.

A good general rule to follow is, what is good for the monsters is good for the players, and vice versa. A magic item usable by a referee-controlled human but not by players is unrealistic and plain unfair. On the other hand, consider what players might do with an item before you put it in a non-player's hands. In two crossover games I met a Pictish shaman with a bag of demons from *Gods, Demi-Gods, & Heroes*. We knew the trick, and the second time nailed the pict and got the bag. Thereafter we could in perfect safety now down anything we encountered. But if we hadn't known the trick we would all have been dead. This is not good *D&D*.

Spells

Bridge (Alteration)
by Michael Hewitt
Usable by: *Magic-User, Cleric, Druid* Area of Effect: *Special*
Level: *4* Components: *V,S,M*
Range: *Special* Casting Time: *2 segments*
Duration: *2 turns* Saving Throw: *None*

This spell enables the caster to create a 5' wide bridge over a chasm or similar gap. The bridge can be of any length up to 10' per level of the caster. It will bear any weight. The material component of the spell is a 5" long, oak bridge which costs 100 g.p. This is placed at the edge of the gap and when the spell is cast, the bridge will expand to its required length. At the expiration of the spell, the bridge contracts to its original size on the opposite side of the gap to where it was first placed.

Sword of Warning (Invocation)
by Phil Masters
Usable by: *Cleric* Area of Effect: *1 person or location*
Level: *5* Components: *V,S*
Range: *4"* Casting Time: *8 segments*
Duration: *5 rounds/level* Saving Throw: *Special*

This spell can only be cast in a location with at least 15' between floor and ceiling (or any other solid obstruction overhead, e.g. archway, cliff overhang, etc.). When casting the spell the cleric gestures to the point or person desired and immediately a great broadsword, shimmering with white light, appears 10' (or more if necessary) above the victim or position and apparently suspended by a slender thread. The victim — which must be at least semi-intelligent — automatically looks at the sword and is immediately *paralysed* unless it has eight or more levels or hit dice in which case if it saves it avoids paralysis and can jump clear. Magic resistance may prevent the sword from appearing. Beings paralysed may speak but cannot cast spells. If the spell is cast in a portal, any not of the caster's party or actively hostile to the caster must save to pass safely beneath. If any pass inadvertently beneath the sword (e.g. if the sword is screened from one approach) they do so normally, but on seeing the sword must save or faint for 2D4 rounds from shock. Victims of animal intelligence gain +3 on saves; non-intelligent beings gain +5. The sword remains until it falls or the spell expires. If the caster is within 7" he can order it to fall. Alternatively he can instruct it to fall in specific circumstances — e.g. if a goblin passes beneath, if any living thing passes beneath, if a paralysed victim orders his minions to attack, etc. The sword hits automatically for 5D8 with a 50% chance of system shock — save vs. system shock or slain — and can strike anything vulnerable to magic weapons or lightning. The sword is a symbol of divine displeasure and so cannot be used against gods, demi-gods, named demons or devils, or members of the caster's religion. It can obviously function as a trap but care should be taken regarding alignment.

Magic Messenger (Conjuration/Summoning)
by Michael Watts
Usable by: *Magic-User* Area of Effect: *Special*
Level: *3* Components: *V,S*
Range: *0* Casting Time: *6 segments*
Duration: *until fulfilled* Saving Throw: *None*

When this spell is cast a small silver sphere with a mouth upon it appears. It can be instructed to carry a message at any specified time (e.g. "Tell Selden the sage if I die" results in the message being delivered when the caster dies. The sphere travels invisibly and at a speed of 28" by the most direct route to its destination where it materialises to deliver its message.

Oath (Conjuration/Summoning)
by Roger Levy
Usable by: *Cleric* Area of Effect: *Creatures touched*
Level: *1* Components: *V,S,M*
Range: *Touch* Casting Time: *1 round*
Duration: *Special* Saving Throw: *None*

This is used to seal a bond, bargain or verbal agreement between two (or more) willing participants, not including the caster. If anyone subsequently wants to break the *oath*, he must first save vs spells (−1 for every level above first of the caster) or take 1D8 damage. If he saves, he still takes 1D4 of damage, but the oath is broken and also negated for the other participants.

Mental Block (Enchantment/Charm)
by James McRobert
Usable by: *Magic-User* Area of Effect: *1 creature*
Level: *4* Components: *V,S,M*
Range: *10"* Casting Time: *1 round*
Duration: *Permanent* Saving Throw: *Neg.*

This spell may be cast on any humanoid except enchanted or undead creatures and will prevent the recipient from performing some specified action, e.g. drawing his sword, harming the caster etc. There is a 95% chance that the recipient will be unaware that a spell has been cast. The spell can only be used to stop actions which the recipient is usually in conscious control of. That is they cannot be prevented from breathing or stop their heat beat, etc. The spell can only be removed if the caster is killed, the material component destroyed, or by *exorcise*. The material component of this spell is a bar or rod of iron or steel.

Jebansalf's Eye of Back-Seeing (Alteration)
by Daniel Adler
Usable by: *Magic-User, Cleric* Area of Effect:
Level: *3 (magic-user); 4 (cleric)* *Personal (magic-user)*
Range: *Touch* *One creature (cleric)*
Duration: *2 hours + 1/level* Components: *V,S,M*
  Casting Time: *5 segments*
  Saving Throw: *None*

This spell forms an extra eye out of the Pineal gland at the back of head (many scientists believe the gland may have been an eye at some earlier stage of our evolution). With this eye, dexterity bonuses are given against any attacks from behind, thieves striking silently from behind do so at +2 and not +4 and damage from the stabbing is halved. The +2 bonus given to other attacks from behind is nulled and any pickpocket attempts have 40% subtracted from them. The eye can have other spells cast on it, such as *infravision* or *permanency*. The eye takes 3 turns to form after the spell is cast. The material component is the eye of an Umber Hulk or Beholder.