

moria

Explore the Dungeons of Moria

by Robert Alan Koeneke and James E. Wilson

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1 Introduction

The game of *morìa* is a single player dungeon simulation. A player may choose from a number of races and classes when creating a character, and then ‘run’ that character over a period of days, weeks, even months, attempting to win the game by defeating the Balrog which lurks in the deeper levels.

The character will begin the adventure on the town level where supplies, weapons, armor, and magical devices can be acquired by bartering with various shop owners. After preparing for this adventure, the character can descend into the dungeons of *morìa* where fantastic adventures await!

Before beginning an adventure, this document should be read carefully. The game of *morìa* is a complicated game (but not as complicated as other roguelikes), and will require a dedicated player to win.

2 Running The Game

```
moria [ -o ] [ -r ] [ -s ] [ -S ] [ -n ] [ -w[seed] ] [ savefile ]
```

By default, *moria* will save and restore games from a file called *moria.save* in the home directory. If the environment variable *MORIA_SAV* is defined, then *moria* will use that file name instead of the default. If *MORIA_SAV* is not a complete path name, then the savefile will be created or restored from the current directory. The savefile can also be explicitly specified on the command line.

When the *-n* option is used, *moria* will create a new game, ignoring any savefile which may already exist. This works best when a savefile name is specified on the command line, as this will prevent *moria* from trying to overwrite the default savefile (if it exists) when saving a game.

Movement in various directions is accomplished by pressing the numeric keypad keys, VMS-style. When *-r* is specified, movement is accomplished in the same way as *rogue*. When *-o* is specified, it forces the VMS-style command set. These options will override defaults stored in the savefile. If these options are given multiple times, only the last one will take effect.

When *-s* is specified, *moria* displays all of the scores in the score file and exits. On a multiuser system, when *-S* is specified, *moria* displays only those scores belonging to the current user and then exits.

When *-w* is specified, *moria* will start up in wizard mode. Dead characters can be resurrected using this option when starting the game. Resurrected characters are teleported to the town level and given zero hit-points. Wizard mode is intended for debugging the game, and for experimenting with new features. To make random events happen in a predictable manner a seed number can be given to the *-w* option. Using wizard mode to win the game is considered cheating. Games played with wizard mode are not scored.

3 The Character

All characters have six main attributes which modify their basic abilities. These six attributes, called *stats*, are *strength*, *intelligence*, *wisdom*, *dexterity*, *constitution*, and *charisma*. Stats may vary from a minimum of 3 to a maximum of 18. At the highest level, stats are further qualified by a number from zero to one hundred, so that the highest value is actually 18/100. A value of 18/100 can be thought of as equivalent to 19, and 18/00 (not actually used) is equivalent to 18. Because adventurers of interest tend to be better than average characters, *moria* stats will average about 13, and are further adjusted by race and class. Some races are just naturally better at being certain classes, as will be shown later.

In addition to the more visible stats, each character has certain abilities which are mainly determined by their race, class, and level, but are also modified by their stats. The abilities are *fighting*, *throwing/bows*, *saving throw*, *stealth*, *disarming*, *magical devices*, *perception*, *searching*, and *infravision*.

Characters will be assigned an early history, with money and a social class based on that history. Starting money is assigned based on history, charisma, and somewhat upon the average of a character's stats. A character with below average stats will receive extra money to help them survive the first adventure.

Each character will also have physical attributes such as race, height, weight, sex, and a physical description. None of these, except weight, play any part in the game other than to give the player a "feeling" for their character. Weight is used for computing carrying capacity and also for bashing.

Finally, each character is assigned *hit-points* based on their race, class, and constitution. Spell casters will also receive *mana* which is expended when casting spells. Mana is based on Wisdom for Priests and Intelligence for Mages.

3.1 Character Stats

Strength Strength is important in fighting with weapons and hand to hand combat. A high strength can improve the chances of hitting, and the amount of damage done with each hit. Characters with low strengths may receive penalties. Strength is also useful in tunneling, body and shield bashing, and in carrying heavy items.

Intelligence

Intelligence is the prime stat of a mage, or magician. A high intelligence increases a mage's chances of learning spells, and it also increases the amount of mana a mage has. No spell may be learned by mages with intelligences under 8. Intelligence also modifies a character's chance of disarming traps, picking locks, and using magic devices.

Wisdom

Wisdom is the prime stat of a priest. A high wisdom increases the chance of receiving new spells from a priest's deity, and it also increases the amount of mana a priest has. No spell may be learned by priests with wisdom under 8. Wisdom also modifies a character's chance of resisting magical spells cast upon their person.

Dexterity

Dexterity is a combination of agility and quickness. A high dexterity may allow a character to get multiple blows with lighter weapons, thus greatly increasing kill power, and may increase the chances of hitting with any weapon and dodging blows from enemies. Dexterity is also useful in picking locks, disarming traps, and protection from pick pockets.

Constitution

Constitution is a character's ability to resist damage to the body, and to recover from damage received. Therefore a character with a high constitution will receive more hit points, and be more resistant to poisons.

Charisma Charisma represents a character's personality, as well as physical looks. A character with a high charisma will receive better prices from store owners, whereas a character with a very low charisma will be robbed blind. A high charisma will also mean more starting money for the character.

3.2 Character Sex

The player may choose to be either a male or a female character. Only height and weight are affected by a character's gender. Female characters tend to be somewhat smaller and lighter than their male counterparts. No adjustments to stats or abilities are made because of the gender of a character. Female characters start out with slightly more money than male characters to help offset the weight penalty.

3.3 Character Abilities

Characters possess nine different abilities which can help them to survive. The starting abilities of a character are based upon race and class. Abilities may be adjusted by high or low stats, and may increase with the level of the character.

Fighting Fighting is the ability to hit and do damage with weapons or fists. Normally a character gets a single blow from any weapon, but if their dexterity and strength are high enough, they may receive more blows per round with lighter weapons. Strength and dexterity both modify the ability to hit an opponent. This skill increases with the level of the character.

Throwing/Bows

Using ranged missile weapons and throwing objects is included in this skill. Different stats apply to different weapons, but this ability may modify the distance an object is thrown/fired, the amount of damage done, and the ability to hit a creature. This skill increases with the level of the character.

Saving Throw

A Saving Throw is the ability of a character to resist the effects of a spell cast on them by another person or creature. This does not include spells cast on the character by their own stupidity, such as quaffing a nasty potion. This ability increases with the level of the character, but then most high level creatures are better at casting spells, so it tends to even out. A high wisdom also increases this ability.

Stealth The ability to move silently about is very useful. Characters with good stealth can usually surprise their opponents, gaining the first blow. Also, creatures may fail to notice a stealthy character entirely, allowing a character to avoid certain fights. This skill is based entirely upon race and class, and will never improve unless magically enhanced.

Disarming

Disarming is the ability to remove traps (safely), and includes picking locks on traps and doors. A successful disarming will gain the character some experience. A trap must be found before it can be disarmed. Dexterity and intelligence both modify the ability to disarm, and this ability increases with the level of the character.

Using Magical Devices

Using a magical device such as a wand or staff requires experience and knowledge. Spell users such as mages and priests are therefore much better at using a magical device than say a warrior. This skill is modified by intelligence, and increases with the level of the character.

Perception

Perception is the ability to notice something without actively seeking it out. This skill is based entirely upon race and class, and will never improve unless magically enhanced.

Searching

To search is to actively look for secret doors, floor traps, and traps on chests. Rogues are the best at searching, but mages, rangers, and priests are also good at it. This skill is based entirely upon race and class, and will never improve unless magically enhanced.

Infravision

Infravision is the ability to see heat sources. Since most of the dungeon is cool or cold, infravision will not allow the character to see walls and objects. Infravision will allow a character to see any warm-blooded creatures up to a certain distance. This ability works equally well with or without a light source. The majority of *moriam*'s creatures are cold-blooded, and will not be detected unless lit up by a light source. All non-human races have innate infravision ability. Humans can gain infravision only if it is magically enhanced.

3.4 Choosing A Race

There are eight different races that can be chosen from in *moriam*. Some races are restricted as to what profession they may be, and each race has its own adjustments to a character's stats and abilities.

Human The human is the base character, all other races are compared to this race. Humans can choose any class, and are average at everything. Humans tend to go up levels faster than any other race, because of their shorter life spans. No racial adjustments occur to characters choosing human.

- Half-Elf** Half-elves tend to be smarter and faster than a human, but not as strong. Half-elves are slightly better at searching, disarming, perception, stealth, and magic, but they are not as good at hand weapons. Half-elves may choose any class.
- Elf** Elves are better magicians than humans, but not as good at fighting. They tend to be smarter and faster than either humans or half-elves, and also have better wisdom. Elves are better at searching, disarming, perception, stealth, and magic, but they are not as good at hand weapons. Elves may choose any class except Paladin.
- Halfling** Halflings, or Hobbits, are very good at bows, throwing, and have good saving throws. They also are very good at searching, disarming, perception, and stealth; so they make excellent thieves (but prefer to be called burglars...). They will be much weaker than humans, and no good at bashing. Halflings have fair infravision, so they can detect warm creatures at a distance. Halflings can choose between being a warrior, mage, or rogue.
- Gnome** Gnomes are smaller than dwarfs, but larger than halflings. They, like the halflings, live in the earth in burrow-like homes. Gnomes are practical jokers, so if they can kill something in a humorous way, so much the better. Gnomes make excellent mages, and have very good saving throws. They are good at searching, disarming, perception, and stealth. They have lower strength than humans so they are not very good at fighting with hand weapons. Gnomes have fair infravision, so they can detect warm creatures at a distance. A gnome may choose between being a warrior, mage, priest, or rogue.
- Dwarf** Dwarves are the headstrong miners and fighters of legend. Since dungeons are the natural home of a dwarf, they are excellent choices for a warrior or priest. Dwarves tend to be stronger and have higher constitutions, but are slower and less intelligent than humans. Because they are so headstrong and are somewhat wise, they resist spells which are cast on them. Dwarves also have good infravision because they live underground. They do have one big drawback though. Dwarves are loudmouthed and proud, singing in loud voices, arguing with themselves for no good reason, screaming out challenges at imagined foes. In other words, dwarves have a miserable stealth.
- Half-Orc** Half-Orcs make excellent warriors, and decent priests, but are terrible at magic. They are as bad as dwarves at stealth, and horrible at searching, disarming, and perception. Half-Orcs are, let's face it, ugly. They tend to pay more for goods in town. Half-Orcs do make good priests and rogues, for the simple reason that Half-Orcs tend to have great constitutions and lots of hit-points.
- Half-Troll** Half-Trolls are incredibly strong, and have the highest hit points of any character race. They are also very stupid and slow. They will make great warriors and iffy priests. They are bad at searching, disarming, perception, and stealth. They are so ugly that a Half-Orc grimaces in their presence. They also happen to be fun to run...

3.4.1 Race Versus Skills and Stats

Stat, hit dice, and experience points per level modifications due to race are listed in the following table.

	Str	Int	Wis	Dex	Con	Chr	Hit Dice	Rqd Exp/level
Human	0	0	0	0	0	0	10	+0%
Half-Elf	-1	+1	0	+1	-1	+1	9	+10%
Elf	-1	+2	+1	+1	-2	+1	8	+20%
Halfling	-2	+2	+1	+3	+1	+1	6	+10%
Gnome	-1	+2	0	+2	+1	-2	7	+25%
Dwarf	+2	-3	+1	-2	+2	-3	9	+20%
Half-Orc	+2	-1	0	0	+1	-4	10	+10%
Half-Troll	+4	-4	-2	-4	+3	-6	12	+20%

Racial abilities as compared to each other, with 1 the lowest, or worst, and 10 the highest, or best, are listed in the following table.

	Disarm	Search	Stealth	Percep	Fight	Bows	Save	Infra
Human	5	5	5	5	5	5	5	None
Half-Elf	6	7	7	6	4	6	6	20 feet
Elf	8	9	7	7	3	9	7	30 feet
Halfling	10	10	10	10	1	10	10	40 feet
Gnome	9	7	9	9	2	8	9	30 feet
Dwarf	6	8	3	5	9	5	8	50 feet
Half-Orc	3	5	3	2	8	3	3	30 feet
Half-Troll	1	1	1	1	10	1	1	30 feet

3.5 Choosing A Class

Once a race has been chosen, the player will need to pick a class. Some classes will not be available to certain races, for instance, a Half-Troll cannot become a Paladin. Players who are new to the game should run a warrior or rogue. Spell casting generally requires a more experienced player that is familiar with survival techniques.

Warrior Warriors are hack-and-slash characters, who solve most of their problems by cutting them to pieces, but occasionally falls back on the help of magical devices. Their prime stats are Strength and Constitution, and a good Dexterity can really help at times. A Warrior will be good at Fighting and Throwing/Bows, but bad at most other skills.

Mage Mages must live by their wits. They cannot hope to simply hack their way through the dungeon, and so must therefore use their magic to defeat, deceive, confuse, and escape. Mages are not really complete without an assortment of magical devices to use in addition to their spells. They can master the higher level magical devices far easier than anyone else, and has the best saving throw to resist effects of spells cast at them. Intelligence and Dexterity are their primary stats. There is no rule that says a mages cannot become good fighters, but spells are their true realm.

- Priest** Priests are characters of holy devotion. They explore the dungeon only to destroy the evil that lurks within, and if treasure just happens to fall into their pack, well, so much more to the glory of their temple! Priests receive their spells from a deity, and therefore do not choose which spells are learned. They are familiar with magical devices, preferring to call them instruments of god, but is not as good as a mage in their use. Priests have good saving throws, and make decent fighters, preferring blunt weapons over edged ones. Wisdom and Charisma are the priest's primary stats.
- Rogue** Rogues are characters that prefer to live by their cunning, but is capable of fighting their way out of a tight spot. They are the master of traps and locks, no device being impossible to overcome. A rogue has a high stealth allowing them to sneak around many creatures without having to fight, or sneak up and get the first blow. A rogue's perception is higher than any other class, and many times they will notice a trap or secret door before having to search. A rogue is better than a warrior or paladin with magical devices, but still cannot rely on their performance. Rogues can also learn a few spells, but not the powerful offensive spells mages can use. A rogue's primary stats are Intelligence and Dexterity.
- Ranger** A Ranger is a warrior/mage. They are good fighters, and the best of the classes with a missile weapon such as a bow. Rangers learn spells much more slowly than a mage, but is capable of learning all but the most powerful spell. Because rangers are really a dual class character, more experience is required for them to advance. Rangers have good stealth, good perception, good searching, good saving throw, and is good with magical devices. Their primary stats are Intelligence and Dexterity.
- Paladin** A Paladin is a warrior/priest. They are very good fighters, second only to the warrior class, but are not very good at missile weapons. They receive prayers at a slower pace then the priest, but can eventually learn all the prayers. Because paladins are dual class characters, it requires more experience to advance them. A paladin lacks much in the way of abilities. They are poor at stealth, perception, searching, and magical devices. They have a decent saving throw due to their divine alliance. A paladin's primary stats are Strength and Charisma.

3.5.1 Race Versus Class

	Warrior	Mage	Priest	Rogue	Ranger	Paladin
Human	Yes	Yes	Yes	Yes	Yes	Yes
Half-Elf	Yes	Yes	Yes	Yes	Yes	Yes
Elf	Yes	Yes	Yes	Yes	Yes	No
Halfling	Yes	Yes	No	Yes	No	No
Gnome	Yes	Yes	Yes	Yes	No	No
Dwarf	Yes	No	Yes	No	No	No
Half-Orc	Yes	No	Yes	Yes	No	No
Half-Troll	Yes	No	Yes	No	No	No

3.5.2 Class Versus Skills

Class abilities as compared to each other, with 1 as the lowest, or worst, and 10 as the highest, or best are shown in the following table.

	Fight	Bows	Save Throw	Stea- lth	Disarm	Magic Device	Percep	Search	Extra Exp/lev
Warrior	10	6	3	2	4	3	2	2	+0%
Mage	2	1	10	5	6	10	8	5	+30%
Priest	4	3	6	5	3	8	4	4	+20%
Rogue	8	9	7	10	10	6	10	10	+0%
Ranger	6	10	8	7	6	7	6	6	+40%
Paladin	9	5	4	2	2	4	2	2	+35%

3.6 Experience

All characters receive experience during the game. Experience determines the level, which determines hit-points, mana points, spells, abilities, etc. The amount of experience required to advance a level increases as the game is played, according to race and class.

3.6.1 Getting Experience

There are many ways to gain experience. This list shows a few.

- Defeating monsters
- Disarming traps
- Picking locks
- Using a scroll, potion, staff, wand, or rod for the first time and discovering what it did
- Casting a spell successfully for the first time
- Drinking a potion of gain experience

4 Adventuring

After the character has been created, their dungeon adventure can begin. Symbols appearing on the screen represent the dungeon's walls, floor, objects, features, and creatures lurking about. In order to direct the character through their adventure, the player will enter single character commands.

Moria symbols and commands each have a help section devoted to them. The player should review these sections before attempting an adventure. Finally, a description of the town level and some general help on adventuring are included.

5 Symbols On The Screen

Symbols on the map can be broken down into three categories: Features of the dungeon such as walls, floor, doors, and traps; objects which can be picked up such as treasure, weapons, magical devices, etc; and creatures which may or may not move about the dungeon, but are mostly harmful to the character's well-being.

Some symbols can be in more than one category. Also note that treasure may be embedded in a wall, and the wall must be removed before the treasure can be picked up.

It will not be necessary to remember all of the symbols and their meanings. A simple command, the /, will identify any symbol appearing on the map. See the section on commands for further help.

Features

.	A floor space, or hidden trap	1	Entrance to General Store
#	A wall	2	Entrance to Armory
'	An open door	3	Entrance to Weapon Smith
+	A closed door	4	Entrance to Temple
^	A trap	5	Entrance to Alchemy Shop
<	A staircase up	6	Entrance to Magic Shop
>	A staircase down	:	Obstructing rubble
;	A loose floor stone		An open pit (Blank)
%	A mineral vein	@	The character

Objects

!	A flask or potion	?	A scroll
"	An amulet	[Hard armor
\$	Money (Can be embedded)	\	A hafted weapon
&	A chest]	Misc. armor
(Soft armor	_	A staff
)	A shield	{	Missile (arrow, bolt, pebble)
*	Gems (Can be embedded)		Sword or dagger
-	A wand	}	Missile arm (Bow, X-bow, sling)
/	A pole-arm	~	Misc
=	A ring	,	Food
s	A skeleton		

Creatures

a	Giant Ant	A	Giant Ant Lion
b	Giant Bat	B	The Balrog
c	Giant Centipede	C	Gelatinous Cube
d	Dragon	D	Ancient Dragon
e	Floating Eye	E	Elemental
f	Giant Frog	F	Fly
g	Golem	G	Ghost
h	Harpy	H	Hobgoblin
i	Icky-Thing	I	

j	Jackal	J	Jelly
k	Kobold	K	Killer Beetle
l	Giant Louse	L	Lich
m	Mold	M	Mummy
n	Naga	N	
o	Orc or Ogre	O	Ooze
p	Human(oid)	P	Giant Human(oid)
q	Quasit	Q	Quylthulg
r	Rodent	R	Reptile
s	Skeleton	S	Scorpion
t	Giant Tick	T	Troll
u		U	Umber Hulk
v		V	Vampire
w	Worm or Worm Mass	W	Wight or Wraith
x		X	Xorn
y	Yeek	Y	Yeti
z	Zombie	Z	
\$	Creeping Coins	,	Mushroom Patch

Here is what the screen looks like after a character has been adventuring in *mor*ia for a while:

```

                                     #           ' #
Elf                                # #####' #
Mage                               # #       # #
Mage (2nd)                         # #
                                     # #
STR :      9                       # #
INT :   18/78                       # #
WIS :     13                       # #
DEX :     16                       # #
CON :      8                       # #
CHR :     15                       # #
                                     #####+##### #
LEV :     27                       #..... #
EXP :  38487                       #.....###
MANA:     66                       #...@..#
MHP :    123                       #.....
CHP :    123                       #.....#
                                     #.....#
AC :      55                       #####.#'##
GOLD:  23868

```

Study 1000 feet

The top line is where messages appear about what's happening in the game. The bottom line is a status line, that shows what dungeon depth the character is at, and other things like if the character is hungry, afraid, poisoned, or moving especially slow or fast. On the left side of the screen the character's stats can be seen. Everything else, is the map of the dungeon.

This picture shows an elf mage character (@) in a lit room at 1000 feet below the surface. The walls of the room (#) can be seen, and the empty lit tiles within it (.). The room has one closed door (+), and one open door ('), and three other ways to leave. The character has arrived to this room through a tunnel or hall coming from the top of the screen. The tunnel is not lit like the room is. The tunnel will be lit by the character's light source as it travels through. There are no monsters visible.

From the statistics on the left side of the screen, it can be seen that the character is a Mage (2nd), which is another way of saying that it is at level 27. The reason that this character is at level 27 is because it has 38487 experience points.

The character has 123 of 123 hit-points available. MHP means maximum hit-points, while CHP means current hit-points. This spell-caster has exactly 66 mana (spell-casting) points to spend as spells are cast. It can also be seen that this mage has some spells to learn. The word Study in the bottom right shows this.

The character's current levels of strength, intelligence, wisdom, dexterity, constitution and charisma can also be seen. The character doesn't have 18 of 78 intelligence, they have 18 78/100 intelligence, which is more than just 18.

Finally, the character's armor class is currently at 55, and has a great number of gold pieces.

6 Commands

All commands are entered by pressing a single key. Some commands are capital or control characters, which require the player to hold down the shift or control key while pressing another key. As a special feature, control keys may be entered in a single stroke, or in two strokes, with a `^` character first.

There are two command sets: the original command set which is the default (e.g. the original VMS-style command set), and the rogue-like command set. The rogue-like command is generally more convenient, especially if the keyboard lacks a keypad.

The following tables summarize the two command sets. Certain commands may be preceded by an optional count, and certain commands must be followed by a direction. These conditions are indicated in the tables by `@` for an optional count, and `~` for a direction. If a particular command requires additional key strokes, then they will be prompted for.

Original command summary.

a	Aim and fire a wand	@ B ~	Bash (object/creature)
b	Browse a book	C	Change name
c ~	Close a door	@ D ~	Disarm a trap/chest
d	Drop an item	E	Eat some food
e	Equipment list	F	Fill lap with oil
f	Fire/Throw an item	G	Gain new magic spells
i	Inventory list	L	Locate with map
@ j ~	Jam a door with spike	M	Map shown reduced size
l ~	Look given direction	@ R	Rest for a period
m	Magic spell casting	S	Search Mode
@ o ~	Open a door/chest	@ T ~	Tunnel in a direction
p	Pray	V	View scoreboard
q	Quaff a potion	=	Set options
r	Read a scroll	?	Command quick reference
@ s	Search for trap or door	{	Inscribe an object
t	Take off an item	@ - ~	Move without pickup
u	Use a staff	. ~	Run in direction
v	Version, credits and manual	/	Identify a character
w	Wear/Wield an item	CTRL-K	Quit the game
x	Exchange weapon	@ CTRL-P	Repeat the last message
<	Go up an up staircase	CTRL-X	Save character and quit
>	Go down a down staircase	@ ~	for movement

Rogue-like command summary.

c ~	Close a door	C	Character description
d	Drop an item	@ D ~	Disarm a trap/chest
e	Equipment list	E	Eat some food
@ f ~	Force/bash item/monster	F	Fill lamp with oil
i	Inventory list	G	Gain new magic spells
@ o ~	Open a door/chest	P	Peruse a book
p	Pray	Q	Quit the game

q	Quaff a potion	@ R	Rest for a period
r	Read a scroll	@ S ~	Spike a door
@ s	Search for trap or door	T	Take off an item
t	Throw an item	V	View scores
v	Version, and manual	W	Where: locate self
w	Wear/Wield an item	X	Exchange weapon
x ~	Examine surroundings	Z	Zap a staff
z	Zap a wand	#	Search Mode
=	Set options	<	Go up an up staircase
/	Identify a character	>	Go down a down stair
@ CTRL-P	Previous message review	{	Inscribe an object
@ - ~	Move without pickup	?	Type this page
@ CTRL ~	Tunnel in a direction	CTRL-X	Save game and exit
@ SHFT ~	Run in direction	@ ~	for movement

6.1 Special Keys

Certain commands may be entered at any time input is accepted. The special character control-R, entered as a single keystroke, will always refresh the screen. This may be used at any prompt for input, and is otherwise ignored.

When playing on a UNIX or similar system, then there are some additional special characters used by *moria*. The special character control-C will interrupt *moria*, and asks the player if they really want the character to die and quit the game. Should the player choose for the character not to die, *moria* merely continues as before, except that resting, running, repeated commands, etc will be terminated. The game can be suspended with control-Z, and return to the original command shell. In this case, *moria* is not terminated, and may be restarted at any time from the shell. Alternatively, the special command ! is available to run any normal shell command. When it is complete, *moria* will restart.

For many input requests or queries, the special character ESCAPE will abort the command. For the "-more-" message prompts, any of SPACE, ESCAPE, RETURN (control-m), or LINEFEED (control-j) can be used to continue after pausing to read the displayed message.

It is possible to give control character commands in two key strokes, by pressing a ^ followed by the appropriate letter of the alphabet. This is useful when running *moria* in circumstances where control characters are intercepted by some external process, or by the operating system.

6.2 Direction

For the original style command set, a direction is given by a digit which is in the appropriate orientation on the keypad. For the rogue-like command set, a direction is given by one of the letters `hykulnjb`. Again, the relative position of the keys on the keyboard gives a clue as to the direction. The digit 5 for the original commands, and the period `.` for rogue-like commands, is a null direction indicator. This means to stay in one place, or when in a look command to look in all directions.

Original Directions			Rogue-like Directions		
\		/	\		/
7	8	9	y	k	u
-	4	6	-	h	l
		-			-
1	2	3	b	j	n
/		\	/		\

Movement is accomplished by specifying a direction immediately. Simply press the appropriate key and the character will move one step in that direction. The character can only move onto and through floor spots, and only if they contain no creatures or obstructing objects such as a closed door.

Other commands that require a direction will prompt for it.

Moving the character one step at a time can be time consuming and boring, so a faster method has been supplied. For the original VMS-style command set, by using the Run command `.`, the character may move in a direction until something interesting happens. For instance, by pressing the period key `.` followed by the direction 8, the character would continue to move up the screen, only coming to a stop after at least one condition is satisfied. For the rogue-like command set, typing a shifted directional letter will move the character in that direction until something interesting happens. The stopping conditions are described more completely in the run command description below.

6.3 Command Counts

Some commands can be executed a fixed number of times by preceding them with a count. Counted commands will execute until the count expires, or until any key is pressed, or until something significant happens, such as being attacked. Thus, a counted command doesn't work to attack another creature. While the command is being repeated, the number of times left to be repeated will flash by on the command line at the bottom of the screen.

To give a count to a command in the rogue-like mode, type the number in digits, then the command. A count of zero defaults to a count of 99.

To give a count to a command in the original mode, press `#`, followed by the digits. To count a movement command (which is itself a digit), type a space after the number, and then give the command.

Counted commands are very useful for searching or tunneling, as they automatically terminate on success, or if the character is attacked. A counted command or a Run can be terminated a counted command by pressing any key. This character is ignored, but it is safest to use a SPACE or ESCAPE which are always ignored as commands.

Many commands will also prompt for a particular object to be used. For example, the command to read a scroll will ask which of the scrolls that the character is carrying is to be read. In such cases, the selection is made by pressing a key for that letter of the alphabet; when selecting from the backpack, the player may also type a digit to select the item whose inscription is that digit. The prompt will indicate the possible letters, and will also allow

the * key to be pressed, which causes all of the available options to be described (e.g. it lists all of the scrolls that can be read).

The particular object may be selected by an upper case or a lower case letter. If lower case or a digit is used, the selection takes place immediately. If upper case is used, then the particular option is described, and you are given the option of confirming or retracting that choice. Upper case selection is thus safer, but requires an extra keystroke.

6.4 Command descriptions

In the following command descriptions, the original style key is given. If the rogue-like key for that command is different, then it will be shown following the original key.

B <Dir> (f <Dir>)

Bash. The bash command includes breaking open doors and chests, or bashing an opponent. The bashing ability increases with weight and strength. In addition, when bashing an opponent, it will either perform a body bash, or, when wielding a shield, perform a shield bash which is more effective.

Bashing a door can throw the character off-balance, but this will not generally be a problem. Doors that have been jammed closed with spikes can only be opened by bashing. Locked doors may also be bashed open. Bashing a door open will permanently break it.

Bashing a creature affects both the character and the opponent. Depending on dexterity, the character may or may not be thrown off-balance allowing free moves to the opponent. If the bash is successful, the opponent may be thrown off-balance, thus giving the character some free hits or a chance to flee. Huge creatures such as ancient dragons will be difficult or even impossible to bash successfully.

A character automatically performs a shield bash instead of a body bash, when they are currently wearing a shield. A shield bash adds the damage of a shield to that of the bash, so it is more effective. Size and material both affect the damage that a shield will do.

Bashing can be done with a command-count, but if the character is town off-balance, the count will be reset straight away.

C

Display character (on screen or saving to a file.)

This command allows the player to either display the character details on the terminal screen, or to save an entire character info listing to a file. The character's history, equipment, and inventory list are also included when saving to a file.

D <Dir>

Disarm a trap.

The character can attempt to disarm floor traps, or trapped chests. When the character tries and fails to disarm a trap, there is a chance that the blunder will set it off. Traps on chests can only be disarmed after firstly finding the trap with the search command. This command can have a count.

E**Eat some food.**

A character must eat occasionally to remain effective. As a character grows hungry, a message will appear at the bottom of the screen saying "Hungry". When a character remains hungry for too long, they will become weak, and eventually start fainting, and finally die of starvation.

F**Fill a lamp or lantern with oil.**

When the character is using a lamp for a light source, and has a flask of oil in the pack, they may refill the lamp by using this command. A lamp is capable of a maximum of 15000 turns of light, and each flask has 7500 turns of oil contained in it.

G**Gain new spells.**

This command causes the character to learn new spells. When the character is able to learn some spells, the word "Study" appears on the status line at the bottom of the screen. Mages, rogues, and rangers must have the magic books containing new spells to be able to learn them. Priests and Paladins are given their prayers by their gods, and hence do not need a holy book before learning the prayers in it. They do need the book in order to use the prayers.

L (W)**Location on map.**

The location command allows the player to look at all parts of the current dungeon level. The displayed view of the dungeon is shifted to bring the character's current position as close to the center as possible. The map can then be shifted using any of the eight possible directions. Each shift moves the view point by one half screen. The top line displays a map section number, each map section having a height and width one half that of the display, and indicates the direction of the display from the character's current position. When this command is exited and the character is not on the display, then the display is centered again.

M**Map shown reduced size.**

This command will show the entire map, reduced by a factor of nine, on the screen. Since nine places map into every character on the screen, only the major dungeon features will be visible. This is especially useful for finding where the stairs are in relation to the character's current position. It is also useful for identifying unexplored areas.

R**Rest for a number of turns.**

The character may rest one turn with the null movement command. Resting for longer periods of time is accomplished by using the Rest command, followed by the number of turns to rest. Resting will continue until the specified duration has expired, or something to wake the character happens, such as a creature wandering by, or getting hungry, or some disability like blindness expiring. It

is sometimes a good idea to rest a beat-up character until they regain some of their hit-points, but be sure to have plenty of food if you rest often.

The character can be awakened by pressing any key. Space is best, since if the rest ends just before the character is typed, the space is ignored as a command.

It is also possible to rest by typing the count first, and using either the Rest or the null movement command.

When * is given for the rest count, the character will rest until both hit-points and mana reach their maximum values. As above, the character will immediately be awakened if anything interesting happens.

S (#)

Search mode toggle.

The Searching toggle will take the character into and out of search mode. When first pressed, the message "Searching" will appear on the status line at the bottom of the screen. The character is now taking two turns for each command, one for the command and one turn to search. This means that the character is taking twice the time to move about the dungeon, and therefore twice the food. If a creature should happen by or attack, search mode will automatically toggle off. Search mode can also be turned off by again pressing the S (or #) key.

T <Dir> (control-<Dir>)

Tunnel through rock.

Tunneling (Mining) is a very useful art in the dungeons of *moriam*. There are four kinds of rock: Permanent Rock, Granite Rock, Magma Intrusion, and Quartz Veins. Permanent Rock is exactly that, permanent. Granite is very hard, therefore hard to dig through, and contains no valuable metals. Magma and Quartz veins are softer and sometimes bear valuable metals and gems, shown as a \$ or a * symbol. When the character can't move over these symbols, it means they are embedded in the rock, and the tunnel command must be used to dig them out. There is a game option which causes magma and quartz to be displayed differently than other rock types.

Tunneling can be VERY difficult by hand, so when digging be sure to wield either a shovel or a pick. Magical shovels and picks can be found which allow the wielder to dig much faster than normal, and a good strength also helps.

Tunneling can have a count.

V

View scoreboard.

This command will display the contents of the score board on the screen. On a multiuser system, pressing V the first time will show only those scores from the score board that belong to the current user, and pressing V again will show all users' scores.

a <Dir> (z <Dir>)

Aim a wand.

Wands must be aimed in a direction to be used. Wands are magical devices and therefore use the Magical Devices ability of the character. They will either affect

the first object/creature encountered, or affect anything in a given direction, depending upon the wand. An obstruction such as a door or wall will generally stop the effects of a wand from traveling further.

b (P)**Browse a book.**

Books can only be read if the character is of its realm. Therefore a magic user could read a magic book, but not a holy book. Warriors will not be able to read either kind of book. When the browse command is used, all of the spells or prayers contained therein are displayed, along with information such as their level, the amount of mana used up in casting them, and whether or not you know the spell or prayer. There are a total of 31 different magical spells in four books, and 31 different prayers in four books.

c <Dir>**Close a door.**

Non-intelligent and certain other creatures will not be able to open a door. Therefore shutting doors can be a life saver. To close a door, the character must be adjacent to an open door, and broken doors cannot be closed. Bashing a closed door will break it and leave it permanently open.

d**Drop an object from the inventory.**

Objects can be dropped onto the floor beneath the character if that floor spot does not already contain an object. Doors and traps are considered objects in this sense. If the character has several objects of the same kind, the player will be prompted for dropping one or all of them. It is possible to directly drop things which you are wielding or wearing.

e**Display a list of equipment being used.**

Use the Equipment command to display a list of objects currently being worn or wielded by the character. Each object has a specific place where it is placed, and that only one object of each type may be used at any one time, excepting rings of which two can be worn, one on each hand.

f <Dir> (t <Dir>)**Fire/Throw an object/use a missile weapon.**

Any object carried by the character can be thrown. Depending upon the weight of an object, it may travel across a room or drop down beside the character. When a stackable object like an arrow is thrown, only one will be thrown at a time.

When throwing at a creature, the chance of hitting the creature is determined by the character's pluses to hit, the ability at throwing, and the object's pluses to hit. Once the creature is hit, the object may or may not do any actual damage to it. Certain objects in the dungeon can do great amounts of damage when thrown, but it's for the player to figure out the obscure ones. Oil flasks are considered to be lit before thrown; therefore, they will do fire damage to a creature if they hit it.

To use a bow with arrows, simply wield the bow and throw the arrows. Extra pluses to damage and hitting are gained by wielding the proper weapon and throwing the corresponding ammo. A heavy crossbow with bolts for example, is a killer...

i

Display a list of objects being carried.

This command displays an inventory of all objects being carried, but not currently in use (e.g. being worn or wielded). The character may carry up to 22 different kinds of objects in the pack. Depending upon strength, the character will be able carry many identical objects before hitting the weight limit. After the weight limit is exceeded the character will move slower due to the encumbrance.

j <Dir> (S <Dir>)

Jam a door with an iron spike.

Most humanoid and many intelligent creatures can simply open a closed door, and can eventually get through a locked door. Therefore the character may also spike a door in order to jam it. Each spike used on a door will increase its strength, although as more spikes are jammed, the less effect each additional spike has. It is very easy to jam a door so much as to make it impossible for the character to bash it down, so spike doors wisely. The bigger a creature is, the easier it can bash a door down. Therefore twenty or more spikes might be necessary to slow down a dragon, where one spike would slow down a kobold. This command can be counted.

l <Dir> (x <Dir>)

Look in a direction.

The Look command is useful in identifying the exact type of object or creature shown on the screen. Also, if a creature is on top of an object, the look command will describe both. Creatures and objects can be seen up to 200 feet away (20 spaces or tiles). The Look command can be used freely without the creatures getting a turn to move against the character.

Looking in a particular direction sees everything within a cone of vision which just overlaps the cones of the two adjacent directions. Looking with the null direction 5 (or .) sees everything which there is to be seen.

The character is able to access monster memories with this command. When the character sees a creature, the player has the option to view a short paragraph of information about prior experiences with that creature. See also the section on being attacked.

m

Cast a magic spell.

To cast a spell, a character must have previously learned it, and must also have in the inventory a magical book from which the spell may be read. Each spell has a chance of failure which starts out fairly large but decreases as a character gains levels. If a character does not have enough mana, the chance of failure is greatly increased, and gambles on losing a point of constitution. The player will be prompted for confirmation before trying to cast a spell when there is

insufficient mana. Since a character must read the spell from a book, they cannot be blind or confused when casting a spell, and there must be some light present.

o <Dir>

Open a door, chest, or lock.

To open an object such as a door or chest, the Open command can be used. If the object is locked, the Open command will attempt to pick the lock, based on the character's disarm ability. If an object is trapped and the character opens it, the trap will be set off. This command can be counted, because the locked object may require several tries to open.

p

Read a prayer.

To pray effectively, a character must have learned the prayer, and must also have in the inventory a holy book from which the prayer may be read. Each prayer has a chance of being ignored which starts out fairly large but decreases as a character gains levels. If a character does not have enough mana, the chance of failure is greatly increased, and gambles on losing a point of constitution. The player will be prompted for confirmation before trying to pray when there is insufficient mana. Since a character must read the prayer from a book, they cannot be blind or confused when praying, and there must be some light present.

q

Quaff a potion.

To drink a potion use the Quaff command. A potion affects the character in some manner. The effects of the potion may be immediately noticed, or they may be subtle and unnoticed.

r

Read a scroll.

To read a scroll use the Read command. Most scroll spells either affect the player or the area around the character; a few cases such as identify scrolls act on other objects. Two scrolls, the identify scroll and the recharge scroll, have titles which can be read without setting them off, and by pressing ESCAPE can be saved for future use.

s

Search general area one turn.

The Search command can be used to locate hidden traps and secret doors about the character. More than a single turn of searching will be required in most cases. The character should always search a chest before trying to open it because they are generally trapped. This command can be counted, and the counted search ends as soon as anything is found.

t (T)

Take off a piece of equipment.

Use the Take Off command to remove an object from use, and return it to the character's pack, or inventory. Occasionally the character will have a cursed item which cannot be removed. Cursed items are always bad, and can only be taken off after removing the curse.

u (Z)

Use/Zap a staff.

The Use command will activate a staff. Like scrolls, most staves have an area effect. Because staves are generally more powerful than most other items, they are also harder to use correctly.

v

Display current version of game.

The Version command displays the credits for the current version of *mor*ia.

w

Wear or wield an item being carried.

To wear or wield an object in the character's inventory, use the Wear/Wield command. If another object is already in use for the same function, it is automatically removed first; if the character is wearing two rings, the player is given a choice of which one to remove. An object's bonuses cannot be gained until it is worn or wielded.

x (X)

Exchange primary and secondary weapons.

A secondary weapon is any weapon which may be needed often. Instead of searching through the inventory, the character may use the exchange command to keep the weapon ready (e.g. slung over the character's back). For instance, if the bow was going to be used primarily, but needed a sword for close combat, the character could wield the sword, use the exchange command to make it the secondary weapon, then wield the bow. If the sword was suddenly needed, simply use the exchange command to switch between the bow and the sword.

/

Identify a character shown on screen.

Use the identify command to find out what a symbol displayed on the screen stands for. For instance, by pressing / ., the player can find out that the . stands for a floor spot, or tile. When used with a creature, the identify command will only tell what class of creature the symbol stands for, not the specific creature; therefore, use the look command for this information.

When identifying a symbol for a creature in the character's monster memory, the player has the option to view a paragraph of information on those creatures identified by the given character. Several creatures may be identified in this way. Typing ESCAPE after the paragraph for any creature will abort back to command level. See also the section on being attacked.

?

Display a list of commands.

The ? command displays a quick reference help page on the screen.

-

Move without pickup.

This is followed by a move command, and causes the character to move over an object without automatically picking it up. This command can be counted.

=

Set options.

This is a free move, to set various game options in *moria*. The available options are:

1. Cut known corners when running. This is on by default, and the only reason for switching it off would be if the character had the search mode on and wished to look for secret doors in the extremity of every corner.
2. Examine potential corners when running. This is on by default, and allows the character to run along an unknown curving corridor. If however, the character is running from a creature, the player may wish to switch this option off, because the creature will cut the corner.
3. Display self during a run. This is off by default, which gives faster screen updating.
4. Stop when map sector changes. This is off by default, but can be switched on to stop running whenever a new part of the dungeon appears in view.
5. Treat open doors as empty space while running. This is off by default, in which case the character stops whenever they run up to an open door.
6. Prompt to pick up objects. This is off by default, in which case stepping over an object automatically causes the character to pick it up. With the option on, the player gets prompted in all such cases with a description of the object to see if it should be put into the character's pack.
7. Rogue-like command set. This option controls the command set in use. It is off by default.
8. Show weights in inventory. This is off by default: switching it on causes the inventory and equipment listings to include the weight of all objects. This may be useful to know if the character's pack is getting too heavy.
9. Highlight and notice mineral seams. This is off by default. Switching it on causes quartz and magma to be displayed as % instead of #; also, it causes the look command to treat them as interesting objects. This is handy when mining. Setting this option does not immediately highlight all minerals, but only those which are subsequently displayed. To display all minerals, just move the map around a bit with the 'Where' (or 'Locate') command.
10. Beep for invalid character. This is on by default. When this option is on, the program will beep for most invalid characters, such as trying to choose a spell that hasn't been learned yet. When off, there are no such beeps.
11. Display rest/repeat counts. This is on by default. When on, the program will progressively display the remaining turns left while resting, and for repeated commands. For those trying to play over a very slow connection, or for those playing on very slow computers, turning this off will make resting and repeated commands work much faster.
12. Disable haggling. This is off by default. When on, all haggling will be disabled at the cost of a 10 percent tax on the final price on items you would otherwise have had to haggle for, and all prices displayed in the stores will be the actual prices you have to pay.

The setting of all these options persist in the savefile, even after the character dies.

^P

Previous message.

The Control-P command will redisplay the last message displayed on the message line at the top of the screen. A second such command will display all of the saved messages. This command can be given a count to specify the number of previous messages to display. At present, only 22 messages are saved.

^K (^Q)

Kill the character.

To exit the game without saving the character (i.e. killing the character) use the Control-K command. Once exited in this manner, the character is nonrecoverable.

^X

Save the character and exit the game.

To save the game so that it can be restarted later, use the Control-X command. Save files will also be generated if the game crashes due to a system error. When the character dies, a reduced savefile is produced containing only the monster memory, and the option settings.

{

Inscribe an object.

This command can be used to inscribe any short string on an object. Inscriptions are limited to twelve characters. The inscription applies only to the particular object, it is not automatically transferred to all similar objects. Under certain circumstances, *moria* will itself inscribe objects: if they have been discovered to be cursed or enchanted, or if they have been sampled without being identified. In this last case, *moria* does in fact carefully inscribe every such item.

If the inscription on an item is a single digit, that digit can be used to refer to it when using, wearing, or wielding an item from inside the pack. For example, if a shovel is kept in the pack with the inscription 1, you can switch to the shovel by wielding item 1 without checking the full inventory list to find out which item the shovel is.

!

Shell out of game.

Use the Shell command ! to temporarily exit the game to execute UNIX or DOS commands. The game can be reentered by typing exit to end the spawned process.

<

Go up an up staircase.

If the character moves onto an up staircase the < command will take the character to go up one level (e.g. one level of dungeon depth). There is always one staircase going up on every level except for the town level (this does not mean it's easy to find). Going up a staircase will always take the character to

a new dungeon area except for the town level, which remains the same for the duration of the current character's game.

>

Go down a down staircase.

If the character is on top of a down staircase the > command may be used to go down one level of dungeon depth. There are always two or three staircases going down on each level, except the town level which has only one. Going down will always take the character to a new dungeon area.

. <Dir> (shift <Dir>)

Move in direction.

The Run command will move the character in the indicated direction until either a choice needs to be made between two directions, or something interesting happens. There are options which determine behavior at corners, and at screen boundaries. More precisely, the conditions which stop a run are as follows:

1. A creature appears on the screen, one already on the screen moves, or a creature attacks or casts a spell at the character.
2. The character moves next to an object, or a feature such as a door or trap.
3. The character comes to the end of open space, or the end of a passage, or a junction of passages, or a hole in a wall.
4. Anything typed during a run causes the run to stop. The keyboard key causing this to occur is ignored. It is best to use a space, which is ignored as a command, just in case the run stops just before the key is pressed.
5. Various changes of state, such as recovery from fear or loss of heroism, will stop a run.

Corners are more complex. A corner allows a choice between adjacent rectangular and diagonal directions. If the character can see walls which ensure that the diagonal gives a faster traversal, then action is determined by the "cut corners" options. If it is set, then the character moves diagonally through the corner. This gives maximum speed (as is nice when fleeing a hidden creature). On the other hand, this option should not be set if more careful coverage is desired (as when searching) so that the character take two moves through the corner.

At a potential corner, where walls are not yet visible ahead of the rectangular direction, the "examine corners" option is considered. If set, the character will move straight into the corner, which will light up all the corner and so determine where to go from there. This allows the character to follow corners in new passages. If the option is not set, the character stops. This allows highly cautious running where the character stops at all potential choice points.

If the character moves off the screen while running, then a new section of the dungeon is displayed and the run continues. However, if the "stop when map changes" option is set, the character will stop. Again, this is an option for nervous players; after all, there may be a dragon on the new screen, and running into a dragon can be bad for the character's health.

7 The Town Level

The town level is where the character will begin the adventure. The town consists of six buildings, each with an entrance, some townspeople, and a wall which surrounds the town. At the start of the game it will be daytime in the town, but later on the character may return to find that darkness has fallen. (Note that some spells may act differently in the town level.)

7.1 Townspeople

The town contains many different kinds of people. There are the street urchins, young children who will mob an adventurer for money, and seem to come out of the woodwork when excited. Blubbering Idiots are a constant annoyance, but not harmful. Public drunks wander about the town singing, and are of no threat to anyone. Sneaky rogues hang about watching for a likely victim to mug. And finally, what town would be complete without a swarm of half-drunk warriors, who take offense or become annoyed just for the fun of it.

Most of the townspeople should be avoided by the largest possible distance when wandering from store to store. Fights will break out though, so be prepared. Since the character grew up in this world of intrigue, no experience is awarded for killing on the town level.

7.2 Supplies

The character will begin the adventure with some supplies already in the backpack. Use the Inventory `i` command to check what these supplies are. It will be necessary to buy other supplies before continuing into the dungeon, however, so be sure to enter each of the stores.

7.3 Town Buildings

The character may enter any of the stores, if they are open, and barter with the owner for items that can be afforded. When bartering, the player enters prices you will pay (or accept) for some object. An absolute amount can be entered, or an amount preceded with a plus or minus sign to give a positive or negative increment on the previous offer. When an increment has been previously given, pressing RETURN will use the previous increment. But be warned that the owners can easily be insulted, and may even throw the character out for a while if you insult them too often. To enter a store, simply move onto the entrance represented by the numbers 1 through 6.

If the character consistently bargains well in a store, that is, you reach the final offer much more often than not, then the store owner will eventually recognize that the character is a superb haggler, and will go directly to the final offer instead of haggling with you. Items which cost less than 10 gold pieces do not count, as haggling well with these items is usually either very easy or almost impossible.

Once inside a store, the store inventory will appear on the screen along with a set of options for the character. The store's inventory can be browsed if there is more than one page to display. Items can be sold to, or purchased from the character's backpack. Regular inventory and equipment commands can be executed in a store. Although the wear, take off, and exchange commands do not appear in the options, they will still work, but were excluded to keep the options simple.

Stores do not always have everything in stock. As the game progresses, they may get new items, so check from time to time. Also, if you sell them an item, it may get sold to a customer while you are adventuring, so don't always expect to be able to get back everything you have sold.

Store owners will not buy harmful or useless items. If an object is unidentified, they will pay some base price for it. Once they have bought it they will immediately identify the object. If it is a good object, they will add it to their inventory. If it was a bad bargain, they simply throw the item away. In any case, the player may receive some knowledge of the item if another is encountered.

The General Store

The General Store sells foods, drinks, some clothing, torches, lamps, oil, shovels, picks, and spikes. All of these items, and some others, can be sold back to the General store for money. The entrance to the General Store is a 1.

The Armory

The Armory is where the town's armor is fashioned. All sorts of protective gear may be bought and sold here. The entrance to the Armory is a 2.

The Weaponsmith's Shop

The Weaponsmith's Shop is where the town's weapons are fashioned. Hand and missile weapons may be purchased and sold here, along with arrows, bolts, and shots. The entrance to the Weaponsmith's is a 3.

The Temple

The Temple deals in healing and restoration potions, as well as bless scrolls, word of recall scrolls, some approved priestly weapons, etc. The entrance to the Temple is a 4.

The Alchemy Shop

The Alchemy Shop deals in all manner of potions and scrolls. The entrance to the Alchemy Shop is a 5.

The Magic User's Shop

The Magic User's Shop is the most expensive of all the stores. It deals in all sorts of rings, wands, amulets, and staves. The entrance to the Magic Shop is a 6.

8 Within The Dungeon

Once the character is adequately supplied with food, light, armor, and weapons, it is time to enter the dungeon. Move on top of the > symbol and use the down > command. The character enters a maze of interconnecting staircases and finally passes through a one-way door. The character is now on the first level of the dungeon (50 feet), and must survive many horrible and challenging encounters to find the treasure lying about.

There are two sources for light once inside the dungeon: permanent light which has been magically placed within rooms, and a light source carried by the character. If neither is present, the character will be unable to map or see any attackers. Lack of light will also affect searching, picking locks, disarming, and casting spells.

A character must wield a torch or lamp in order to supply their own light. Once a torch or lamp has only 50 or less turns left before burning out, the message "**Your light is growing faint**" will be displayed at random intervals. Once a torch is burnt out, it is useless and can be dropped. A lamp or lantern can be refilled with oil by using the Fill F command, however the character must be carrying extra oil to refill a lantern.

9 Attacking and Being Attacked

Attacking is simple in *moria*. When moving into a creature, the character attacks it. The character can attack from a distance by firing a missile, or by magical means such as aiming a wand. Creatures attack in the same way; if they move into the character, they attack. Some creatures can also cast spells from a distance, and others can breathe fire or worse from a distance.

Creatures moving in walls cannot be attacked by wands and other magic attacks normally stopped by walls. The character can attack a creature in a wall normally though by trying to move into the wall space containing the creature. However, in order to attack an invisible creature in a wall, the character must tunnel into the wall containing the creature. Trying to move into the wall will bump the character's head, and they will look quite silly.

If the character is wielding a weapon, the damage for the weapon is used when a creature is hit. Otherwise, the character gets two fist strikes. Very strong creatures can do a lot of damage with their fists... The character may have a primary weapon, and a secondary weapon which is kept on the belt or shoulder for immediate use. Weapons can be switched with the exchange command. Be sure to wield the proper weapon when fighting. Hitting a dragon over the head with a bow will simply make it mad, and get the character killed.

Missile weapons, such as bows, can be wielded, and then the proper missile, in this case an arrow, can be fired across the room into a target. Missiles can be used without the proper missile weapon, but used together they have a greater range and do far more damage.

Hits and misses are determined by ability to hit versus armor class. A hit is a strike that does some damage; a miss may in fact reach a target, but fails to do any damage. Higher armor classes make it harder to do damage, and so lead to more misses.

9.1 Monster Memories

There are hundreds of different creatures in the mines of *moria*, many of which look the same on the screen. The exact species of a creature can be discovered by looking at it. It is also very difficult to keep track of the capabilities of various creatures. Rather than forcing the player to keep notes, *moria* automatically keeps track of prior experiences with a particular creature. This is called the *monster memory*. The monster memory recalls the particular attacks of each creature which the character has suffered, as well as recalling if the character has observed them to multiply or move erratically, or drop treasure, or many other attributes.

If the character has killed enough of a particular creature, or suffered enough attacks, recalling the monster memory may also provide information not otherwise available, such as a armor class or hit dice. These are not explained, but may be useful to give the relative danger of each creature. This memory can be passed on to a new character even after the character dies, by means of a reduced savefile.

9.2 The Character's Weapon

Carrying a weapon in a backpack doesn't do much good. The character must wield a weapon before it can be used in a fight. A secondary weapon can be kept by wielding it and then using the exchange command. A secondary weapon is not in use, simply ready to be switched with the current weapon if needed.

Weapons have two main characteristics, their ability to hit and their ability to do damage, expressed as (+#,+#). A normal weapon would be (+0,+0). Many weapons in *moria* have magical bonuses to hit and/or do damage. Some weapons are cursed, and have penalties that hurt the character. Cursed weapons cannot be taken off until the curse is lifted.

Moria assumes that the youth of the character spent in the rough environment near the dungeons has taught the relative merits of different weapons, and displays as part of their description the damage dice which define their capabilities. The ability to damage is added to the dice roll for that weapon. The dice used for a given weapon is displayed as #d#. The first number indicates how many dice to roll, and the second indicates how many sides they have. A "2d6" weapon will give damage from 2 to 12, plus any damage bonus. The weight of a weapon is also a consideration. Heavy weapons may hit harder, but they are also harder to use. Depending on the strength stat and the weight of the weapon, the character may get several hits in a single turn.

Missile booster weapons, such as bows, have their characteristics added to those of the missile used, if the proper weapon/missile combination is used. Also, these weapons will multiply the base damage of the missile by a number from 2 to 4, depending on the strength of the weapon. This multiplier is displayed as (x#).

Although the character receives any magical bonuses an unidentified weapon may possess when you wield it, those bonuses will not be added in to the displayed values of to-hit and to-dam on the character sheet. Weapons must be identified before the displayed values reflect the real values used.

Finally, some rare weapons have special abilities. These are called ego weapons, and are feared by great and meek. An ego sword must be wielded to receive benefit of its abilities.

Special weapons are denoted by the following abbreviations:

DF

Defender.

A magical weapon that helps wielders defend themselves, thus increasing their armor class, and protecting them against damage from fire, frost, acid, lightning, and falls. This weapon also will increase stealth, let the character see invisible creatures, protect from paralyzation attacks, and help regenerate hit-points and mana faster. As a result of the regeneration ability, the character will use up food faster than normal while wielding such a weapon.

FB

Frost Brand.

A magical weapon of ice that delivers a cold critical to heat-based creatures. It will inflict one and a half times the normal damage when used against a heat-based creature.

FT

Flame Tongue.

A magical weapon of flame that delivers a heat critical to cold-based creatures. It will inflict one and a half times the normal damage when used against cold-based or inflammable creatures.

HA**Holy Avenger.**

A Holy Avenger is one of the most powerful of weapons. A Holy Avenger will increase the strength and the armor class of the wielder. This weapon will do extra damage when used against evil and undead creatures, and will also give the ability to see invisible creatures.

SA**Slay Animal.**

A Slay Animal weapon is a special-purpose weapon whose sole intent is to destroy all the dangerous animals in the world. An animal is any creature natural to the world. Therefore an orc would not be an animal, but a giant snake would be. This will inflict twice the normal amount of damage when used against an animal.

SD**Slay Dragon.**

A Slay Dragon weapon is a special-purpose weapon whose sole intent is to destroy dragon-kind. Therefore, when used against a dragon, the amount of damage done is four times the normal amount.

SE**Slay Evil.**

A Slay Evil weapon is a special-purpose weapon whose sole intent is to destroy all forms of evil. When used against an evil creature, either alive or undead, the damage done twice the normal amount.

SU**Slay Undead.**

A Slay Undead weapon is a special-purpose weapon whose sole intent is to destroy all forms of undead. This weapon is hated and feared by the intelligent undead, for a single blow from this weapon will inflict three times the normal amount of damage. This weapon also gives the ability to see invisible creatures, which is especially useful against undead, since many of them are normally invisible.

9.3 Body and Shield Bashes

Weight is the primary factor in being able to bash something, but strength plays a role too. After bashing, a character may be off-balance for several rounds depending upon the dexterity stat.

Doors can be broken down by bashing them. Once a door is bashed open, it is forever useless and cannot be closed.

Chests too may be bashed open, but be warned that the careless smashing of a chest often ruins the contents. Bashing open a chest will not disarm any traps it may contain, but does allow the strong and ignorant to see what is inside.

Finally, a creature may be bashed. If a shield is currently being worn, the bash is a shield bash and will do more damage. In either case, a bash may throw an opponent off-balance

for a number of rounds, allowing the character to get in a free hit or more. If the character is thrown off-balance, the opponent may get free hits. This is a risky attack.

9.4 The Character's Armor Class

Armor class is a number that describes the amount and the quality of armor being worn. Armor class will generally run from about 0 to 60, but could become negative or greater than 60 in rare cases.

The larger the armor class, the more protective it is. A negative armor class would actually help the character get hit. Armor protects in three manners. One, it makes the character harder to be hit for damage. A hit for no damage is the same as a miss. Two, good armor will absorb some of the damage that the character would have taken. An armor class of 30 absorbs 15% of damage. Three, acid damage is reduced by wearing body armor. It is obvious that a high armor class is a must for surviving the lower levels of *moria*.

Each piece of armor has an armor class adjustment, and a magical bonus. Armor bought in town will have these values displayed with its description. Armor that is found within the dungeon must be identified before these values will be displayed. All armor always has the base armor class displayed, to which the bonus is added. It is always possible to figure this out anyway, by watching the effect it has on the displayed armor class.

Armor class values are always displayed between a set of brackets as [#] or [#,#]. The first value is the armor class of the item. The second number is the magical bonus of the item which is only displayed if known, and will always have a sign preceding the value. There are a few cases where the form [+ #] is used, meaning the object has no armor class, only a magical armor bonus if worn. Body armor may also have a (-#) displayed in parentheses; this is a penalty to hit, because the bulk of the armor makes it more difficult to swing a weapon freely.

Some pieces of armor will possess special abilities denoted by the following abbreviations:

RA

Resist Acid.

A character using such an object will take only one-third normal damage from any acid thrown upon them. In addition, armor so enchanted will resist the acid's effects and not be damaged by it.

RC

Resist Cold.

A character using a resist cold object will take only one-third damage from frost and cold.

RF

Resist Fire.

A character using a resist fire object will take only one-third damage from heat and fire.

RL

Resist Lightning.

A character using a resist lightning object will take only one-third damage from electrical attacks.

R**Resistance.**

A character wearing armor with this ability will have resistance to Acid, Cold, Fire, and Lightning as explained in each part above.

9.5 Crowns

Some crowns also have special magical abilities that improve chances in a battle.

Crown of Might

This is the great crown of the warriors. This crown confers an increased strength, dexterity, and constitution, and the wearer will also be immune to any foe's attempt to slow or paralyze him or her.

Crown of the Magi

This is the great crown of the wizards. The wearer will have an increased intelligence, and will also be given resistance against fire, frost, acid, and lightning.

Crown of Lordliness

This is the great crown of the priests. The wearer will have an increased wisdom and charisma.

Crown of Seeing

This is the great crown of the rogues. The wearer will be able to see even invisible creatures, and will have an increased ability to locate traps and secret doors.

Crown of Regeneration

This crown will help you regenerate hit-points and mana more quickly than normal, allowing the character to fight longer before needing to rest. The character will use food faster than normal while wearing this crown because of the regenerative effects.

Crown of Beauty

This crown looks impressive, and will increase charisma, but is otherwise not useful.

9.6 Magic Spells

All characters except warriors are able to learn some form of magic spells. There are two kinds of magic, magic spells, which mages, rogues, and rangers get, and prayers, which priests and paladins have. Each spell has a minimum level required for learning it, a mana score, which is the mana points required to cast it, and a failure percentage.

Mana points are determined by the character's experience level, and the level of a key stat. For mages, rogues, and rangers, the key stat is intelligence, for priests and paladins the key stat is wisdom. The effect of the key stat is shown by the following table.

Stat Level	Factor
3-7	0
8-17	1
18-18/49	3/2
18/50-18/69	2
18/70-18/89	5/2
18/90-18/99	3
18/100	4

The mana score is the factor times the experience level plus 1. If the key stat is 7 or less, the mana score will be zero (not one) and the character will not be able to use any spells. When attempting to cast a spell that calls for more mana than the character has, the rate of failure is much greater than normal. The character will faint for a few turns afterward, and there is a chance at damaging health too.

9.6.1 Priest Spells

Priest spells are received from the character's deity. When the **G** command is issued to learn new spells, spells are chosen randomly from the spells that the character is able to cast. The character need not have the book the spell is in to learn it, because the god gave it to the character, but the book is needed to cast the spell. Failure percentages and spell effectiveness are based on wisdom for priests and paladins.

9.6.1.1 Priest Spell Levels And Mana

This is a table of all the spells, with the mana and level of achievement for Priests and Paladins.

(Beginner's Handbook)	Priest		Paladin	
	Lv	Mana	Lv	Mana
A Detect Evil	1	1	1	1
B Cure Light Wounds	1	2	2	2
C Bless	1	2	3	3
D Remove Fear	1	2	5	3
E Call Light	3	2	5	4
F Find Traps	3	3	7	5
G Detect Doors/Stairs	3	3	7	5
H Slow Poison	3	3	9	7
(Words of Wisdom)				
A Blind Creature	5	4	9	7
B Portal	5	4	9	8
C Cure Medium Wounds	5	4	11	9
D Chant	5	5	11	10
E Sanctuary	7	5	11	10
F Create Food	7	5	13	10
G Remove Curse	7	6	13	11
H Resist Heat and Cold	7	7	15	13

(Chants and Blessings)

A	Neutralize Poison	9	6	15	15
B	Orb of Draining	9	7	17	15
C	Cure Serious Wounds	9	7	17	15
D	Sense Invisible	11	8	19	15
E	Protection from Evil	11	8	19	15
F	Earthquake	11	9	21	17
G	Sense Surroundings	13	10	23	17
H	Cure Critical Wounds	13	11	25	20
I	Turn Undead	15	12	27	21

(Exorcisms and Dispellings)

A	Prayer	15	14	29	22
B	Dispel Undead	17	14	31	24
C	Heal	21	16	33	28
D	Dispel Evil	25	20	35	32
E	Resist Poison Gas	31	45	--	--
F	Glyph of Warding	33	24	37	36
G	Holy Word	39	32	39	38

9.6.1.2 Priest Spell Descriptions

This is a short description of each of the spells, listed alphabetically.

‘Bless’ Improves armor class and fighting ability for a short period of time.

‘Blind Creature’
Blinds a creature for a short period of time.

‘Call Light’
Lights up an area.

‘Chant’ Improves armor class and fighting ability for a medium period of time.

‘Create Food’
Causes a food item to be dropped at the character’s feet.

‘Cure Critical Wounds’
Cures a very large number of hit-points.

‘Cure Light Wounds’
Cures a small number of hit-points.

‘Cure Medium Wounds’
Cures a medium number of hit-points.

‘Cure Serious Wounds’
Cures a large number of hit-points.

‘Detect Doors/Stairs’
Finds all the doors and stairs on the screen.

‘Detect Evil’
Finds all the evil creatures on the screen.

- 'Dispel Evil'
Attempts to destroy the evil creature.
- 'Dispel Undead'
Attempts to destroy the undead creature.
- 'Earthquake'
Randomly toggles corridors into walls and vice versa.
- 'Find Traps'
Locates all the traps on the screen.
- 'Glyph of Warding'
Leaves a 'Glyph' that monsters won't pass over.
- 'Heal'
Restores 200 Hit Points.
- 'Holy Word'
Dispels evil, removes fear, cures poison, restores 1000 hit-points, restores all stats, and invulnerability for 3 turns.
- 'Neutralize Poison'
Cures you of poison.
- 'Orb of Draining'
Offensive spell that drains levels from monsters.
- 'Portal'
Teleports the character a short distance away.
- 'Prayer'
Improves armor class and fighting ability for a long period of time.
- 'Protection from Evil'
Causes evil creatures to do less damage.
- 'Remove Curse'
Removes {damned} objects that you are wielding.
- 'Remove Fear'
Negates the fear placed on the character by an enemy.
- 'Resist Heat and Cold'
Reduce damage from heat or cold attacks.
- 'Resist Poison Gas'
Permanently reduces damage from poison gas attacks.
- 'Sanctuary'
Causes neighboring monsters to fall asleep for a while.
- 'Sense Invisible'
Finds all invisible creatures on the screen.
- 'Sense Surroundings'
Maps the dungeon appearing on the screen.
- 'Slow Poison'
Reduces the rate hit-points are lost due to poison.
- 'Turn Undead'
Attempts to cause undead creatures to flee.

9.6.2 Mage Spells

Mage Spells are more powerful and offensive in nature than priest spells. This offsets the fact that magicians are generally weaker than any other class. Because mage spells are learned through study, the correct magic book must be present in the character's pack to learn and cast a spell. Learning spells can be banked up. For example: a second level mage who had learned Magic Missile and can learn one more spell. If the mage does not wish to learn Detect Monsters, Phase Door or Light Area, the mage can wait until the third level and learn both the Cure Light Wounds and Stinking Cloud, both third level spells. Spell failure and effectiveness is based on intelligence for mages, rangers, and rogues. Rangers can learn all but the most powerful offensive spell. Rogues cannot learn any offensive spell.

9.6.2.1 Mage Spell Levels And Mana

	Mage		Ranger		Rogue	
(Beginners-Magik)	Lv	Mana	Lv	Mana	Lv	Mana
A Magic Missile	1	1	3	1	--	--
B Detect Monsters	1	1	3	2	5	1
C Phase Door	1	2	3	2	7	2
D Light Area	1	2	5	3	9	3
E Cure Light Wounds	3	3	5	3	11	4
F Find Hidden Traps/Doors	3	3	5	4	13	5
G Stinking Cloud	3	3	7	5	--	--
 (Magik I)						
A Confusion	3	4	7	6	15	6
B Lightning Bolt	5	4	9	7	--	--
C Trap/Door Destruction	5	5	9	8	17	7
D Sleep I	5	5	11	8	19	8
E Cure Poison	5	5	11	9	21	9
F Teleport Self	7	6	13	10	--	--
G Remove Curse	7	6	13	11	23	10
H Frost Bolt	7	6	15	12	--	--
I Turn Stone to Mud	9	7	15	13	--	--
 (Magik II)						
A Create Food	9	7	17	17	25	12
B Recharge Item I	9	7	17	17	27	15
C Sleep II	9	7	21	17	--	--
D Polymorph Other	11	7	21	19	--	--
E Identify	11	7	23	25	29	18
F Sleep III	13	7	23	20	--	--
G Fire Bolt	15	9	25	20	--	--
H Slow Monster	17	9	25	21	--	--

(Mages Guide to Power)							
A	Frost Ball	19	12	27	21	--	--
B	Recharge Item II	21	12	29	23	--	--
C	Teleport Other	23	12	31	25	--	--
D	Haste Self	25	12	33	25	--	--
E	Fire Ball	29	18	35	25	--	--
F	Resist Poison Gas	31	45	--	--	--	--
G	Word of Destruction	33	21	37	30	--	--
H	Genocide	37	25	--	--	--	--

Note: Rangers don't get spells until 3rd level, Rogues 5th level.

9.6.2.2 Mage Spell Descriptions

'Confusion'

Confuses a monster for a short time.

'Create Food'

Causes a food item to be dropped at the character's feet.

'Cure Light Wounds'

Restores a small number of hit-points.

'Cure Poison'

Neutralizes the poison running through the character's veins.

'Detect Monsters'

Displays all the monsters on the screen.

'Find Hidden Traps/Doors'

Locates all the secret traps and doors.

'Fire Ball'

Shoots a ball of flame toward a monster.

'Fire Bolt'

Shoots a bolt of flame toward a monster.

'Frost Ball'

Shoots a ball of frost toward a monster.

'Frost Bolt'

Shoots a bolt of frost toward a monster.

'Genocide'

Destroys a particular monster on the level.

'Haste Self'

Causes the character to move faster temporarily.

'Identify'

Identifies an unknown object in the pack.

'Light Area'

Illuminates the area with light.

- 'Lightning Bolt'
Shoots a bolt of lightning at the enemy.
- 'Magic Missile'
Traditional bolt of magic used to damage enemies.
- 'Phase Door'
Teleports the character a short distance.
- 'Polymorph Other'
Polymorphs a monster into a different creature.
- 'Recharge Item I and II'
Recharges a staff, rod, or wand.
- 'Remove Curse'
Allows {damned} items to be taken off.
- 'Resist Poison Gas'
Permanently reduces damage from poison gas attacks.
- 'Sleep I' Causes a specified monster to fall asleep.
- 'Sleep II' Causes neighboring monsters to fall asleep.
- 'Sleep III'
Causes all monsters in range to fall asleep.
- 'Slow Monster'
Causes a monster to move slower.
- 'Stinking Cloud'
Shoots a ball of noxious vapors to do damage.
- 'Teleport Self'
Teleports the character to a new place on the level.
- 'Teleport Other'
Teleports an enemy to a new place on the level.
- 'Trap/Door Destruction'
Destroys all neighboring doors and traps.
- 'Turn Stone to Mud'
Causes a wall (or other stone object) to melt.
- 'Word of Destruction'
Destroys the entire screen.

For spells that come in numbered versions (Sleep I, II, III, etc), the higher numbers have a higher effectiveness, but greater change of spell failure and greater Mana cost.

9.6.3 Using Offensive Spells Against Monsters

Monsters have a chance to save themselves from damage caused by offensive spells, just like the character has a chance to be saved from damage by monster spells. This chance is greater for higher level monsters than for lower level monsters. Also, some spells will never work against monsters whose level is higher than the character's experience level.

Many monsters are immune to certain kinds of attack, and will suffer little or no damage from such attacks. For example, a fire-breathing dragon will suffer little damage from a fire ball, but will suffer greatly from a frost ball. Also, undead creatures will not be affected by sleep spells, since they never sleep.

10 Objects Found In The Dungeon

The mines are full of objects just waiting to be picked up and used. How did they get there? Well, the main source for useful items are all the foolish adventurers that proceeded into the dungeon beforehand. They get killed, and the helpful creatures scatter the various treasure throughout the dungeon. Most cursed items are placed there by the joyful evil sorcerers, who enjoy a good joke when it gets someone killed.

The character picks up objects by moving on top of them. Up to 22 different items can be carried in the backpack while wearing and wielding many others. Although limited to 22 different items, several items of each kind can be carried, restricted only by the amount of weight the character can carry. The weight limit is determined by the strength stat. Only one object may occupy a given floor location, which may or may not also contain one creature. Doors, traps, and staircases are considered objects for this purpose.

When carrying more weight than the character is able, they will move more slowly than normal until the extra weight is dropped. If picking up an object would take the character over their weight limit, then the player will be asked whether or not the object should be picked up. It is a good idea to leave the object alone when fleeing from a monster.

Many objects found within the dungeon have special commands for their use. Wands must be Aimed, staves must be Used, scrolls must be Read, and potions must be Quaffed. In any case, the character must first be able to carry an object before it can be used. Some objects, such as chests, are very complex. Chests contain other objects and may be trapped, and/or locked. Read the list of commands carefully for a further understanding of chests.

One item in particular will be discussed here. The scroll of "Word-of-Recall" can be found within the dungeon, or bought at the temple in town. It acts in two manners, depending upon the character's location. If read within the dungeon, it will teleport the character back to town. If read in town, it will teleport the character back down to the deepest level of the dungeon on which the character has previously been. This makes the scroll very useful for getting back to the deeper levels of *morja*. Once the scroll has been read, it takes a while for the spell to act, so don't expect it to save the character in a crisis.

The game provides some automatic inscriptions to help keep track of possessions. Wands and staves which are known to be empty will be inscribed with "empty". Objects which have been tried at least once, but haven't been identified yet will be inscribed with "tried". Cursed objects are inscribed with "damned". Also, occasionally the character will notice that something in the pack or equipment list seems to be magical. High level characters are much more likely to notice this than beginning characters. When the character does notice this, the item in question will be inscribed with "magik".

And lastly, a final warning: not all objects are what they seem. Skeletons lying peacefully about the dungeon have been known to get up...

10.1 Cursed Objects

Some objects, mainly armor and weapons, have had curses laid upon them. These horrible objects will look like any other normal item, but will detract from the character's stats or abilities if worn. They will also be impossible to remove until a remove curse is done.

When a cursed item is worn or wielded, the character will immediately feel that something has gone wrong. The item will also be inscribed "damned".

10.2 Mining

Much of the treasure within the dungeon can be found only by mining it out of the walls. Many rich strikes exist within each level, but must be found and mined. Quartz veins are the richest, yielding the most metals and gems, but magma veins will have some hordes hidden within.

Mining is virtually impossible without a pick or shovel. Picks and shovels have an additional magical ability expressed as (+#). The higher the number, the better the magical digging ability of the tool. A pick or shovel also has pluses to hit and damage, and can be used as a weapon.

When a vein of quartz or magma is located, the character should wield a pick or shovel and begin digging out a section. When that section is removed, another section of the vein can be located, and begin the process again. Since granite rock is much harder to dig through, it is much faster to follow the vein exactly and dig around the granite. There is a game option for highlighting magma and quartz.

If the character has a scroll or staff of treasure location, all strikes of treasure within a vein can be immediately shown on the screen. This makes mining much easier and more profitable.

It is sometimes possible to get a character trapped within the dungeon by using various magical spells and items. So it is a very good idea to always carry some kind of digging tool, even when tunneling for treasure is not a goal.

10.3 Staircases, Secret Doors, Passages and Rooms

Staircases are the manner in which the character gets deeper, or climbs out of the dungeon. The symbols for the up and down staircases are the same as the commands to use them. A < represents an up staircase and a > represents a down staircase. The character must move on top of the staircase before they can be used.

Each level has at least one up staircase, and at least two down staircases. There are no exceptions to this rule. The character may have trouble finding some well hidden secret doors, but the stairs are there.

Many secret doors are used within the dungeon to confuse and demoralize adventurers foolish enough to enter. But with some luck, and lots of concentration, these secret doors can be found. Secret doors will sometimes hide rooms or corridors, or even entire sections of that level of the dungeon. Sometimes they simply hide small empty closets or even dead ends.

Creatures in the dungeon will generally know and use these secret doors. If they leave one open, the character will be able to go right through it. If they close it behind them the character will have to search for the catch first. Once a secret door has been discovered, it is drawn as a known door and no more searching will be required to use it.

11 Winning The Game

Once the character has progressed into killing dragons with but a mean glance and snap of the fingers, they may be ready to take on the Balrog. The Balrog will appear on most levels after level 49 (a depth of 2450 feet), so don't go down there until the character is ready to take on the biggest and baddest creature in the game.

The Balrog cannot be killed in some of the easier methods used on normal creatures. The Balrog will cunningly teleport to another level if a spell such as destruction is cast. Also, the Balrog cannot be polymorphed, slept, confused or genocided. Magical spells like coldball are effective, as are weapons, but the Balrog is difficult to kill, and if allowed to escape to another level it can heal itself.

If the character should actually survive the attempt of killing the Balrog, they will receive the status of WINNER. Since the toughest creature alive has been defeated, the character is ready to retire and cannot be saved. When you quit the game, the character receives a surprise bonus score.

12 Upon Death and Dying

If the character falls below 0 hit-points, they have died and cannot be restored. A tombstone showing information about the character will be displayed. A record of the character will be provided, along with all of the equipment (identified) either on the screen or saved in a file.

The character will leave behind a reduced savefile, which contains only the monster memory and the game option choices. It may be restored, in which case the new character is generated exactly as if the file was not there, but the new character will find the monster memory containing all the experience of past incarnations.

13 Wizards

There are rumors of *morja* Wizards which, if asked nicely, can explain details of the *morja* game that seem complicated to beginners.

14 Contributors

The following people have contributed to *moria*:

- Robert Alan Koenke (Creator of Moria)
- Jimmey Wayne Todd
 - added character generator
 - added skills
 - added history
- James E. Wilson (Creator of Umoria 4.87)
 - ported moria from VMS to unix
- David J. Grabiner (Maintainer of Umoria 5.5.2)
 - many bug fixes
- Lars Hegelund
 - many bug fixes
- Ben Asselstine
 - changed build system to autoconf
 - added manual in texinfo format
- D. G. Kneller
 - reduced map display
 - 16 bit integers
- Christopher J. Stuart
 - recall
 - options
 - inventory
 - running code
- William Setzer
 - object naming code
- Dan Bernstein
 - UNIX hangup signal fix
 - many bug fixes
- Joseph Hall
 - line of sight code
- Brian Johnson
 - linux support [Ed note: GNU+Linux support]
- Eric Bazin
 - merge monster memories

15 A Word From The Authors

Here are some interesting correspondences that Robert Alan Koeneke and James E. Wilson have made on the internet.

15.1 The Early Days of Moria

Robert Alan Koeneke, posting on `rec.games.roguelike.*`, 21. February 1996

I had some email show up asking about the origin of Moria, and its relation to Rogue. So I thought I would just post some text on the early days of Moria.

First of all, yes, I really am the Robert Koeneke who wrote the first Moria. I had a lot of mail accusing me of pulling their leg and such. I just recently connected to Internet (yes, I work for a company in the dark ages where Internet is concerned) and was real surprised to find Moria in the news groups... Angband was an even bigger surprise, since I have never seen it. I probably spoke to its originator though... I have given permission to lots of people through the years to enhance, modify, or whatever as long as they freely distributed the results. I have always been a proponent of sharing games, not selling them.

Anyway...

Around 1980 or 81 I was enrolled in engineering courses at the University of Oklahoma. The engineering lab ran on a PDP 1170 under an early version of UNIX. I was always good at computers, so it was natural for me to get to know the system administrators. They invited me one night to stay and play some games, an early startrek game, The Colossal Cave Adventure (later just 'Adventure'), and late one night, a new dungeon game called 'Rogue'.

So yes, I was exposed to Rogue before Moria was even a gleam in my eye. In fact, Rogue was directly responsible for millions of hours of play time wasted on Moria and its descendants...

Soon after playing Rogue (and man, was I HOOKED), I got a job in a different department as a student assistant in computers. I worked on one of the early VAX 11/780's running VMS, and no games were available for it at that time. The engineering lab got a real geek of an administrator who thought the only purpose of a computer was WORK! Imagine... Soooo, no more games, and no more rogue!

This was intolerable! So I decided to write my own rogue game, Moria Beta 1.0. I had three languages available on my VMS system. Fortran IV, PASCAL V1.?, and BASIC. Since most of the game was string manipulation, I wrote the first attempt at Moria in VMS BASIC, and it looked a LOT like Rogue, at least what I could remember of it. Then I began getting ideas of how to improve it, how it should work differently, and I pretty much didn't touch it for about a year.

Around 1983, two things happened that caused Moria to be born in its recognizable form. I was engaged to be married, and the only cure for THAT is to work so hard you can't think about it; and I was enrolled for fall to take an operating systems class in PASCAL.

So, I investigated the new version of VMS PASCAL and found out it had a new feature. Variable length strings! Wow...

That summer I finished Moria 1.0 in VMS PASCAL. I learned more about data structures, optimization, and just plain programming that summer then in all of my years in school. I soon drew a crowd of devoted Moria players... All at OU.

I asked Jimmey Todd, a good friend of mine, to write a better character generator for the game, and so the skills and history were born. Jimmey helped out on many of the functions in the game as well. This would have been about Moria 2.0

In the following two years, I listened a lot to my players and kept making enhancements to the game to fix problems, to challenge them, and to keep them going. If anyone managed to win, I immediately found out how, and 'enhanced' the game to make it harder. I once vowed it was 'unbeatable', and a week later a friend of mine beat it! His character, 'Iggy', was placed into the game as 'The Evil Iggy', and immortalized... And of course, I went in and plugged up the trick he used to win...

Around 1985 I started sending out source to other universities. Just before a OU / Texas football clash, I was asked to send a copy to the University of Texas... I couldn't resist... I modified it so that the beggar on the town level was 'An OU football fan' and they moved at maximum rate. They also multiplied at maximum rate... So the first step you took and woke one up, it crossed the floor increasing to hundreds of them and pounded you into oblivion... I soon received a call and provided instructions on how to 'de-enhance' the game!

Around 1986 - 87 I released Moria 4.7, my last official release. I was working on a Moria 5.0 when I left OU to go to work for American Airlines (and yes, I still work there). Moria 5.0 was a complete rewrite, and contained many neat enhancements, features, you name it. It had water, streams, lakes, pools, with water monsters. It had 'mysterious orbs' which could be carried like torches for light but also gave off magical aura's (like protection from fire, or aggravate monster...). It had new weapons and treasures... I left it with the student assistants at OU to be finished, but I guess it soon died on the vine. As far as I know, that source was lost...

I gave permission to anyone who asked to work on the game. Several people asked if they could convert it to 'C', and I said fine as long as a complete credit history was maintained, and that it could NEVER be sold, only given. So I guess one or more of them succeeded in their efforts to rewrite it in 'C'.

I have since received thousands of letters from all over the world from players telling about their exploits, and from administrators cursing the day I was born... I received mail from behind the iron curtain (while it was still standing) talking about the game on VAX's (which supposedly couldn't be there due to export laws). I used to have a map with pins for every letter I received, but I gave up on that!

I am very happy to learn my creation keeps on going... I plan to download it and Angband and play them... Maybe something has been added that will surprise me! That would be nice... I never got to play Moria and be surprised...

Robert Alan Koeneke

15.2 Moria and the GPL

Robert Alan Koeneke, posting to `debian-devel` mailing list. February 2005

Ok, I am working on getting the correct GPL statement put together so this game on all the games based on it don't have any restrictions to distribution. It was never my intention to make it hard to share, just to make certain my name stayed with the game and future variants of it.

Sheesh, I should have gone into game design I guess. I had no idea people were still playing these games. Did anyone ever add the Moria V5.0 new features to the game? Liquids (pools, streams, lava, etc), orbs, and recipes for building magic weapons? There were other things but that's the stuff I remember off-hand.

In case you can't tell, I am no longer a part of the coding community. I moved up the corporate chain to the point of all I do is design enterprise systems; no one lets me touch code anymore.

Enjoy.

Robert Alan Koenke

Enterprise Architect

15.3 The Early Days of Umoria

James E Wilson, posting on `rec.games.roguelike.moria`. January 2006

I started work on Umoria in February 1987. I somehow acquired play testers in April. I don't recall exactly how, but I was at a university, so maybe they saw me playing it on a public terminal and asked for a copy. The game slowly spread around the Berkeley area. By November, the game was in good enough shape that I could post it to `comp.sources.games`. I think I was still calling it UNIX Moria then, to distinguish it from the original, but the `comp.sources.games` moderator shortened it to Umoria, and that name has stuck. After the `comp.sources.games` posting, the game was widely available, and things just grew from there. The Usenet `rec.games.moria` group was created sometime around Jan 1, 1988, and was where most of the early discussions about it occurred.

I originally got involved with Moria because I was tired of playing other games. I spent a lot of time playing games such as `rogue` and `hack`, and was looking for something different to try. There was a game called `UltraRogue` that I enjoyed playing. Unfortunately, it had some very frustrating bugs, and it was only available as a binary. I spent some time investigating the possibilities of trying to decompile it and fix it. Before I got very far, I chanced upon a copy of the VMS Pascal Moria sources and quickly decided that porting the sources to Unix was a better project than trying to fix `UltraRogue`. After I gained some fame as the Umoria author, I did manage to get a copy of of the `UltraRogue` sources, but by then it was too late, and I wasn't sure if I had a legal copy of the sources, so I never did anything with them.

The original game was written in VAX/VMS Pascal with some VAX/VMS Assembler. I did not have access to a VMS machine, and both the Pascal and Assembler code would not work with Unix because of many uses of VMS extensions. Since C was a more common language for Unix anyways, I decided to just convert the whole thing to C. Much of the initial syntax conversion was done via emacs macros. Then it was just a matter of tweaking the sources until they would compile. The hardest part was finding and fixing all of the off-by-one errors, as Pascal array indexing starts at 1, and C array indexing starts at 0. It took me years to find and fix all of the off-by-one errors. I still can't believe how hard it was to find them all. At least, I hope I found them all.

Mostly what I remember about the early years of working on Umoria was that it was a good introduction to software engineering principles. I had to learn how to deal with bugs, bug fixes, release schedules, making and distributing releases, etc. It was just a game, but I learned many valuable lessons about real world software development while working on it.

One of my favorite moments from my Umoria years is when I got mail from one of the authors of rogue. I recognized the name right away, and had to ask. He confirmed that he was one of the rogue authors, and that he was a fan of Umoria. That made my day.

The credits in the PC/Windows game Diablo mention that it was inspired in part by Umoria.