

Vardy Combat System

Part 1

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This is a variant of the *Dungeons & Dragons* combat system, parts of which have appeared in substantially different form in various issues of *Alarums & Excursions* and *The Wild Hunt*. Because of its length, the system will be presented in two parts, the first in this issue and the last in the next issue of *Different Worlds*. The combat system is in three sections: The basic system is simple enough for beginners and fast enough to satisfy experienced players. The expanded system consists of optional modules to add extra realism and more interesting "feel" to combat. The D20 variant is for those who prefer to stay with a D20 system instead of shifting to using D100.

BASIC SYSTEM

The *D&D* system most widely used is the alternative combat system from *Men & Magic**. This system has a problem — it is not keyed directly to levels. Instead, a character becomes better skilled in combat by going up in groups of levels that I call "combat classes." Fighters hit better in groups of three levels, clerics and thieves in groups of four levels, and magic users in groups of five levels. This is bothersome when you compare the fighter's lot with that of the spellusers and thieves. Everybody but the fighter gets increases every level in the skills that characterize their occupations; magic users get new spells each level, clerics get new spells and get better vs. undead, and thieves get higher percentages on their skills. The poor fighter gets nothing but a new hit die (as does every other class).

The reason for this was the decision to use a D20 (20-sided die) attack system instead of a D100 (percentage dice, two D10s) system, since you cannot differentiate fine distinctions between character classes when you are stuck with the D20's increments of 5% per number. This is a pity, and it seems strange that *D&D* stuck with D20 combat after introducing D100 skills for thieves in *Greyhawk*. And so I propose a system of D100 combat, an idea that is far from original with me, although my numbers may be a bit different from other sys-

tems, as part of a comprehensive combat system revision.

This system provides an increase of a specified percentage in combat skill every level, depending in amount on the character class. Fighters as combat specialists get the highest increase, clerics and thieves are in the middle, and mages are at the bottom: fighters get +4% to hit per level achieved above the first, clerics and thieves get +3%, and mages +2%. This system is not directly comparable to the existing combat class system in terms of percentages to hit. Fighters, clerics, and thieves all hit a bit better here than under combat class progression, while mages are exactly the same at the break points. I suggest having the monsters fight as appropriate for their closest equivalent to a character class, that is, mages as mages, and so forth (with monsters fighting at level=hit dice on the fighter table in case of doubt).

To use this system, the character rolls D100 and consults the appropriate table. In order to hit, the die roll must equal or exceed the number given on the table at the intersection of the "level" and the "armor" lines. Any pluses to hit from a magic weapon translate directly as 5% increments. Thus, for every +1 to hit, move up one armor line on the table to see whether you hit (for example, when hitting with a +1 sword against an opponent in chainmail and small shield, you would look at the AC 5 line instead of the AC 4 line). Similarly, any pluses for magic armor or shield translate directly as 5% increments. So for every +1 in armor, move down one armor line on the table (for example, when wearing +1 chainmail and a small shield, your armor on the attack table would be AC 3 instead of AC 4).

You will notice that there is a limit of progression on the tables; no matter how high a level a character attains, the best base chance to hit is never better than 20%+, meaning that without a magic sword or other aid from high strength or dexterity or some other source, you always miss on a roll of 01-19. In addition, you always miss on a natural (unadjusted) attack roll of 01-05, regardless of your level and weaponry pluses (and see below for the optional rule on fumbles). On the other hand, although the tables call for very high base attack rolls against very good armor, some over 100% and thus attainable only through a good natural roll aided by pluses from some source (generally high level plus magic weapons), a natural attack roll of 96-00 always hits. These two exceptions to the mathematical exactness of the tables are designed to insure that even a very high level character has at least a chance of missing any target, and that even a very low level character has at least a chance of hitting any target.

* This article concerns the combat system used in the original *D&D* rules, which is also the basis of the combat system used in *Advanced D&D*. However, *AD&D* is a new game with sufficiently different rules as to be incompatible with existing *D&D* campaigns, as the designer discussed in issue 26 of *The Dragon*. While the combat system described in this article is adaptable to *AD&D*, it is primarily designed for use with the original *D&D* rules.

FIGHTER ATTACK TABLE

AC	Level																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
9	50	46	42	38	34	30	26	22	20	20	20	20	20	20	20	20	20	20	20	20
8	55	51	47	43	39	35	31	27	23	20	20	20	20	20	20	20	20	20	20	20
7	60	56	52	48	44	40	36	32	28	24	20	20	20	20	20	20	20	20	20	20
6	65	61	57	53	49	45	41	37	33	29	25	21	20	20	20	20	20	20	20	20
5	70	66	62	58	54	50	46	42	38	34	30	26	22	20	20	20	20	20	20	20
4	75	71	67	63	59	55	51	47	43	39	35	31	27	23	20	20	20	20	20	20
3	80	76	72	68	64	60	56	52	48	44	40	36	32	28	24	20	20	20	20	20
2	85	81	77	73	69	65	61	57	53	49	45	41	37	33	29	25	21	20	20	20
1	90	86	82	78	74	70	66	62	58	54	50	46	42	38	34	30	26	22	20	20
0	95	91	87	83	79	75	71	67	63	59	55	51	47	43	39	35	31	27	23	20
-1	100	96	92	88	84	80	76	72	68	64	60	56	52	48	44	40	36	32	28	24
-2	105	101	97	93	89	85	81	77	73	69	65	61	57	53	49	45	41	37	33	29
-3	110	106	102	98	94	90	86	82	78	74	70	66	62	58	54	50	46	42	38	34
-4	115	111	107	103	99	95	91	87	83	79	75	71	67	63	59	55	51	47	43	39
-5	120	116	112	108	104	100	96	92	88	84	80	76	72	68	64	60	56	52	48	44

CLERIC AND THIEF ATTACK TABLE

AC	Level																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
9	50	47	44	41	38	35	32	29	26	23	20	20	20	20	20	20	20	20	20	20
8	55	52	49	46	43	40	37	34	31	28	25	22	20	20	20	20	20	20	20	20
7	60	57	54	51	48	45	42	39	36	33	30	27	24	21	20	20	20	20	20	20
6	65	62	59	56	53	50	47	44	41	38	35	32	29	26	23	20	20	20	20	20
5	70	67	64	61	58	55	52	49	46	43	40	37	34	31	28	25	22	20	20	20
4	75	72	69	66	63	60	57	54	51	48	45	42	39	36	33	30	27	24	21	20
3	80	77	74	71	68	65	62	59	56	53	50	47	44	41	38	35	32	29	26	23
2	85	82	79	76	73	70	67	64	61	58	55	52	49	46	43	40	37	34	31	28
1	90	87	84	81	78	75	72	69	66	63	60	57	54	51	48	45	42	39	36	33
0	95	92	89	86	83	80	77	74	71	68	65	62	59	56	53	50	47	44	41	38
-1	100	97	94	91	88	85	82	79	76	73	70	67	64	61	58	55	52	49	46	43
-2	105	102	99	96	93	90	87	84	81	78	75	72	69	66	63	60	57	54	51	48
-3	110	107	104	101	98	95	92	89	86	83	80	77	74	71	68	65	62	59	56	53
-4	115	112	109	106	103	100	97	94	91	88	85	82	79	76	73	70	67	64	61	58
-5	120	117	114	111	108	105	102	99	96	93	90	87	84	81	78	75	72	69	66	63

MAGIC USER ATTACK TABLE

AC	Level																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
9	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22	20	20	20	20	20
8	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	20	20
7	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22
6	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27
5	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32
4	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37
3	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42
2	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47
1	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52
0	95	93	91	89	87	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57
-1	100	98	96	94	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62
-2	105	103	101	99	97	95	93	91	89	87	85	83	81	79	77	75	73	71	69	67
-3	110	108	106	104	102	100	98	96	94	92	90	88	86	84	82	80	78	76	74	72
-4	115	113	111	109	107	105	103	101	99	97	95	93	91	89	87	85	83	81	79	77
-5	120	118	116	114	112	110	108	106	104	102	100	98	96	94	92	90	88	86	84	82

EXPANDED SYSTEM

This expanded combat system consists of a series of optional rules to be used to add new features to the basic system. These rules can be used individually or all together, at the Game Master's option.

WEAPONS VS. ARMOR ADJUSTMENTS. Many of the weapons in the *D&D* list do the same amount of damage on a hit, although I have added more variety in the list at the end of this part. The *Greyhawk* rules provide for a way of distinguishing among weapons by treating them as being less or more likely to score a hit against certain kinds of armor. Or you can use this simplified approach, in which the numbers in the Weapons vs. Armor Adjustment Table are adjustments to the effective armor class of the target. Note that there is no special rule for shields in this simplified system of weapons vs. armor; they just add directly to armor class. Remember that a "hit" in *D&D* is defined as a strike that does damage, not merely a glancing blow. The rationale for this system is that blunt weapons are minus against clothing because that tends to absorb the force of the blow, whereas blunt weapons transmit their force well through metal. Cutting weapons tend to cut through cloth well, but do poorly against metal. Thrusting weapons penetrate better through armor of either type than cutting or blunt weapons. Articulated weapons are treated as blunt weapons.

ARMOR AND SHIELD TYPES. The *D&D* armor system breaks the extremely complex types of armor used in history down into four basic categories: None, Leather, Chainmail, and Plate Armor. It also collapses the use of the shield of any type into a highly abstract, one-size category at a flat +1 in armor protection when used. Just for fun, I'd like to suggest a greater variety in types of armor and shields. The new armor types would be:

AC 9 Clothing	AC 6 Cuirboilli	AC 3 Full Plate
AC 8 Padding	AC 5 Chainmail	AC 2 Riding Plate
AC 7 Leather	AC 4 Half Plate	

Clothing includes everything from evening dress to a peasant's rags; I'd probably include a naked savage in this, although that could be AC 10 instead. Padding includes heavy cloth worn for protection (or light leather), and was usually worn under heavier armor (and is included in their armor values).

Leather armor is exactly what it says. Cuirboilli is leather hardened with boiling wax. It offers greater protection than leather, but is very rigid and heavy. Ringmail, leather armor with large rings of metal attached, and light scale would give equivalent protection. Chainmail is fine rings of metal fastened to four rings next to it, providing heavy but flexible metal armor. Heavy scalemail would give equivalent protection, but at a greater weight. Half Plate is a mixture of cuirass of plate with chainmail on the limbs, while Full Plate is plate armor all around (this often by fastening pieces to the limbs, such as vambraces and greaves, rather than a complete flexible metal suit). Riding Plate is extremely heavy plate armor, which while it provides great protection was never intended for walking around on foot. For those using my encumbrance system in *Different Worlds 5*, the weights for these armor types would be 15% of body weight for Padding, 20% for Leather, 25% for Cuirboilli or Ringmail, 30% for Chainmail or Light Scale, 35% for Half Plate or Heavy Scale, 40% for Full Plate, and 50% for Riding Plate. I realize the figures really aren't as neatly arranged that way in real life, but they're not far off.

Now for shields, which come in an incredible variety of sizes and shapes. For convenience, and to keep complexity to a minimum, I suggest three standard shield sizes, the usability of which and the amount of protection provided would depend upon the character's strength because that determines your ability to parry effectively with a heavy weight:

Shield	Strength					
	03-05	06-08	09-12	13-15	16-18	19+
Small	+1	+1	+1	+1	+1	+2
Medium	NA	+1	+1	+1	+2	+3
Large	NA	NA	+1	+2	+3	+4

The Small Shield, or Buckler, is a 30 cm circle used to parry in place of a parrying dagger, and weighs 5% of the user's body weight. The Medium Shield, or Heater, is a 60 cm circle, and weighs 10%. The Large Shield, or Kite, is a full body shield used mainly by heavy infantry, and weighs 15%. The values given are added to the character's total armor protection when using the particular type of shield, and are added like pluses for magic. Note that the shield sizes are all relative to the size of the creature for whom they were made; a Hobbit could not use a Human's Large Shield, but could use a Human's Medium Shield as if it were a Hobbit's Large Shield in terms of the protection received. Dwarf shields are similar in size to Human shields, but their Large Shields are usually round instead of kite-shaped.

An alternative form of defense exists for characters with a high dexterity, which is to use a parrying dagger in place of the

WEAPONS VS. ARMOR ADJUSTMENT TABLE

Weapon Type	Armor Type			
	Clothing/Padding	Leather/Cuirboilli	Chainmail/Half Plate	Full/Riding Plate
One-handed cutting	+2	+1	0	-1
Two-handed cutting	+3	+2	+1	0
One-handed blunt	-2	-1	0	+1
Two-handed blunt	-1	0	+1	+2
One-handed thrusting	+2	+1	+1	0
Two-handed thrusting	+3	+2	+1	+1

Small Shield. It is usable only with light main weapons, usually the longsword, and provides no defense against missiles. The parrying dagger provides protection according to the user's dexterity:

Dexterity	03-08	09-12	13-15	16-18	19+
Plus to AC	NA	+1	+2	+3	+4

ADJUSTMENTS FOR STRENGTH OR DEXTERITY. Characters whose strength or dexterity falls in the average range (09-12) fight as shown on the appropriate combat table for their character class. But those whose strength or dexterity is above or below average are subject to certain modifications of their to-hit and damage figures, as shown in the Combat Modifications Tables. Note that it is possible to have characteristics above 18 or below 03. A character who rolls an 18 or 03 then rolls D100, with the following results: 01-50% no change; 51-75% shift one point; 76-90% shift two points; 91-99% shift three points; 100% shift four points. This results in a range from -1 to 22.

This system, which appeared in *Greyhawk* in a different form, is only an approximation of a halving series of numbers, since it is not possible to produce such a range on D100. For those who prefer a more mathematically even method, if a character has an 18 or 3 in a personal characteristic, roll a D6. If you roll low (1-3), the answer is "no" and you stay at the 18 or 3. If you roll high (4-6), the answer is "yes" and you shift one number outward and roll again, continuing until you either reach the limit (22 or -1) or get a "no" result. This method gives you exactly even odds at each step, and is therefore an exactly halving series. (You can roll any size die, actually; a D20 will give the smoothest roll.)

In the tables, you *subtract* the number shown from the attack or damage roll (but the minimum damage is one point) if you are in the -1 to 8 range, and you *add* the number shown if you are in the 13 to 29+ range. Doing it this way allows us to save space by printing only half of each table, since the tables are symmetrical.

The Combat Modifications for Strength Table does not apply to missile weapons (bow, crossbow, sling) since the weapon supplies the force that sends the missile, not the user's strength.

This system is based on the theory that dexterity is more important than strength in landing a hit, while strength is more

important than dexterity in doing damage, but both are relevant to each category.

This system significantly reduces the bonuses in damage points for unusually high strength or dexterity, as compared with the *Greyhawk* strength table, for example. Instead of a steadily increasing number of points added to damage, these tables provide for a steadily increasing *range* of possible bonus points of damage. You start at +1 point of damage at strength 13-14, move up to a 1-2 range expressed as "D2" ($\frac{1}{2}$ D4, roll a D4 and divide in half) at strength 15-16, move up to a 1-3 range expressed as "D3" ($\frac{1}{2}$ D6) at strength 17-18, and so forth, with D4 being a regular D4, D5 being $\frac{1}{2}$ D10, and D6 being a regular D6. The reason for this change is twofold. First, it brings the average extra damage down to a more reasonable damage bonus when compared with the damage done by monsters. Second, it permits the monster damage scale to be



COMBAT MODIFICATIONS FOR STRENGTH

Strength with Minus	8	7	6	5	4	3	2	1	0	-1	Monster Strength						
Strength with Bonus	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29+
To-Hit Factor	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	13%	15%	17%	19%	21%	+2%
Damage Points	1	1	D2	D2	D3	D3	D4	D4	D5	D6	2D4	2D6	3D6	4D6	5D6	6D6	+1D6

COMBAT MODIFICATIONS FOR DEXTERITY

Dexterity with Minus	8	7	6	5	4	3	2	1	0	-1	Monster Dexterity						
Dexterity with Bonus	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29+
To-Hit Factor	2%	4%	6%	8%	10%	12%	14%	16%	18%	20%	22%	25%	28%	31%	34%	37%	+3%
Damage Points	-	-	-	1	1	1	D2	D2	D3	D3	D4	D4	D5	D6	2D4	2D6	+1D6

brought in line with the character's damage scale, and thus allows for a uniform standard of damage for a particular strength, regardless of the race of the creature doing the damage. The extension of the dexterity scale runs the same way.

Remember, however, that these extensions apply only to monsters, since the normal player-character races are limited to a maximum of 22 on their personal characteristics without magical assistance. Remember, also, that these figures are bonuses, and are in addition to weapon damage for claw, club, or other weapon used. And weapons are proportional to the monster's size and strength — a giant's club is not your ordinary D6 mace. This is significant in determining just what Gauntlets of Ogre Strength permit a character to do, for example. In general, characters or monsters of strength 20-22 can use weapons of one die size larger than normal (i.e., D8 instead of D6), those of strength 23-24 still another size larger, and so on for every two steps up. Thus, an Ogre using a Battlemace would do D12+D6 instead of a Human's plain D10. Odd size dice (i.e., D16) can be rolled by using a D20 and rerolling rolls above the permitted range. Sample monsters at given strengths:

<i>Strength</i>	<i>Monster</i>
22	Ogre, Troll
23	Small Ent
24	Medium Ent, Hill Giant
25	Large Ent, Stone Giant, Flesh Golem
26	Frost Giant, Stone Golem
27	Fire Giant, Iron Golem
28	Cloud Giant
29	Storm Giant, Titan

It is easy to deal with magical devices that give the user specific amounts of strength or dexterity, keyed either to a specific monster's ability or to a specific number on the scale. But it is not clear how you would handle a sword that doubles the user's effective strength, for example. Doubled strength does not double the strength number, since this is a geometrical and not a linear scale and doing so would produce exaggerated results. I recommend for doubled strength that you double the damage bonus (or divide a damage minus in half), going up the scale until you find the resulting damage bonus and reading the to-hit bonus for that damage bonus there. Where there is more than one possibility, pick the lower number. For example, a strength 16 fighter using that sword would get an effective strength 19 (instead of 20) by going from a D2 damage bonus to a D4 bonus; a strength 11 fighter would get an effective strength 13, up from no bonus to the lowest available bonus; and a strength 3 fighter (if such a thing is possible) would get an effective strength 7. A weapon that doubled effective dexterity would operate the same way, but on the dexterity table.

CRITICAL HITS AND FUMBLES. A critical hit is one that does extra damage, and requires a natural (unadjusted) attack roll of 96-00 followed by a second roll sufficient to hit. This double roll system works out mathematically to a 5% chance for any level character with any weapon against any armor, without the need for special tables. If a critical hit is made, the damage is the damage for that weapon, plus a bonus determined by a D6 roll: 1-3, +1D6; 4-5, +2D6; 6, +3D6 damage. Notice that this system is simple and easy to remember, and in addition has no guaranteed instant death results. Everything depends on points done, and is therefore consistent with the regular *D&D* damage system under which a character's staying

power is determined directly by his or her hit points; the same is true under this system of critical hits. This system is intentionally generalized as to what has actually happened, going directly to consequences, instead. This avoids arguments over whether a stated occurrence on a table is possible (such as "weapon impales in heart, instant death," when the weapon used was a mace). There is a class of weapon that is designed as point-impact weapons and is frequently referred to as "impaling" weapons. Their greater chance of penetrating armor can be simulated by increasing the probability of critical hits, by requiring of them a natural roll of 91-00 followed by a hit roll. See the notes to the Weapons Table.

A fumble is the opposite of a critical hit, since instead of being a particularly good hit, it is a disastrous attempt at one. A fumble is produced by a natural roll of 01-05 followed by a failure to roll within the character's dexterity on a D20 (that is, equal or below). The reason the second roll is against dexterity rather than a to-hit roll is that it represents the character's ability to recover from a slip, rather than the force of the blow that landed. (For high dexterity characters, note that a roll of 19-20 on the D20 dexterity roll is always a fumble, regardless of how high the character's dexterity may be.) If a fumble is made, roll 1D6 for the number of melee rounds in which the character is unable to attack, parry, or dodge: 1-3 one round, 4-5 two rounds, 6 three rounds. This system, like that for the critical hit, is deliberately designed to avoid arguments over whether a particular occurrence is possible under the circumstances by stating the result rather than the causes. Note that articulated weapons, although they do significant damage, are difficult to control. This can be simulated by doubling their fumble chances, by requiring the D20 dexterity roll to be within one-half the user's dexterity.

WEAPONS EXPERTISE. The *D&D* combat system is so abstract that it assumes a character is equally good with all weapons, by rating the character's combat ability solely by combat class instead of by how much actual experience the character has had with a given type of weapon. Thus, a character can readily exchange a +1 sword for a +2 axe acquired during an expedition, for example, at no penalty. This is all very fine in terms of simplicity, but it discourages a part of role-playing, which is the character's having favorite weapons. If there were definite benefits to using a particular weapon consistently, and corresponding disadvantages to switching weapons, the character would develop favorites and stick with them, and this would add further color to the personality of the character.

This can be easily provided for, although there is slightly more record keeping required. For each character, record EP (experience points) gained on expeditions in which a given type of weapon was actually used, keeping a total next to each weapon on the character sheet. The weapon types (not individual weapons) would be treated as if they were going up levels in terms of the to-hit figure on the attack table for the user's character class. The character would continue to keep a master life EP tally to record other factors that apply to the character's real experience level, such as hit dice. Under this system, a fighter who has used swords for five levels would use swords as a fifth level fighter. If the character then acquires a +2 axe and wants to use it, he or she would have to start using the axe as a first level fighter and begin accumulating experience as an axe fighter (but would get the +2 enchanted into the axe, of course). Note that EP earned on an expedition would not be divided among the weapon types used. The entire trip's EP would be added to the individual totals of EP for each weapon type used to a substantial degree on the adventure (meaning the duration of one fight, or a reasonable part of one, such as

shooting arrows while the orcs charge the party, then drawing sword as the orcs close on you). The GM, as usual, would make the decision in doubtful cases.

The GM will have to supervise the campaign to prevent the "sampling" problem, where a character keeps switching weapons during the trip solely to be able to claim usage of a wide variety of weapon types. This requires talking with your players and conveying to them the role-playing factor that this is supposed to provide to the game. Anyone who is really interested in role-playing should quickly become self-supervising when they understand the purpose of the rule. Character class roles can provide another limit, by allowing fighters to develop expertise in only four weapons (such as sword, javelin, lance, and crossbow, for example), clerics and thieves in three, and mages in two (dagger and throwing dagger). In addition, encumbrance rules help limit the number of weapons a character can carry, or absent that the GM could simply rule that no more than three main weapons plus a dagger (or other small throwing weapon) can be carried.

The weapons expertise rule does require that a certain amount of leeway be allowed for certain classes. Mages in particular should be given an exception from the "actual use" rule, since they seldom participate in melee with their daggers as this is not their function. Their +2% per level is set to give them a limited growth that goes by levels, not real combat, simply to allow them to keep up a reasonable degree of competence in keeping with their current station (level) in life. Think of it as coming from training. But the other classes (other than mage specialties, that is) all get into melee and thus have genuine opportunity to develop weapons skills through use.

WEAPONS TABLE. Weapons come in a variety of types and sizes, and are selected by a character according to the weapons that are customary to the character's native people, or are standard issue in the militia or army in which the character received weapons training. Weapons come in four kinds: One-

handed weapons, two-handed weapons, throwing weapons, and missile weapons. A character who is expert with light mace and who has the strength and dexterity required can start using a heavy mace at the same level of expertise, because both are one-handed maces. On the other hand, a character who has been using a battlemace two-handed and who acquires gauntlets of ogre strength cannot now use the battlemace one-handed at the same level of expertise, since he didn't learn it that way.

Weapons come in different sizes doing different damage, depending both on size and type. Note that axes do more damage than swords and spears, which in turn do more damage than maces. Some weapons are better than others, although some of this is offset by weapon vs. armor modifications (since maces do very nicely against plate armor, for example). STR/DEX requirements limit certain weapons to characters with high strength or dexterity, but if a character exceeds in one but lacks in the other characteristic, you may treat the lower characteristic as if it were higher by one point for every three points by which the other exceeds its requirement. (For example, if you have 12/14 and need 13/11 for a weapon, you can use that weapon because the 14 (+3=+1) offsets the 12 (-1) by enough to give you the specifications needed.)

Weapons with a † are throwing weapons, and the specifications given are those for STR/DEX requirements and damage done in this mode. Weapons when thrown lose speed in flight, and thus do slightly less damage than when used as hand weapons. For the same reason, I recommend giving only half the normal damage bonus from high strength or dexterity for throwing weapons. Remember that although these weapons are usually identical to their hand weapon counterparts in weight and cost (except for throwing daggers), the skill of throwing them is different from that of using them as hand weapons, and must be learned separately under the weapons expertise rule.

Certain weapons are designed as point-impact weapons and are frequently referred to as "impaling" weapons for their po-



WEAPONS TABLE

Weapon Class		Specific Weapon	STR	DEX	Damage	Cost	Weight
Articulated Weapons	One-Handed	Light Flail	9	7	1D6+1	3	1
		Heavy Flail	11	9	1D8+1	6	1
		Morningstar	15	11	1D10+1	9	1½
	Two-Handed	Morningstar	11	9	1D10+1	9	1½
		Military Flail	15	11	1D12+1	12	2
Axe	One-Handed	Light Axe †	10	11	1D6+1	4	1
		Light Axe	7	7	1D8	4	1
		Heavy Axe	11	9	1D10	7	1½
		Battleaxe	15	11	1D12	11	2
	Two-Handed	Heavy Axe	9	7	1D10	7	1½
		Battleaxe	11	9	1D12	11	2
		Greataxe	15	11	1D12+2	14	2½
Dagger		Dagger †	9	11	1D4	3	½
		Dagger	—	—	1D4+1	3	½
		Parrying Dagger	—	7	1D6	5	½
Mace	One-Handed	Hammer †	11	11	1D4+1	4	1½
		Light Mace/Hammer	9	7	1D6	4	1½
		Heavy Mace	12	7	1D8	7	2
		Battlemace	16	9	1D10	10	2½
	Two-Handed	Quarterstaff	7	7	1D6+1	1	1
		Heavy Mace	9	—	1D8	7	2
		Battlemace	12	9	1D10	10	2½
		Maul	16	9	1D12	12	3
Pick	One-Handed	Light Pick	7	7	1D6	4	1
		Heavy Pick	11	9	1D8	7	1½
		Warhammer	15	11	1D10	11	2
	Two-Handed	Warhammer	11	9	1D10	11	2
		Military Pick	15	11	1D12	14	2½
Pole Arms	Two-Handed	Any Pole Arm	15	11	1D12+2	14	3
Spear	One-Handed	Light Javelin †	11	9	1D6	4	1
		Heavy Javelin †	15	11	1D8	7	1½
		Short Spear	9	7	1D6+1	4	1
		Long Spear	12	9	1D8+1	7	1½
		Riding Lance	9	7	1D10+1	10	2
	Two-Handed	Short Spear	—	—	1D6+1	4	1
		Long Spear	9	7	1D8+1	7	1½
		Pike	11	9	1D10+1	10	2
Sword	One-Handed	Shortsword	—	—	1D6+1	7	1
		Longsword	9	11	1D6+1	10	1
		Broadsword	11	7	1D8+1	8	1½
		Bastardsword	15	11	1D10+1	13	2
	Two-Handed	Bastardsword	11	9	1D10+1	13	2
		Greatsword	15	11	1D12+1	15	3
Bow		Shortbow	9	9	1D6	25	1
		Longbow	14	13	1D6+1	40	1
		Horsebow	14	13	1D6+1	40	1
		Composite Bow	16	13	1D8	50	1
Crossbow		Crossbow	7	—	2D6+2	15	2
		Heavy Crossbow	9	7	2D8+3	25	2½
		Arbalest	11	7	2D10+4	40	3
Sling		Sling	—	9	1D8	2	½
		Staff Sling	—	13	1D10+1	5	1

Cost is in gold pieces. Weight is in kg.

tential of doing greater damage on a good hit. This can be simulated by increasing their chance of making a critical hit: They require a natural roll of 91-00 followed by a roll to hit (instead of the normal 96-00). Impaling weapons are dagger, short-sword, longsword, pick, spear, pike, arrow, and quarrel. Broad-sword, bastardsword, and greatsword are not principally thrusting weapons, and therefore do not come within this category. Pole arms are treated as being primarily variants on the greataxe, doing the same damage, and therefore are not impaling weapons. For those types of pole arm that are primarily thrusting weapons, treat them as pikes.

Table 1:1:1 is for the benefit of those who are using my enchanted weapons article in *DW 4*. This expands the list of weapons to match the one here.

The articulated weapons operate on a leverage principle, and so I have put them at slightly higher damage than other blunt weapons (morningstars come in both spiked and unspiked versions). The light flail is a pair of light sticks about 50 cm each, connected by a few links of chain, the design derived from a grain flail. The heavy flail is much the same thing, but each piece is about 80 cm and thicker. The morningstar is a different variety of weapon, a mace head on about 50 cm of chain attached to a wooden handle, usable either one- or two-handed. The military flail is either a purely two-handed morningstar or a double-handed version of the heavy flail's design. Articulated weapons have the advantage of going around corners, and thus reduce the defender's armor class by two (+2 on AC number) by pivoting around shields or parrying weapons (if using the parry system in Part Two of this article, change this to reducing the parrying odds of the defender to half without affecting armor number). But these weapons are difficult to control, and therefore fumble more frequently: On a natural 01-05 followed by a failure to roll within half the user's dexterity on a D20.

The axe needs little introduction or description. Note that as this is a long-hafted weapon it is usable either one- or two-handed in more sizes than is true in most weapon classes. The

dagger is listed as a separate weapon class instead of in with the swords to emphasize that it is indeed a separate type of weapon, the learning of which does not qualify one as a sword user and vice versa. The parrying dagger is listed for damage in case it is ever used to attack, but those who have learned the sword-and-dagger style of fighting usually attack with sword only and parry with dagger.

The mace as a weapon class goes by several different names. Those who learn this as a weapon skill can use any variety of club of the appropriate weight at these specifications, whether the weapon is a bulky wooden mallet, a flanged or knobbed mace, or a sledgehammer. The hammer listed here is specifically balanced for throwing, but can also be learned as a melee weapon as a light mace by someone too weak to use a heavier weapon. Note that, like the axe, the mace is a naturally long-hafted weapon and this means that more members of this class are usable either one- or two-handed than average. The quarterstaff is listed here because it is basically a club, in this case a two-handed club usable with either end. Although it has a thrust option in use, this is of course not an impaling weapon. I suggest you try using the thrust option with quarterstaff as a knockback, pushing the opponent hit back 3 m, and knocked over if he or she fails to roll within dexterity on a D20, but at no damage.

The pick is basically a spiked instrument that depends upon its weight to penetrate armor, which is why it is an impaling weapon. It is often confusingly referred to as a "warhammer," but I have applied that name to only one size, calling the others picks. These do less average hit damage than sword or axe, but the chance of impaling makes this a weapon to respect. Based on the mining tool of the same name, the pick is a favorite weapon of the Dwarves.

The spears shown here come in basically three sizes, but are learned individually in each of the available modes. The three sizes are the short spear of about 3 m length, the long spear of about 4 m, and the pike of about 5 m. The first two can be learned as throwing weapons, and as melee weapons in either

TABLE 1:1. PHYSICAL DESCRIPTION OF WEAPON.

Table 1:1:1. Weapon Type, Size, Shape, and Damage Done. D1000:

001-040	Dagger, Straight Blade, 1D4+1	666-680	Morningstar, 1D10+1
041-060	Dagger, Curved Blade, 1D4+1	681-685	Military Flail, 1D12+1
061-070	Dagger, Wavy Blade, 1D4+1	686-720	Light Axe, 1D8
071-130	Shortsword, Straight Blade, 1D6+1	721-745	Heavy Axe, 1D10
131-170	Shortsword, Curved Blade, 1D6+1	746-760	Battleaxe, 1D12
171-190	Shortsword, Wavy Blade, 1D6+1	761-765	Greataxe, 1D12+2
191-250	Longsword, Straight Blade, 1D6+1	766-780	Quarterstaff, 1D6+1
251-280	Longsword, Curved Blade, 1D6+1	781-815	Light Mace/Hammer, 1D6
281-300	Parrying Dagger, 1D6	816-840	Heavy Mace, 1D8
301-420	Broadsword, Straight Blade, 1D8+1	841-855	Battlemace, 1D10
421-480	Broadsword, Curved Blade, 1D8+1	856-860	Maul, 1D12
481-500	Broadsword, Wavy Blade, 1D8+1	861-890	Light Pick, 1D6
501-530	Bastardsword, Straight Blade, 1D10+1	891-915	Heavy Pick, 1D8
531-550	Bastardsword, Curved Blade, 1D10+1	916-925	Warhammer, 1D10
551-560	Bastardsword, Wavy Blade, 1D10+1	926-930	Military Pick, 1D12
561-590	Greatsword, Straight Blade, 1D12+1	931-960	Short Spear, 1D6+1
591-610	Greatsword, Curved Blade, 1D12+1	961-985	Long Spear, 1D8+1
611-620	Greatsword, Wavy Blade, 1D12+1	986-995	Pike, 1D10+1
621-645	Light Flail, 1D6+1	996-000	Pole Arm, 1D12+2
646-665	Heavy Flail, 1D8+1		

one- or two-handed mode. The last can be learned only as a two-handed melee weapon, or one-handed as a riding lance with shield.

The shortsword is similar to the Roman gladius, a cut-and-thrust weapon capable of impaling. The longsword is really a thin broadsword, often used as a dress sword, and may be slightly curved. It is a long, light weapon usable either in straight fencing (with attack and parry done with the same piece) or in dagger and sword style. It is basically a thrusting weapon and thus can impale. The rest of the swords on this list are basically chopping weapons and cannot impale, even though they have points, because they are not learned in a thrusting style. The broadsword is a one-handed sword with a long broad blade. The bastard sword is a heavier version of the broadsword with a long grip making it usable either one- or two-handed, depending upon the strength of the user. The greatsword is a purely two-handed weapon.

All bows are fired twice a round, a level of skill learned by a character who has learned the bow at all in the period before the character entered the campaign. The high rate of fire and the fact that arrows are impaling weapons make the archer even more deadly on the average than the crossbow user, des-



pite the higher amount of damage an individual shot with a crossbow does. The reason why bow (and sling) fire faster than you can hit with hand weapons during melee is that you spend part of your time feinting and parrying during melee, which takes time while you try to get in a hit; the archer (or slinger) only has to load and fire, load and fire, without attempting anything else. The shortbow and longbow are simple wooden bows about 1½ m and 2 m long, respectively. The horsebow and composite bow are the traditional double curved bow of wood and horn or bone, about 1.2 m and 1.8 m long, respectively. The horsebow is the favored weapon of nomad riders, while the shortbow (in a slightly smaller size than normal) is the bow used by those hobbits that do not use the sling.

The sling is the biblical sling of David, a leather pouch on about ½ m of thong, firing twice a round. It does more damage than the average bow's shot, but does not impale. The staff sling is a sling on a short staff for greater leverage, firing once a round. The sling is the weapon of the poor, as it is cheap to make, and is sometimes favored by those who want to carry a missile weapon that can be carried compactly and unobtrusively.

The crossbow is a bow mounted on a stock and drawn by mechanical means. The light crossbow is not listed on the weapons list because it is generally regarded as being unsuitable for combat, and is used only by children for practice and for hunting. It does 2D4+1 damage. The exception to this attitude is the Dwarves, some tribes of which have devised a light repeating crossbow firing twice a round at that damage, with a clip of six rounds. It takes three melee rounds to reload the weapon after the clip is emptied. No other race has these weapons, and the Dwarves will kill to preserve its secret. The weapon listed in the weapons table as the crossbow is a wooden bow on a stock, drawn by either a belt hook or a lever, that shoots once every other round. The heavy crossbow is a composite bow on a stock, drawn by a lever, that shoots once every three rounds. The arbalest is a metal bow on a stock, drawn by a windlass, that shoots once every four rounds. Crossbow bolts (quarrels) are impaling weapons. All crossbows/stonebows fire at +2 to hit, reflecting how much easier this weapon is to learn than the handbow or sling. The stonebow is a mechanical heavy-duty rockthrower based on the same design as the crossbow. For characters who prefer a blunt missile weapon and are willing to put up with the slow rate of fire, these do the damage of a crossbow of the next smaller size (e.g., a heavy stonebow shoots once every three rounds but at 2D6+2 damage).

LIMITS ON MISSILE WEAPON USAGE. The original *D&D* rules distinguished between types of missile weapons by damage done and rate of fire, making the bow the weapon of choice because it fires faster than the crossbow and does more damage than the sling. This results in practically everybody wanting to carry a bow, and effectively excludes the other weapons from the game except in unusual circumstances (i.e., hobbits getting +3 with sling). This is unrealistic, in the sense that the crossbow is far easier to learn to use skillfully than the bow. It takes extensive training and experience to make a skilled archer. And I think it is undesirable to have people pick the most powerful weapon in wargaming terms, instead of asking whether their character came from a background in which certain weapons would have naturally be learned in preference to others because those were the accepted weapons of the people, time, and place.

Rather than attempt to create an instant background for a character here, since you can't anticipate the social structure of every GM's world, I suggest a die roll to select the missile weapon learned by a character during the prior experience pe-

riod (while the character was at "zero level" learning the skills that come at first level). Humans have a 15% chance of knowing the bow and a 20% chance of knowing the sling, the two rapid-fire missile weapons. Otherwise, you learned the crossbow. Elves automatically know the bow. Hobbits have a 30% chance of knowing the bow, otherwise they know the sling automatically. Dwarves have a 50% chance of knowing the bow, otherwise they learn the crossbow in preference to the sling because of the crossbow's flat trajectory, which is important underground. Note that this system eliminates any racial pluses to hit with bow or sling, since the ability to fire rapidly is a sufficient benefit in itself in a world in which most people envy the archer for his or her skill.

There is also the question of what type of handbow, sling, or crossbow the character will learn, even after the die roll for which general weapon class is available. In a completely filled in world, you can limit the learning of specific weapons classes or types within classes according to the typical weapons of the tribe or city that a given character came from, as an additional way of making the characters into people. But even in beginning campaigns, the GM can rule that certain weapons simply do not exist even though they are on the weapons list, such as the composite bows. Otherwise, I recommend letting players make their own choices from the list. The handbows are limited according to strength and dexterity, and will automatically limit the more powerful bows to small number of characters. (If a character with strength and dexterity below 9 rolls training with the handbow, I suggest allowing the user of a weaker-than-standard shortbow doing 1D4+1 damage.) The character with a roll for use of the sling gets a choice based on damage and rate of fire. Any character can choose to learn the crossbow, in any size desired based on damage and rate of fire.

ADJUSTMENTS TO RANGE. The system of adjustments for damage and to-hit odds for above or below average strength or dexterity did not provide for adjustment to the range of thrown or missile weapons. This is provided automatically by following system, which measures range directly in actual battleboard distances for convenience. One inch on the board equals one meter scale distance, and one hex on a hexboard (or one square on an alternating square board, which I prefer) also equals one square meter, which is a comfortable area for one character to occupy.

The farther a weapon has to travel, the less likely it is to hit. This is represented in this system by subtracting a factor from the hit odds for every distance unit traveled, the unit's length depending on the weapon used. The factor is -1 (-5%) per distance unit, beginning with the first unit, both to simplify the calculations and because I believe that it is harder to hit even at short range with a thrown weapon than in melee with a hand weapon. (I suggest as an optional rule for missile weapons, with their inherently higher speed from bow, crossbow, or sling, that at point-blank range (within three hexes) the -1 not be imposed.) This system, I feel, makes the ability to hit at different ranges easier to understand than the usual method of stating a standard range for a weapon, with it falling to half hit odds at twice normal range and to one-quarter hit odds at three times normal range. This system also provides shorter effective ranges than many systems, which seems to me to be more realistic. Note that under this system the effective range varies both with a character's level and strength and dexterity bonuses, which will make up for one or more unit's -1 to hit, and according to the armor of the target; you can score a hit on an opponent in leather armor at a greater distance than one in plate armor, which is reasonable.

Light throwing weapons (throwing dagger, etc.) are -1 to hit for every four hexes of range.

Heavy throwing weapons (javelins, axes, hammers) are -1 to hit for every three hexes of range.

Light missile weapons (shortbow, crossbow, sling) are -1 to hit for every six hexes of range.

Medium missile weapons (longbow, horsebow, heavy crossbow, staff sling) are -1 to hit for every nine hexes of range.

Heavy missile weapons (composite bow, arbalest) are -1 to hit for every twelve hexes of range.

The range adjustments of -5% per distance unit is subtracted from the attack roll when a throwing or missile weapon is used, just as the adjustments for unusual strength are made for thrown weapons (did it get there with enough force?) and the adjustments for unusual dexterity are made for both thrown weapons and missile weapons (was it aimed well?). For high strength or dexterity, the plus to hit automatically increases the effective range of the weapon by offsetting one or more distance unit's minus to hit. These range distinctions do make a difference, since rooms in which the range will exceed 15 hexes are not all that uncommon and at that distance a shortbow is noticeably more effective than a thrown axe (-3 vs. -5 at 15 m). And, of course, there are always corridor fights or outdoor battles in which the differences between different types of missile weapon will be equally significant.

THINGS TO COME

Part two of this article, in the next issue of *Different Worlds*, will complete the expanded combat system's optional modules, which include an extensive section on treating weapon or shield parries as an active part of combat (with its own set of attack tables), a new look at hit points, experience points, and the rationale for character class differences in the use of weapons and armor; and a revision of combat using D20 instead of D100 rolls for those who believe this is faster, with corresponding sections of the expanded combat system in D20 terms.



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Vardy Combat System

Part 2

By John T. Sapienza, Jr.



This is a variant of the *Dungeons & Dragons* combat system, parts of which appeared in substantially different form in various issues of *Alarums & Excursions* and *The Wild Hunt*. The system is copyright © 1980 by the author, and is divided into three sections: The Basic System is simple enough for beginners and fast enough to satisfy experienced players. The Expanded System consists of optional rules modules to add extra realism and more interesting "feel" to combat. The D20 variant is for those prefer to stay with a D20 system instead of shifting to using D100.

The Vardy Combat System is being presented in two parts because of its length. Part 1, which was published in *Different Worlds 6*, contains the Basic System plus the first group of the Expanded System's optional modules, including weapons vs. armor adjustments, adjustments for unusual strength or dexterity, adjustments to range of thrown or missile weapons, limits on missile weapon usage, critical hits and fumbles with weapons, a weapon expertise system, and a weapons list. We begin this part with a concept that greatly adds to the involvement of the players in combat, treating parries as an active part of the game.

EXPANDED SYSTEM (continued)

WEAPON OR SHIELD PARRIES. The *D&D* rules contain no means of reasonably simulating the use of weapons or shields to parry blows. In either case, the existing rules simply give the character a +1 on armor class for the use of a main gauche or shield in defense. It seems to me that combat would be more interesting if parrying were treated as a skill in *D&D*, as it is in *RuneQuest*. And the simulation of reality would be improved, because it has been my observation that, at least in Society for Creative Anachronism combat, the shield is a far more significant factor in your defense than *D&D*'s flat 5% (+1). This is because the shield is mobile armor, and is an inherently flexible defense requiring skill to use, unlike body armor protection.

I propose taking the shield out of the armor system, and adding parrying to the combat system. *D&D* combat would be changed from a one-action to a two-action system, giving the character the option of using each hand in either an attack or a parry every melee round. Normally, characters fight with weapon and shield, and the usual choice will be to attack with the weapon and parry with the shield. However, you can elect to parry with both against a monster that seems to be raining

down blows on you, giving you the chance to block two incoming blows instead of one as you try to figure how to get out of there. A character fighting with two weapons can choose between two attacks, an attack and a parry, or two parries, and so can a character fighting with a double-handed weapon. But the shield will remain the fighter's best friend because while you can parry weapon attacks with weapon or shield, only a shield can parry against incoming missiles.

Parrying skill would depend upon character class and level. Fighters would go up +3% per level achieved above the first, clerics and thieves +2%, and mages +1%, all beginning with a base parry chance of 10%. Unlike the attack tables, in the Parry Table you try to roll D100 equal or below the number shown in order to succeed in parrying the blow, thus preventing it from hitting the character. You only roll to parry when an opponent has rolled a hit on the character. The figures in the Parry Table could be modified according to the character's dexterity, using the Parry Modifications for Dexterity Table. Note that a character with a minus on parrying skill due to low dexterity cannot be reduced to below zero, but cannot parry at all until he or she has risen to a sufficiently high level to overcome the initial dexterity handicap.

It is still possible to retain the different sizes for shields used in Part 1 of the system. The figures given in the Parry Table would be for use with the medium shield, and you would adjust those figures as follows. The adjustments reflect the relative weight of the different sizes of shield and the strength necessary to use them effectively:

Shield	Strength					
	03-05	06-08	09-12	13-15	16-18	19+
Small	- 5%	- 5%	- 5%	- 5%	+0	+5%
Medium	NA	+0	+0	+0	+5%	+10%
Large	NA	NA	+0	+5%	+10%	+15%

"NA" means that a person of that low strength cannot use that size shield effectively at all, while "+0" means no adjustment to the figure given in the Parry Table percentage. The - 5% for use of the small shield merely reflects its smaller coverage as compared with the medium shield, just as the pluses for the large shield reflect its larger coverage in comparison with the medium shield.

Use of a parry skill system requires removal of the shield from the armor table, and a revaluation of each type of armor. Since the numbers will be different for each variety of armor,

FIGHTER ATTACK TABLE

AT	Level																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
9	40	36	32	28	24	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
8	45	41	37	33	29	25	21	20	20	20	20	20	20	20	20	20	20	20	20	20
7	50	46	42	38	34	30	26	22	20	20	20	20	20	20	20	20	20	20	20	20
6	55	51	47	43	39	35	31	27	23	20	20	20	20	20	20	20	20	20	20	20
5	60	56	52	48	44	40	36	32	28	24	20	20	20	20	20	20	20	20	20	20
4	65	61	57	53	49	45	41	37	33	29	25	21	20	20	20	20	20	20	20	20
3	70	66	62	58	54	50	46	42	38	34	30	26	22	20	20	20	20	20	20	20
2	75	71	67	63	59	55	51	47	43	39	35	31	27	23	20	20	20	20	20	20
1	80	76	72	68	64	60	56	52	48	44	40	36	32	28	24	20	20	20	20	20
0	85	81	77	73	69	65	61	57	53	49	45	41	37	33	29	25	21	20	20	20
-1	90	86	82	78	74	70	66	62	58	54	50	46	42	38	34	30	26	22	20	20
-2	95	91	87	83	79	75	71	67	63	59	55	51	47	43	39	35	31	27	23	20
-3	100	96	92	88	84	80	76	72	68	64	60	56	52	48	44	40	36	32	28	24
-4	105	101	97	93	89	85	81	77	73	69	65	61	57	53	49	45	41	37	33	29
-5	110	106	102	98	94	90	86	82	78	74	70	66	62	58	54	50	46	42	38	34

CLERIC AND THIEF ATTACK TABLE

AT	Level																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
9	40	37	34	31	28	25	22	20	20	20	20	20	20	20	20	20	20	20	20	20
8	45	42	39	36	33	30	27	24	21	20	20	20	20	20	20	20	20	20	20	20
7	50	47	44	41	38	35	32	29	26	23	20	20	20	20	20	20	20	20	20	20
6	55	52	49	46	43	40	37	34	31	28	25	22	20	20	20	20	20	20	20	20
5	60	57	54	51	48	45	42	39	36	33	30	27	24	21	20	20	20	20	20	20
4	65	62	59	56	53	50	47	44	41	38	35	32	29	26	23	20	20	20	20	20
3	70	67	64	61	58	55	52	49	46	43	40	37	34	31	28	25	22	20	20	20
2	75	72	69	66	63	60	57	54	51	48	45	42	39	36	33	30	27	24	21	20
1	80	77	74	71	68	65	62	59	56	53	50	47	44	41	38	35	32	29	26	23
0	85	82	79	76	73	70	67	64	61	58	55	52	49	46	43	40	37	34	31	28
-1	90	87	84	81	78	75	72	69	66	63	60	57	54	51	48	45	42	39	36	33
-2	95	92	89	86	83	80	77	74	71	68	65	62	59	56	53	50	47	44	41	38
-3	100	97	94	91	88	85	82	79	76	73	70	67	64	61	58	55	52	49	46	43
-4	105	102	99	96	93	90	87	84	81	78	75	72	69	66	63	60	57	54	51	48
-5	110	107	104	101	98	95	92	89	86	83	80	77	74	71	68	65	62	59	56	53

MAGIC USER ATTACK TABLE

AT	Level																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
9	40	38	36	34	32	30	28	26	24	22	20	20	20	20	20	20	20	20	20	20
8	45	43	41	39	37	35	33	31	29	27	25	23	21	20	20	20	20	20	20	20
7	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22	20	20	20	20	20
6	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	20	20
5	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22
4	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27
3	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32
2	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37
1	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42
0	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47
-1	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52
-2	95	93	91	89	87	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57
-3	100	98	96	94	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62
-4	105	103	101	99	97	95	93	91	89	87	85	83	81	79	77	75	73	71	69	67
-5	110	108	106	104	102	100	98	96	94	92	90	88	86	84	82	80	78	76	74	72

PARRY TABLE

Level	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Fighter	10%	13%	16%	19%	22%	25%	28%	31%	34%	37%	40%	43%	46%	49%	52%	55%	58%	61%	64%	67%
Clrc/Thf	10%	12%	14%	16%	18%	20%	22%	24%	26%	28%	30%	32%	34%	36%	38%	40%	42%	44%	46%	48%
Mage	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%

PARRY MODIFICATIONS FOR DEXTERITY

Dexterity with Minus	8	7	6	5	4	3	2	1	0	-1
Dexteirty with Bonus	13	14	15	16	17	18	19	20	21	22
Parry Modification	2%	4%	6%	8%	10%	12%	14%	16%	18%	20%

to avoid confusion let's not call them armor classes (AC) in the parry system, but armor types (AT). And since the shield occupied a space between each kind of armor in the *D&D* table, let's fill in those spaces with new intermediate types of armor. As compared with ACs, the to-hit number for all armor has been reduced by 10% across the board, with the following names and designations:

AT 9 Clothing	AT 6 Cuirboilli	AT 3 Full Plate
AT 8 Padding	AT 5 Chainmail	AT 2 Riding Plate
AT 7 Leather	AT 4 Half Plate	

The change in armor value in the parrying system requires a new set of attack tables. Remember that attacks against mon-

sters in these tables read as if against AC numbers, which simplifies conversion and is why I kept the same numbers for AT as for AC. I suggest having all monsters use attack tables that most resemble the monsters' equivalent character class — mages as mages, etc., and in case of doubt as fighters.

A superficial look at these tables makes it appear that the character is much easier to hit under this system, but this is not the case. Remember that the character can parry with shield or weapon (including the mage's dagger). The comparison of Combat Systems Charts is a comparison of three systems, one using the Alternative Combat System from *D&D* but regularized to +2 per combat class, another using combat classes with parries, and the third using my D100 system. What I wanted to find out was how long it would take in melee

COMPARISON OF COMBAT SYSTEMS CHART

Alternative Combat System

Level	1	2	3	4	5	6	7	8	9	10	11	12
Hit %	20	20	20	30	30	30	40	40	40	50	50	50
Average Damage	0.90	0.90	0.90	1.35	1.35	1.35	1.80	1.80	1.80	2.25	2.25	2.25
Hit Points	4.5	9.0	13.5	18.0	22.5	27.0	31.5	36.0	40.5	45.0	49.5	54.0
Rounds to Kill	5	10	15	14	17	20	18	20	23	20	22	24

Combat Classes with Parries

Level	1	2	3	4	5	6	7	8	9	10	11	12
Hit %	30	30	30	40	40	40	50	50	50	60	60	60
Parry %	20	20	20	25	25	25	30	30	30	35	35	35
Net Hit %	24	24	24	30	30	30	35	35	35	39	39	39
Average Damage	1.08	1.08	1.08	1.35	1.35	1.35	1.58	1.58	1.58	1.76	1.76	1.76
Hit Points	4.5	9.0	13.5	18.0	22.5	27.0	31.5	36.0	40.5	45.0	49.5	54.0
Rounds to Kill	5	9	13	14	17	20	20	23	26	25	29	31

Percentage Combat System

Level	1	2	3	4	5	6	7	8	9	10	11	12
Hit %	30	34	38	42	46	50	54	58	62	66	70	74
Parry %	10	13	16	19	22	25	28	31	34	37	40	43
Net Hit %	27.0	29.6	31.9	34.0	35.9	37.5	38.9	40.0	40.9	41.6	42.0	42.2
Average Damage	1.22	1.33	1.44	1.53	1.62	1.69	1.75	1.80	1.84	1.87	1.89	1.90
Hit Points	4.5	9.0	13.5	18.0	22.5	27.0	31.5	36.0	40.5	45.0	49.5	54.0
Rounds to Kill	4	7	10	12	14	16	18	20	22	24	27	29

rounds to kill an opponent in plate and shield with a D8 longsword. The comparison assumes two fighters of the same level, with no magic armor or weapons and no pluses to hit than those from level/combat class, using D8 hit dice per level. The figures for average damage per round are derived by multiplying 4.5, the average damage on a hit by a D8 weapon, by the net hit odds. This was then divided into the hit points to get the number of rounds, on average, required to kill.

You might think that introducing a defense-by-level system would greatly increase the advantage that high levels have over low levels already due to their higher hit odds and higher hit points, but the difference is surprisingly slight. For example, a fight between a L4 and a L7 in the first table gives the L7 ten rounds to kill the L4, and L4 24 rounds to kill the L7. In the third table the figures are eleven and 21, a difference but not a dramatic one.

The increase per level in defensive capacity through increasing parrying skill in this system has had a traditional equivalent in *D&D* of allowing characters to acquire magical armor as they progress through life, adding the equivalent of new layers of armor through magical armor pluses. Gamemasters who adopt the parrying system are cautioned to give out much less magical armor protection, as the combination will tend to make characters too close to invulnerable for comfort. Note that what magical armor is available would continue to behave as it does now, moving the character down the to-hit table the number of lines that the armor has pluses. Magical shields, however, should be converted from behaving like pieces of magical armor to affecting the character's ability to parry, at the rate of +5% for every +1 on the shield. Remember also that weapons can be given this power, too, and this would be particularly appropriate with double-handed weapons which, as they must be used without a shield, must be used to parry if there is to be a parry at all. Rings, cloaks, and other items of magical protection could also be treated as affecting parrying ability, but they also could be considered to affect AT — remember to specify.

There are limits that can be applied to the character's effectiveness in parrying. One is position. If you use lead figures to determine the location of all characters (and you should, it eliminates a lot of arguments), you can use something like Dave Hargrave's system from the first volume of the *Arduin Grimoire*, in which directions are given on where you can protect with a parry and where you cannot. You can do it on a tabletop, but it's easier on a hexboard or a checkerboard, or an alternating square battleboard such as the one I use.

Another method is breakage. There should always be a possibility of a weapon or shield breaking when it is hit while parrying, even if you don't want to bother with weapons breaking when they hit an opponent. Any weapon making a successful parry against a hard hit would break if the opponent's successful attack roll was followed by a second successful to-hit roll, while to break a shield would require a roll of 96-00 followed by a successful to-hit roll (a critical hit), since shields are much harder to break. A magical weapon or shield gets a save against breaking of 5% for every plus and every ability enchanted into it. Magical equipment can be repaired by a master smith, but the repair must be re-enchanted using the *Enchant an Object* spell for the repair to be complete. Otherwise, a weapon or shield will be down one point from its former plus to hit (or parry). Magic gear that has been brought down to +0 goes no farther down, but begins to lose any abilities it has at the rate of one per break (roll randomly to determine which one goes). But a magic weapon that has been reduced to +0 and no abilities remains valuable, since it would continue to be able to hit enchanted monsters that are immune to normal weapons.

HIT POINTS. One of the things that keeps this combat system a *D&D* variant instead of changing it completely to a different game is that its factors are still keyed to the level concept for degree of skills attained. A part of the level system is the idea that a character's defences against attack, both physical and magical, increase as the character ascends to higher levels, and this is measured in hit points, which in turn govern the character's ability to function after being damaged. As long as the character doesn't run out of hit points, the character can still function. The hit points possible are governed by the character class selected for the character, with the fighter having the highest possible number, presumably representing vitality arising from lots of exercise. The cleric gets the next highest, again presumably because the cleric spends at least part of the time in physical training for combat. The thief and mage get the least possible hit points, indicating that they are less charged with physical vigor through lack of intense physical training. Or at least that seems a reasonable theory; the rules don't give reasons, only specify hit dice per level of D8, D6, and D4, respectively.

On average, this means that a fighter should get 4.5 hit points per level, a cleric 3.5 hit points, and a thief or mage 2.5 hit points. But anyone who has played a large number of characters knows that the average is merely that, and the one-die-per-level approach produces mages at L5 with 20 hit points and fighters at L5 with five hit points, depending on the luck of the die rolls. It seems to me that this is a highly peculiar result, even a perversion of the intended roles to be played in each of the character classes when this kind of situation can



occur. That is, by definition a fighter should be more able to sustain injury in combat than a mage, since the former is supposed to represent a vigorous physical specimen while the latter is supposed to be a flabby bookworm. I exaggerate, but you can see my point — the hit point system contains the potential of distorting the theoretical roles it is supposed to simulate because, while it varies the maximum results of each roll, it does not vary the minimum result, which is one hit point for every character class.

I suggest changing the hit dice per level arrangement for the four basic character classes from using three different dice sizes to using one die size with points added: D4 for mages, D4+1 for thieves, D4+2 for clerics, and D4+3 for fighters. This gives a guaranteed spread of one point between the classes, one, two, three, and four points minimum, respectively, on the bottom, with four, five, six, and seven points maximum, respectively, on the top. It also means an average of 2.5, 3.5, 4.5, and 5.5 hit points per level, respectively. And while it means that it is no longer possible for a fighter to get eight points when going up a level, it also means no danger of getting only one, either, and in fact the average points will be a bit higher under this system than before for everyone but mages. Thieves have been promoted a bit as compared with mages because thieves fight more than mages do. This system treats thieves somewhat along the same lines as in the *Advanced D&D* rules in this respect, but is a better system because of its minimum points limits. However, if you feel you must have high hit point maximums for fighters under the *AD&D* rules, then in place of D4, D6, D8, and D10, I recommend using a D4, D4+2, D4+4, D4+6 series, instead.

Low level characters can be dull to play when their low hit points make them run away from fights, knowing that one sword blow can kill. I suggest livening things up by a special rule for low level characters: hit points equal Constitution until points rolled as you go up levels exceed Constitution. Remember to do the same for monsters, of course.

EXPERIENCE POINTS. One of the curious irregularities in the original *D&D* rules is that the EP required per level does not appear to have been done by comparing what was required for a given level in each character class. The result is that you have such oddities as mages reaching level seven faster than

fighters, although mages have a higher rate of EP increase at first than fighters. Or that clerics at high levels need only 100k per level while thieves need 125k per level, although clerics have a higher rate of EP increase at first than thieves. Or that clerics reach combat class 5 and 6 before fighters, although clerics go up to higher combat classes every four levels while fighters only need three levels to advance. In addition, you have the strange situation that while high EP requirements are designed to represent slower progress to higher levels commensurate with the higher power of certain classes, notably mages, the cleric (which is a form of spelluser, but without the mage's limit on weapons and armor) requires less EP per level than the fighter, who is denied the use of magic and is in that respect less powerful than the cleric (particularly under the system used in my article in *DW 3*). Also puzzling is the charging of low EP to the thief, who although limited in combat protection is given special combat abilities (especially the strike from behind power), plus the use of magic scrolls at high levels, a power denied even to the lowly fighter.

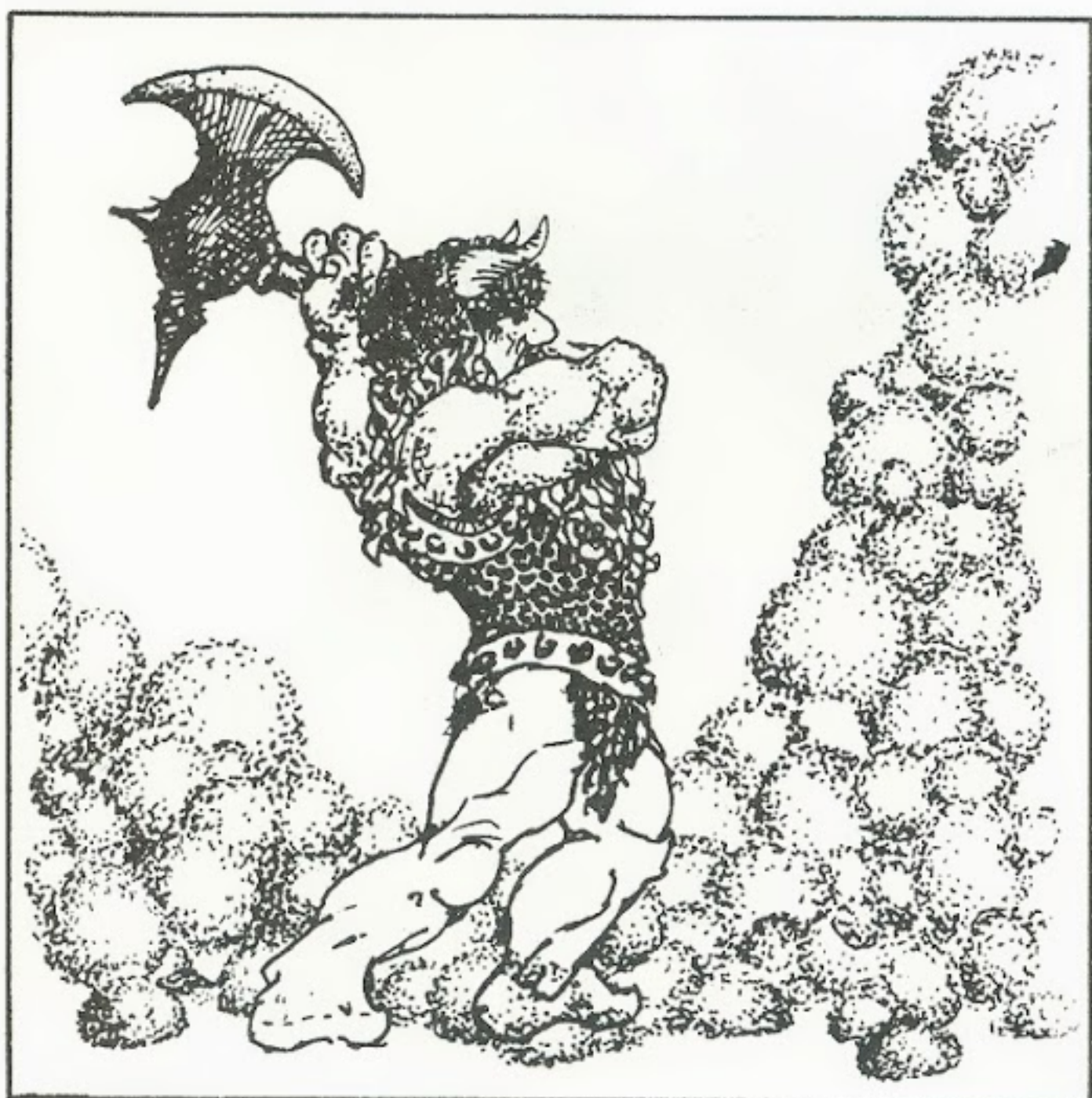
I therefore recommend a major revision of the EP scales for the four main character classes, to provide for even spacing between the classes, thus eliminating the present crossing of the scales at various levels. And I suggest that the EP charged each class be adjusted to better reflect the relative powers of the classes. This would mean reversing the scales for fighter and cleric, moving the cleric between fighter and mage as a mixed class. And it would mean moving the thief up to the same scale as the fighter, but with combat progression every four levels, thus insuring that the thief will not advance much faster than the cleric in combat skills.

Level	Fighter/Thief	Cleric	Mage
2	1.5k	2k	2.5k
3	3k	4k	5k
4	6k	8k	10k
5	12k	16k	20k
6	25k	32k	40k
7	50k	63k	75k
8	100k	125k	150k
9	200k	250k	300k
10	300k	375k	450k
+1	+100k	+125k	+150k

The relatively low increments for high levels are premised on the GM awarding EP at a rate lower than the inflated amounts required under the present tables. This is the only real control over advancement, since what counts is not so much the numbers on the tables as the rate at which the GM awards EP to the characters.

CHARACTER CLASS DIFFERENCES in weapons and armor permitted are not explained at all in the original *D&D* rules. It is clear that the differences in what each class was permitted to use were written with the intention of providing some balance between the powers of each class. Yet the lack of a rationale for each set of rules makes it difficult to understand and provide logical extensions within each class, particularly for subclasses developed later. With this in mind, I have some suggested rules changes based on specific rationales that may prove more satisfactory to anyone who is not content with the rules as they now stand.

Fighters are heavy infantry. They spent their entire prior experience period (when they were still "zero level" people, before they entered the campaign) training in the use of heavy armor, for which they went through body-building exercises to



toughen the body sufficiently to fight effectively in plate armor, and weapons exercises in order to become proficient with certain weapons (up to "first level" skill) while wearing that armor. In addition, social custom permits only the fighter to wear plate armor as a sign of status, this due in part to the rarity of smiths skilled enough to make plate armor in sufficient quantity. Therefore, only fighters can wear plate armor. They can choose to learn to use any hand weapon, and normally learn to use single-handed weapons with shield for maximum protection, but may elect to use double-handed to two weapon combat. The only weapons limit they have is on thrown and missile weapons. They are limited to the crossbow as a missile weapon because plate armor is too restrictive to use bow or sling. Similarly, it is difficult to throw weapons in plate armor, and with these weapons fighters attack at -15% (-3). The fighter is thus forced to choose between maximum protection and the use of better long range weapons, and most choose to wear plate and shield instead of lighter armor in order to best serve in their function as front line infantry.

Clerics are light infantry. They spent their entire prior experience splitting their training between their clerical magic skill (usually their first cure spell plus their initial power against the undead) and combat skills. They are not expected to be front line fighters, are not trained in the use of plate armor, and are not provided with plate armor. Instead, they train in chainmail and shield, and are expected to act as second line combat reserves for the fighters. In this capacity, they may use any weapon, including the bow, crossbow, or sling; they are not limited to using only blunt weapons. This rebalance of the class, trading 10% of armor protection in exchange for permitting them to use any weapon, was adopted because the old rule requiring blunted weapons in order to do less damage than the fighters' weapons no longer makes sense under the revised EP system. The new system requires higher EP per level than for fighters, thus making the clerics' progress in combat skills even slower relative to the fighters than under the original *D&D* rules (as a compensation for their other powers, although most of the difference is in the faster promotion for fighters than a slowdown for clerics). And this lower level of fighting skill, plus the armor limit, justifies allowing them the use of any weapon, particularly the sword, which is also used by thieves and druids.

Thieves are skirmishers. They are not particularly combat-oriented, and are not expected to fight head-on in melee, like fighters or clerics. Thieves are scouts, and prefer to remain unobtrusive, so they shun heavy (and noisy) metal armor, or even cuirboilli with its greater weight and stiffness, in favor of quiet, non-reflective leather. They generally do not use shields, which are too bulky to allow for silent movement and hiding in shadows. This does not mean that thieves are unable to use shields in a pinch, but they won't enter a building with one while scouting, because they don't expect to stand and fight and thus the shield is an unnecessary burden. Thieves prefer light weapons, and often learn to fight with longsword and parrying dagger. They tend to use sling or shortbow, preferring the former if they usually spend their time in towns or underground because it can be pocketed and carried unobtrusively, or preferring the latter if they usually spend their time in the wilderness, where the extra bulk of a bow and a small quiver with 20 arrows is small bother, and the sight of it is unlikely to cause comment among those the thief encounters.

Mages are not fighters of any description, except in desperation. They are intellectuals who spent their entire prior experience period learning reading, writing, and arcane matters. The only weapon they carry is the dagger, which is the universal eating tool and personal protection weapon, in which they re-

ceive their only combat training at the academies. Mages do not use other weapons because they never learned how, and for the same reason they do not use shields or heavy armor. They disdain light armor because they know they can protect themselves better with a protection spell than leather armor can. (The training rationale is probably the most useful one. I don't like the metal-inhibits-magic rationale because it raises questions of why magic thrown at metal works, and why clerics are unaffected even though they share a number of magic spells pertaining to detection and communication with the mage. In fact, I consider the cleric a specialized variety of mage, a master of magic pertaining to life and death, not only in the cure spells but those pertaining to the undead, either creating them, controlling them, repelling them, or destroying them, and so I am very cautious with rules affecting either class for their effect on the other. The reason clerics go in for weapons and armor training is that they lack that which gives the mage the most noticeable power, the mass damage spells.)



D20 COMBAT VARIANT

Although the D100 system permits greater flexibility in fine tuning distinctions between character classes, I realize that some people will prefer to stick with a D20 combat class system such as the one in the *D&D* rules. This does have the advantage of simplicity, since it is easier to make adjustments of +1 or +2 than +4% or +11% mentally, and rapid calculations can be made in such a system for quick adjustment of factors by most people. Does this mean that I suggest sticking with the *D&D* rules as they now exist? No; there is still room for improvement.

The fact remains that the fighter lacks a gain per level in the skills that distinguish the class from other classes under the existing system in the *D&D* rules. While the present attack table is somewhat irregular, it is fair to say that in general characters gain +2 to hit when they go up to a higher combat class. In particular, fighters gain +2 for every three levels, clerics and thieves +2 for every four levels, and mages +2 for every five levels. It doesn't have to be so long a wait, however.

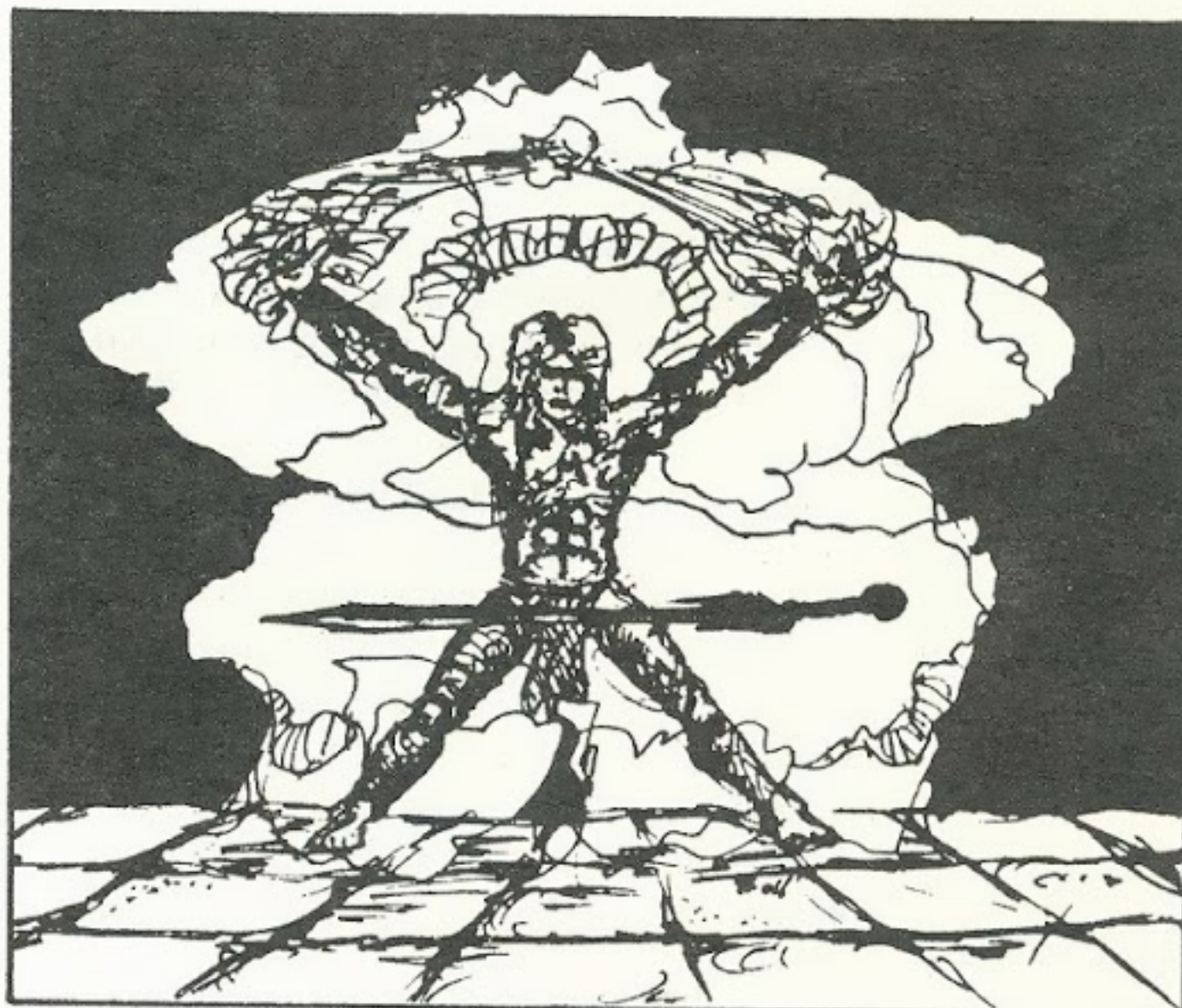
If the combat classes were split into increments of +1 instead of +2, you could get a gain every few levels instead of having to wait a long time for a bigger increase in skill. Clerics and thieves are easy to handle this way, since their +2 per four levels divides neatly into +1 per two levels. But what about fighters and mages? You can't divide a level in half, after all. You don't have to, all that is required is the mental flexibility to divide the present combat class level groups into irregular, but regularly recurring, groups of levels. Thus, for a fighter combat class 0 (no plus to hit) would be the first level, combat class 1 (meaning +1 to hit) would be the next two levels level, combat class 2 (+2 to hit) would be the next level, and so forth. This isn't as neatly split as would be possible under a D100 system, but it's far more satisfactory than before. The combat class groups of levels under this revision would be as in the D20 Combat Table.

I suggest that you apply a system like that in the D100 system, under which a natural roll of "01" on the D20 attack roll is always a miss regardless of combat class and other factors, while a roll of "20" is always a hit regardless of the defender's armor.

One advantage of the combat class system is that you don't need an attack table for every character class, as in the D100 system. Instead, you have the Armor Number Table, a simple

table that applies to everyone, giving what it takes to hit each Armor Class at first level. The combat class number would be a plus to hit added to the amount rolled for the attack, just like a plus to hit from a magic sword or one coming from high strength or dexterity (thus making it possible to get attack rolls higher than 20 on a D20), which is easy mental addition.

In fact, under this system it is possible to eliminate the Armor Class number system entirely. You would refer to your armor by its Armor Number: Clothing 10, Padding 11, Leather 12, Cuirboilli 13, Chainmail 14, Half Plate 15, Full Plate 16, Riding Plate 17. Chainmail would be simply "Armor 14." If you are using weapons vs. armor modifications, you would identify your armor by its nature and its effective to-hit number. Thus, for example, a character in chainmail +3 and a ring of +1 protection, without a shield, would be wearing "chainmail 18," and the number stated would be modified up or down by the GM in computing what was needed to hit that kind of armor with a given type of weapon. This is a more rational system, since its numbers are directly related to combat function, and its pluses and minuses are actually added or subtracted (respectively) to or from the Armor Number, unlike the Armor Class system (in which a plus is actually subtracted from the Armor Class number, and a minus is actually added to the Armor Class number). Shields would be handled exactly as in the D100 system, with each +5% changed to +1.



D20 COMBAT TABLE

	<i>Combat Class</i>										
	0	1	2	3	4	5	6	7	8	9	10
Fighter	01	02-03	04	05-06	07	08-09	10	11-12	13	14-15	16
Cleric/Thief	01-02	03-04	05-06	07-08	09-10	11-12	13-14	15-16	17-18	19-20	21-22
Mage	01-03	04-05	06-08	09-10	11-13	14-15	16-18	19-20	21-23	24-25	26-28

ARMOR NUMBER TABLE

<i>Armor Class</i>	09	08	07	06	05	04	03	02	01	00	-1	-2	-3	-4	-5
<i>Armor Number</i>	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

EXPANDED D20 SYSTEM

A number of the modules of the expanded D100 system can be used directly in the D20 system: Weapon vs. Armor Adjustments, Weapons Table, Adjustments to Range, Weapon Expertise, Hit Points, and Experience Points. Others require a separate discussion.

ADJUSTMENTS FOR STRENGTH OR DEXTERITY. These tables parallel those of the D100 system, of course, but they are less apparently helpful than those of the other system. The reason is that these tables are in fixed 5% increments, and thus where the D100 system allows small pluses at closer-to-average strength or dexterity this simply isn't possible in the D20 system. The result is that a character needs to be farther away from normal (09-12) before any adjustments show up on these tables. Remember that the beginning pluses in the D100 system are really quite small, and don't let it bother you.

The Combat Modifications for Strength table does not apply to missile weapons (bow, crossbow, sling) since the weapon supplies the force that sends the missile, not the user's strength.

This system is based on the theory that dexterity is more important than strength in landing a hit, while strength is more important than dexterity in doing damage, but both are relevant to each category.

WEAPON OR SHIELD PARRIES. Parrying can be added to the D20 system, too. If a character is hit by an opponent against whom a parry is possible, the player would roll a D20 to see whether the parry attempt succeeded. Base parry roll for fighters would be "01-04," for clerics or thieves "01-03," and for mages "01-02." (GMs using the four-step separation of

the classes would have fighters parry on a base of "01-05," clerics "01-04," thieves "01-03," and mages "01-02.") For every even-numbered combat class achieved above zero, the character would increase the base parry range by +1: Combat classes 2, 4, 6, etc. Parry system Armor Numbers are: Clothing 8, Padding 9, Leather 10, Cuirboilli 11, Chainmail 12, Half Plate 13, Full Plate 14, Riding Plate 15. Other modifications in the D100 system for different shield sizes translate to + or - in the D20 system.

CRITICAL HITS AND FUMBLES. A critical hit occurs on an attack roll of a natural "20" followed by a second D20 roll sufficient to hit. Damage done is that for the weapon, plus a bonus determined by a D6 roll: 1-3 +1D6; 4-5 +2D6; 6 +3D6 damage. A fumble occurs on an attack roll of a natural "1" followed by a failure to roll equal or below the character's dexterity on a second D20 roll. The result is the character being unable to attack or parry for the number of melee rounds determined by a D6 roll: 1-3 one melee round; 4-5 two rounds; 6 three rounds. The other notes in the D100 system apply equally to the D20 system.

FINAL WORD

Many of the ideas in this article first saw the light of day in my columns in *Alarums & Excursions* and *The Wild Hunt*. My special thanks go to Robert Ellis for the use of his hit point system and to Daniel L. Pierson for the use of his weapons expertise system.



COMBAT MODIFICATIONS FOR STRENGTH

<i>Strength with Minus</i>	8	7	6	5	4	3	2	1	0	-1	<i>Monster Strength</i>						
<i>Strength with Bonus</i>	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
To-Hit Factor	-	-	1	1	1	1	1	2	2	2	2	3	3	3	4	4	4
Damage Points	1	1	D2	D2	D3	D3	D4	D4	D5	D6	2D4	2D6	3D6	4D6	5D6	6D6	7D6

COMBAT MODIFICATIONS FOR DEXTERITY

<i>Dexterity with Minus</i>	8	7	6	5	4	3	2	1	0	-1	<i>Monster Dexterity</i>						
<i>Dexterity with Bonus</i>	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
To-Hit Factor	1	1	1	2	2	2	3	3	3	4	4	5	5	6	6	7	7
Damage Points	-	-	-	1	1	1	D2	D2	D3	D3	D4	D4	D5	D6	2D4	2D6	3D6

PARRY MODIFICATIONS FOR DEXTERITY

<i>Dexterity with Minus</i>	8	7	6	5	4	3	2	1	0	-1
<i>Dexterity with Bonus</i>	13	14	15	16	17	18	19	20	21	22
Parry Modification	1	1	1	2	2	2	3	3	3	4