Actual Dungeon Mastering: How to Design Dungeons

As far as I know, there is no existing procedure on how to make an OSR dungeon that is useful to complete beginners. The following is an analysis on dungeon design which cumulates with a comprehensive procedure to make OSR dungeons based on the original TSR principles. OSR dungeons are designed for games that are about physically exploring a dangerous location, and the original TSR principles of dungeon design incentivize exploring the dungeon. *(Heads up, this is 23 pages long)*

The following is a list of the manners in which dungeons are commonly designed alongside a quick analysis of the merits of each method.

Dungeon Design Methods

Top Down Dungeon Design

- 1. Start with a concept of dungeon
- 2. From concept make monsters/traps/treasure/special
- 3. Arrange concepts in physical space
- 4. Add missing mechanical elements to dungeon
- 5. Refine dungeon

Pro: Aesthetic consistency and tonal fidelity *Con:* Important dungeon elements absent

Down Up Dungeon Design

- 1. Use dungeon generator to design map
- 2. Roll for contents of each room
- 3. Add missing aesthetics and colors
- 4. Refine Dungeon

Pro: All dungeon elements present

Con: Gonzo/disjointed dungeon fills and absence of underlying theme

5 Room Dungeon Design (checklist)

- 1. Establish 5 specific aspects of a dungeon
- 2. Arrange concepts in physical space
- 3. Add missing mechanical elements to dungeon
- 4. Add missing aesthetics and colors
- 5. Refine Dungeon

Pro: the dynamic player facing elements of the dungeon are focused on

Con: not always useful for OSR games due to how little dungeon content is made. Other versions have a much more expanded list of up to 20 items which is more faithful to OSR.

Dungeon History Design

- 1. Establish original use of dungeon
- 2. Establish current use of dungeon
- 3. Arrange concepts in physical space
- 4. Add in factions
- 5. Establish faction interactions
- 6. Add missing mechanical elements

Pro: this is a mix of top down and 5 room design which results in good dynamics and unified themes *Con:* borderline world-building rather than pragmatic use of time, mechanical aspects of a dungeon not emphasized

However, not everyone makes the same sort of dungeons. Within OSR the following concepts of dungeons are discussed:

Dungeon Types

Naturalistic/Themed

This refers to a dungeon built around a theme with possible thought placed into "what do the orcs eat?" Generally, the term "dungeon ecology" is used. I would say that most RPG videogame dungeons would fall into this classification. Top-Down and Dungeon History design methods are often used to make these dungeons.

<u>Funhouse</u>

These dungeons are one where dungeon ecology is abandoned in favor of placing a great deal of the individual dungeon contents to be fun to encounter. These tend to have a great deal of dynamic elements. Those familiar with haunted houses would easily grasp these, as would those who have played light-gun games House of the Dead and Ocean Hunter come to mind. Down-Up and Checklist design methods are often used to make these dungeons.

Mega-dungeon

This is the dungeon type OSR is known for. Hundreds of rooms, several levels, and factions. I'm going to assume that if you read this blog then you are aware of what those are.

Neg-adungeon

This the dungeon type LOTFP is infamous for. It is a terrible place to be full of terrible things. That being said Death Frost Doom have 7349 silver pieces inside of it, which is almost enough XP for 4 party level 1 characters to reach level 2. Conicidentally this matches the commonly prescribed amount of treasure (4x XP needed to get to level 2) prescribed for the first level of a OSR dungeon. This dungeon is more fitting to that of a horror film, than a a fantasy world.

Mythic Underworld

I'm going to quote Jason Cone to explain this.

"There are many interpretations of "the dungeon" in D&D. OD&D, in particular, lends itself to a certain type of dungeon that is often called a "megadungeon" and that I usually refer to as "the underworld." There is a school of thought on dungeons that says they should have been built with a distinct purpose, should "make sense" as far as the inhabitants and their ecology, and shouldn't necessarily be the centerpiece of the game (after all, the Mines of Moria were just a place to get through). None of that need be true for a megadungeon underworld. There might be a reason the dungeon exists, but there might not; it might simply be. It certainly can, and perhaps should, be the centerpiece of the game. As for ecology, a megadungeon should have a certain amount of verisimilitude and internal consistency, but it is an underworld: a place where the normal laws of reality may not apply, and may be bent, warped, or broken. Not merely an underground site or a lair, not sane, the underworld gnaws on the physical world like some chaotic cancer. It is inimical to men; the dungeon, itself, opposes and obstructs the adventurers brave enough to explore it"

The mythic underworld is an amalgam of the other dungeon types, and is more of a platonic dungeon ideal. We are going to make procedures for making a mythic underworld dungeon, because it would allow us to alter those procedures easily to make any of the other dungeons described.

Now that we have determined the type of dungeon we shall make, we can refer to OSR texts which describe how to construct a dungeon in order to make one. Within published OSR rulesets, down-up dungeon design is commonly prescribed and likely the most reknown method as it is found in the ADnD Dungeon Master's Guide. Analysis of each of the stocking procedures may illuminate the principles of TSR dungeon design. All of the following methods state to make a map and then stock the rooms once dungeon lay out is established.

Before getting into the dungeon stocking procedure I have included and explanation of jaquaying and loops for dungeons.

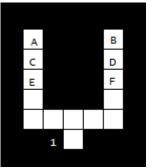


Figure 1

Here we have a linear dungeon that forks into two paths. We're going to use this to represent a dungeon which is not just a straight line. Here we have a single entry and then two different paths one could take. An issue with exploring this dungeon design is that to reach points A or B one must first cross points C,E or D,F. This makes these two points mandatory in order to reach A or B. This is not conducive to exploration as there is a single approach to each destination. However, we can increase the amount of exploration by creating a loop.

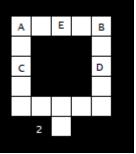


Figure 2

Here we have a looped dungeon. Now we have doubled the ways of reaching point A or B. Unlike figure 1, there is a incentive for a party to explore the dungeon. One is able to reach point A by passing point C or through B,D,E. Though a party is not aware of the loop, they would be able to turn back and attempt to pass through a different point. Consider a party trying to reach point E. They are first presented with options C and D and are able to choose which of the two to attempt to cross. Let's assume that the party is able to overcome C, they would then have the option to cross A or D and unlike Figure 1, neither of those would be mandatory to cross to reach E. In fact we can increase the amount of pathing options.

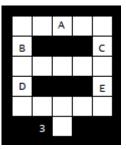


Figure 3

Here we have added a loop within the loop. Let's consider a party trying to reach point A. The party would be able to explore and find points D and E. They could choose to cross one, but then they would gain an even greater amount of options to cross. Let's assume a party crosses D, they would have options to try to pass through B,C,E in order to reach A. An increased number of loops incentives exploration of the dungeon further. Let's add another loop offset from the first and see how it changes exploration potential.

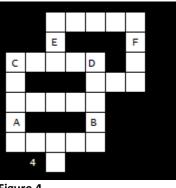


Figure 4

Here we have several loops. And much like adding a loop within a loop, adding an external loop greatly increases the amount of different pathing possible to be taken by a party. In sharp contrast to Figure 1, there are many different paths one could take. The increased number of paths creates greater and greater possibilities of what a party may do within a dungeon and provides greater means of emergent gameplay. There is no narrative for exploring a dungeon with many loops. A further tenant of jaquaying the dungeon is the addition of numerous entrances into the dungeon, lets see what that looks like.

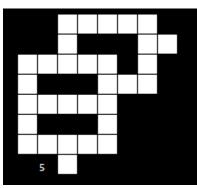


Figure 5

Here we have added another entrance into the dungeon, but the effects become apparent if we think of outside of the dungeon as a separate loop in itself, like depicted in figure 6.

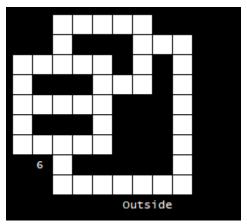
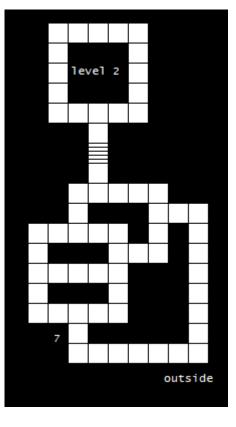


Figure 6

Here we see that the addition of multiple entrances into the dungeon, results in additional pathing possibilities. It is no different from adding loops in the dungeon layout. Further adding multiple stairs to lower levels as you can see in the further figure is little more than adding larger and larger loops.





Here is an addition of the lower level which contains a loop within it.

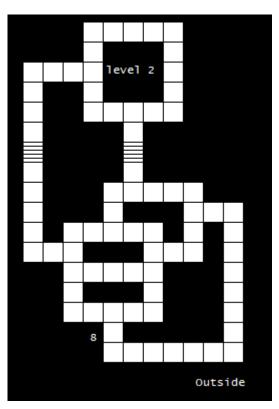


Figure 8

Here we have added another staircase to the 2nd level increasing the number of loops in the dungeon.

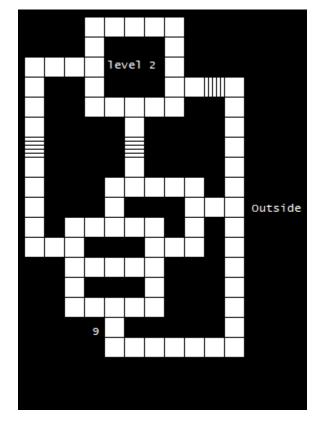


Figure 9

Finally we have added another entrance, this time to the second floor. This gives us many more loops.

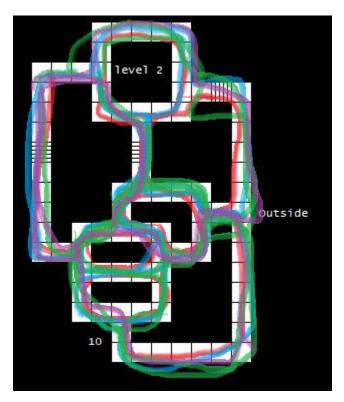


Figure 10

Here we have many loops visualized within the dungeon. I quickly drew 7 red loops, 6 blue loops, 6 green loops, and 2 purple loops. We can see that there are over 21 loops in the dungeon, each presenting different pathing one could take within the dungeon.

BASIC/Expert

"First the DM should design any major encounter areas and the monsters, treasures, traps and special situations which may be en-countered there. Then the DM may stock the remaining minor areas with monsters and treasure using the following system."

Room Content 1d6	Some math on treasure chance
2 in 6 monster	M 2/6 * 3/6 6/36
2 in 6 empty	E 2/6 * 1/6 2/36
1 in 6 trap	T 1/6 * 2/6 2/36
1 in 6 special	S 1/6 * 0
Treasure Chance 1d6	10/36 chance of treasure in a room
Monster 3 in 6	
Trap 2 in 6	Mechanical Contents from Basic Dungeon per 36 rooms
Empty 1 in 6	12 rooms are empty
Special 0 in 6	12 rooms have monster
	10 rooms have treasure
	6 rooms have a dynamic element
	6 rooms are trapped

Monsters in Rooms are drawn from the Wandering Monster List (One of which is a trader, which means we could in theory replace 1 in 20 monsters with a terrible entity offering barters)

We have treasure in roughly one third of the rooms, one third has monsters, one sixth are trapped, and one sixth are dynamic.

<u>ADnD</u>

Dungeon Room stocking Per 1d20	Mechanical Contents from ADnD DMG per 20 rooms (on					
1-12 Empty	average)					
13-14 Monster	12 rooms are "empty"					
15-17 Monster and Treasure	5 rooms have monsters					
18 Special	4 rooms have treasure					
19 Trick/Trap	1 room is trapped					
20 Treasure	2 rooms have dynamic elements					

3/4ths of the treasure is found alongside a monster, which results in double the amount of treasure. Further it increases the chance of a magic item from 3% to 25%. Further rolling 3 rooms with treasure have a 99% chance of having a magic item within them. We're going to do math about this later in order to determine the average value of a treasure room.

Of treasure that is guarded: 1-8 treasures are trapped and 9-20 treasures are hidden

Let's change this to be 50% of treasure is open, 50% of treasure is guarded and half of guarded is hidden, while the other is trapped.

Of the traps: 40% is poison, we can consider this poison to instead be repeated damage instead of just a single pit opening beneath the treasure, it can be expanded to repeated threats Of hidden: 50% in secret room/alcove so they would be revealed through interacting with the environment

So, we can work backwards to get the following numbers of where a treasure is

Treasure Location 1d8

1-4 Open Treasure
5 Trapped Treasure*: Single Damage Threat
6 Trapped Treasure*: Repeated Damage Threat
7 Hidden Treasure*: Passive
8 Hidden Treasure*: Active

*Roll again for Magic Item Chance

Adventurer Conqueror King

1d100 roll

30% Empty 30% Monster 15% Trap 25% Unique

Like Basic/Expert, you add treasure upon determining the room content

1d100 roll

15% of empty rooms have treasure 30% of trap rooms have treasure Unique rooms may have applicable treasure Monster rooms have a chance of being a Lair (and then have treasure as a result), which is different for every monster

This is not very different from B/X stocking Methods

Labyrinth Lord

1d100 roll

30% Empty 30% Monster 15% Trap 25% Unique

Like Basic/Expert (and ACK), you add treasure upon determining the room content

1d100 roll

15% of empty rooms have treasure30% of trap rooms have treasure50% of monster rooms have treasureUnique rooms may have applicable treasure

This is B/X with possible treasure in unique/special rooms

<u>OSRIC</u>

Dungeon Room stocking 1d20

1-7 Empty8-11 Monster12-17 Monster and Treasure18 Special19 Trick/Trap20 Treasure

Mechanical Contents from OSRIC DMG per 20 rooms (on average)

7 rooms are "empty"10 rooms have monsters6 rooms have treasure1 room is trapped2 rooms have dynamic elements

This is very similar to the ADnD methods however, the amount of empty rooms are decreased, while the amount of monsters is increased. Even more inhabitants than the B/X dungeon stocking method.

Wolf-packs and Winter Snow

Dungeon Room stocking 1d20

1-7 Empty 8-10 Monster* 11-12 Treasure 13-17 Trap/Hazard 18-20 Special

Mechanical Contents from WPAWS DMG per 20 rooms (on average)

7 rooms are "empty"
3 rooms have monsters*
2 rooms have treasure
5 room is trapped
3 rooms have dynamic elements

Unlike other systems WPAWS has variable chance of wandering monsters ranging from 5 in 6 to 1 in 6, on average this is a 3 in 6 chance of encountering a wandering monster. However, these wandering monsters are inhabitants of the cave complex and if they are slain, they will no longer be encountered. This means that there are even less monsters in comparison to most other OSR dungeon stocking methods. WPAWS deviates from normal traps as well, with certain traps being hazards to be overcome, which may be more analgous to locked doors. However, they would be solved by lateral thinking rather than pure mechanical abilities.

From these stocking-methods we can create a syncretic system of stocking the dungeon.

Synthesized Dungeon Stocking Method

1d20 Method
1-12 Empty
13 Dynamic Element (Changes the dungeon, the characters, or items permanently)
14 Trapped (Reduces party resources, most commonly HP)
15 Obstacle* (Blocks passage but may be circumvented)
16-20 Monster
Further a room has a 2 in 10 chance of possessing treasure and that treasure has a 1 in 6 chance of being a magic item.

Mechanical Contents per 20 rooms 12 rooms are "empty" 5 rooms have monsters 1 room is trapped 1 room is blocked by an obstacle 1 rooms has a dynamic elements

Further: 4 rooms have treasure: 2 treasure in plain sight, 1 treasure hidden, 1 treasure is trapped However, it cannot be the obstacle room

*I have decided to add these to the standard list of dungeon contents because they provide further opportunities for lateral thinking.

Though we now have a syncretic method of dungeon stocking of a dungeon based on 20 rooms. A further analysis of TSR Rulesets would inform a great deal of dungeons that would not be apparent from only the room contents of a dungeon.

ADnD DMG's dungeon generator gives us the contents of a treasure room on the first floor on the dungeon in the form of a table. We are able to calculate the average value of a treasure room on the first dungeon level.

ADnD TREASURE MATH

Base chance

25% 10 G 25% 100 G 15% 375 G 15% 250 G 10% 1000 G 4% 2.5 Gems of 275 [687.5 total] 3% Jewelery 2910G 3% Magic Item

Gems

25% 10g 25% 50g 20% 100g 20% 500g 9% 1000g 1% 5000g

2.5 + 12.5 + 20 + 100 + 90 + 50

Jewelry* this not take into account gems on the jewelry*

10% 550g 10% 700g 20% 1050g 10% 1750g 20% 3500g 20% 5000g 10% 7000g

55 + 70 + 210 + 175 + 700 + 1000+ 700 = 2910

ADnD DMG proceudres informs us that monster treasuer rooms and non-monster treasure rooms have different ditributions but we know that roughly 3/4ths of the treasure rooms have monsters within them so we can take that into account in future calcualtions.

Non-Monster

25% 10 G 25% 100 G 15% 375 G 15% 250 G 10% 1000 G 4% 2.5 Gems of 275 [687.5 total] 3% Jewelery 2910G 3% Magic Item Monster (Twice Over) 15% 10 G 25% 100 G 15% 375 G 15% 250 G 10% 1000 G 4% 2.5 Gems of 275 [687.5 total] 3% Jewelery 2910G 13% Magic Item

We're gonna take out the magic item treasure value, math by not including it in the math.

Non-Monster

.25 * 10 .25 * 100 .15 * 375 .15 * 250 .1 * 1000 .04 * 687.5 .03 * 2910

2.5+25+56.25+37.5+100+27.5+87.3

336.05 G and 3% magic item chance

Monster

.15 * 10 .25 * 100 .15 * 375 .15 * 250 .1 * 1000 .04 * 687.5 .03 * 2910

2(1.5+25+56.25+37.5+100+27.5+87.3) 2(335.05)

670 G and 25% magic Item chance

We cna now determine: the average dungeon level 1 treasure amount.

 $\{.25 * [336.05 G and 3\% magic item chance] + .75 * [670 G and 25\% magic Item chance] \}$

84g and .75% + 502.5 and 18.75%

Average treasure value of ADnD Level 1 dungeon room is 586.5 Gold and has a 19% chance of being a magic item. Deeper levels would have a linearly increased gold amount but the same chance of magic items. Thus, a level 4 dungeon room would have treasure worth 2346 gold with the same 19% chance of having a magic item. I want to round that 19% down to 15%/16.6% because it makes it easier to roll with a 1d6 and 1d20.

B/X's advice on how much treasure to place in a dungeon maybe used to inform us on how large a dungeon would be and how much treasure it would possess.

Basic has the following text "if no players reach level 2 in 3 to 4 sessions then add treasure, if most players have reached level 3 reduce treasure"

Let's assume that in 3.5 sessions players need to reach above level 2 but not above level 3 Average XP to reach level 2 is 2000XP Average XP to reach Level 3 is 4000 XP So let's assume that absolute minimum XP needed for level 2 is 1200 XP (from Thief) so N players * 1200 needs to be locatable in 3.5 sessions At least B/X gives average part size as 5-8 From NPC party encounters So we can assume an average party size of 6.5 members 6.5 * 1200 = 7800 XP This is using a thief But we know that some treasure is hidden So we'll use Fighter XP on the basis that 40% of treasure is not found by a party as 50% of treasure by ADnD DMG stocking is hidden or trapped Giving us 6.5 * 2000 XP = 13000XP 13000XP/3.5 Sessions gives us 3714 XP per session. Basic Assumed that 75% of XP comes from treasure so we can ammend the treasure XP to instead be 9750 over 3.5 sessions or 3785.7 XP per session. Which leaves us with 3250XP from monsters, we will come back to this value later.

So let's think about how far one could delve in 3.5 sessions instead of simply looking at the average session. Let's assume that they get to the 2nd level of the dungeon as well by at least session 2 and that means session 3.5 includes both level 1 and level 2 of the dungeon

So we return to the 9750XP value

Magic Items do not contribute to this amount and make up 15% of treasure. so instead that becomes 8287.5 XP from treasure from 3.5 sessions.

Let's say that half of the rooms are from level 1 while the other half are level 2 (essentially that the party will explore this dungeon in 3.5 sessions and then leave ocne they alve enough to level up to level 2). This means that we have an equation for the number of treasure rooms the party is expected to explore in 3.5 sessions.

Level 1 treasure is worth 586.5 XP while Level 2 treasure is worth 1173 XP. Assuming that floor 1 and 2 are of equal size we can then divide 8287.5 by the avergae treasure value of this dungeon (879.75) to find the amount of treasure rooms in the dungeon. Coincidentally this gives us 9 treasure rooms. So 4.5 treasure rooms on level 1 and 4.5 treasure rooms on level 2. We can assume that one of the treasures on floor 2 is instead larger than the others so this gives us 4 and 4+1 Treasure rooms on levels 1 and 2 respectively.

Previously we have established that per 20 rooms, there would be 4 treasure rooms. Thus we learn this "dungeon" would have 40 rooms. This also gives us an assumed average of 11.4 rooms explored per session. This gives us the treasure XP from floor 1 to be roughly double that for a thief to reach level 2, 2400XP.

If we want to make things easier on ourselves we could instead form a heuristic for treasure placement based on the XP needed for a standard character to reach level 2.

Based on TSR's design: 20 rooms of level 1 should contain enough treasure for 2 standard characters to reach level 2. Deeper levels multiply the treasure amount by the dungeon depth.

Now we return to the monster XP 3250 which we have yet to concern ourselves with which we could use in order to determine the properties of monsters within a dungeon.

We have previously established this dungeon has 40 rooms, 20 on level 1 and 20 below on level 2.

Splitting the monster XP in half gives us 1083 XP on floor 1 and 2166 on floor 2

From ADnD room distribution that's a total of 5 encounters so the average XP amount of a monster encounter for floor 1 is 216 and the average XP amount for a monster encounter for floor 2 is 432. So let's figure out a way to construct the mechanical aspects of monster encounters so they average out to those numbers.

So, let's look at the ADnD XP given for monsters, XP is given for HD of the monster, HP of the monster, and abilities. There is a division between special abilities and exceptional abilities and they are described as follows. [I have added a few other types of special and exceptional abilities]

Typical special abilities: 1d3,1d8

- 1,1 4 or more attacks per round
- 1,2 missile discharge
- 1,3 armor class 0 or lower
- 1,4 Alternative movement means
- 1,5 special defenses regeneration
- 1,6 high intelligence which actually affects combat
- 1,7 use of minor (basically defensive) spells
- 1,8 Ambushes: Increased suprise chance to 1-4
- 2,1 Rending: If both attacks hit the creature deals further damage
- 2,2 Undead
- 2,3 Hug: If to hit roll is high enough it deals futher damage
- 2,4 Dissolves material (rust monster/Black Pudding)
- 2,5 Charge: Deal a great blow but requires space

2,6 Blind: Blind for 1-4 rounds/Deafen: Deafened for 2-12 rounds

2,7 Petrification Touch: basilisk

- 2,8 hit only by special and/or magic weapons
- 3,1 Chorus: trigger for monsters to gain bonuses
- 3,2 Grappler: monster grapples rather than purely attacks
- 3,3 Spell ability: as spell
- 3,4 Death-curse: death triggers future effect on killer
- 3,5 Rage: deal damage to gain bonuses
- 3,6 Vampiric: heals self for damage dealt
- 3,7 Entangle: Save vs being unable to move
- 3,8 Telling blow: Attack also moves target away

Typical exceptional abilities: 1d2,1d8

- 1,1 energy level drain
- 1,2 paralysis
- 1,3 poison (Save vs Death)
- 1,4 major breath weapon/Area of effect attack
- 1,5 magic resistance
- 1,6 spell use

1,7 cursed damage: injury does not heal without divine intervention/cleric

1,8 swallowing whole (on a critical hit, swallows enemy which needs to deal at least 25% of the creatures remaining hit points with a edged weapon by a single attack to cut themselves out)

2,1 possession: save vs possessed by monster

2,2 weakness (radius around the monster which causes a save vs penalty)

2,3 Convert: those damaged roll 1d100 if below damage dealt begin to convert

2,4 Parasitic: attacks have a 50% of striking either part. Each part has 50% of HD. Slaying one limits movement, slaying the other ends the malevolence

- 2,5 Thorns: deals damage to those who attempt Melee
- 2,6 Spores: damage dealt has chance to spawn 1 HD version
- 2,7 Rending: If damage over 7 then save vs losing limb

2,8 Attacks causing maximum damage greater than 24 singly,30 doubly, 36 trebly, or 42 in all combinations possible in 1round

So let's get some standard HD/HP XP Values assuming a standard HD roll of 4.5 HP per HD. SUMXPALL is the value given in ADnD for a monster of that HD. NuXP is a massaged version of those values which makes them better to work off of. These sums are multiplied by the number of monsters encountered in the room, so 10 HD 1 monsters would be 150 XP.

HD	HP	XPofHD	XPofHP	SUMXPHP	SUMALL	NuXP	EAXPA	EASUM
1	4.5	10	1	4.5	14.5	15	35	50
2	9	20	2	18	38	40	45	85
3	13.5	35	3	40.5	75.5	75	55	130
4	18	60	4	72	132	130	65	195
5	22.5	90	5	112.5	202.5	200	75	275
6	27	150	6	162	312	315	125	440
7	31.5	225	8	252	477	475	175	650
8	36	375	10	360	735	750	275	1025
9	40.5	600	12	486	1086	1100	400	1500
10	45	900	14	630	1530	1500	600	2100

Exceptional abilities increase the XP to a greater HD pretty consistently, thus a HD 2 creature with an exceptional ability would become a HD 3 creature in terms of XP value. Further from the matrix on average the special ability bonus (from HD 1 to 10) is 49% of the Exceptional HD bonus, which means this would average out to be a half of the exceptional HD bonus. Thus, a creature with 1 HD a special ability would improve by half to 1.5 HD. This will make our work much easier.

So, we can work backwards to construct a methodology to generate monsters of correct XP cost that will average out to Dungeon Level * 216 XP.

									-	Mon	ster H	D							
Amount encountered	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
1	15	30	45	60	75	102.5	130	165	200	257.5	315	395	475	612.5	750	925	1100	1315	1530
2	30	60	90	120	150	205	260	330	400	515	630	790	950	1225	1500	1850	2200	2630	3060
3	45	90	135	180	225	307.5	390	495	600	772.5	945	1185	1425	1837.5	2250	2775	3300	3945	4590
4	60	120	180	240	300	410	520	660	800	1030	1260	1580	1900	2450	3000	3700	4400	5260	6120
5	75	150	225	300	375	512.5	650	825	1000	1287.5	1575	1975	2375	3062.5	3750	4625	5500	6575	7650
6	90	180	270	360	450	615	780	990	1200	1545	1890	2370	2850	3675	4500	5550	6600	7890	9180
7	105	210	315	420	525	717.5	910	1155	1400	1802.5	2205	2765	3325	4287.5	5250	6475	7700	9205	10710
8	120	240	360	480	600	820	1040	1320	1600	2060	2520	3160	3800	4900	6000	7400	8800	10520	12240
9	135	270	405	540	675	922.5	1170	1485	1800	2317.5	2835	3555	4275	5512.5	6750	8325	9900	11835	13770
10	150	300	450	600	750	1025	1300	1650	2000	2575	3150	3950	4750	6125	7500	9250	11000	13150	15300
11	165	330	495	660	825	1127.5	1430	1815	2200	2832.5	3465	4345	5225	6737.5	8250	10175	12100	14465	16830
12	180	360	540	720	900	1230	1560	1980	2400	3090	3780	4740	5700	7350	9000	11100	13200	15780	18360
13	195	390	585	780	975	1332.5	1690	2145	2600	3347.5	4095	5135	6175	7962.5	9750	12025	14300	17095	19890
14	210	420	630	840	1050	1435	1820	2310	2800	3605	4410	5530	6650	8575	10500	12950	15400	18410	21420
15	225	450	675	900	1125	1537.5	1950	2475	3000	3862.5	4725	5925	7125	9187.5	11250	13875	16500	19725	22950

Using the following chart we can determine the wandering monsters possible for a level based on the upper limit of monster XP for that floor. Thus level 3 could have a max of 3 * 216 = 648 XP. This means that the greatest HD possible would be 7.5.

Wandering Monster Generators

These have been made so that the rolls of these values average out to fit the Dungeon Level * 216 XP, if you wanted you could make your own.

Dungeon Level 1: 1d6

1 3HD + Exceptional ability 2 1d4 2HD + Special ability 3 1d6 1HD + Exceptional Ability 4-5 1d8 1HD + Special Ability 6 2d8 1 HD

Dungeon level 2: 1d10

1 6 HD + special ability 2 4 HD + 2 exceptional abilities 3 1d2 4 HD + exceptional ability 4 1d4 3HD + exceptional ability 5 1d4 3HD + special ability 6-7 1d8 2HD + special ability 8-9 2d4 1HD + exceptional ability 10 2d10 1HD

Dungeon level 3: 1d12

1 6 HD special ability + Exceptional ability 2 1d2 5HD + special Ability 3 1d4 4 HD + exceptional ability 4 1d8 3 HD 5-6 1d6 2HD + 3x special ability 7-8 1d10 2HD + special ability 9-11 2d8 2HD 12 2d20 1 HD

Dungeon level 4: 1d20

1 6 HD + 2 exceptional abilities 2 7 HD 3-4 1d4 5HD + special ability 4-5 1d6 3HD + exceptional ability 6-8 1d8 2HD + special ability + exceptional abilities 9-12 2d6 2HD + 2 special abilities 13-15 2d8 1HD + exceptional ability + special ability 16-19 2d10 2 HD 20 3d10 1 HD + special ability

A Further Synthesis

Now that we know that 20 rooms of level 1 should contain enough treasure for 2 standard characters to reach level 2, we can return to our standard synthesized dungeon method and see how much treasure would be placed in each room.

Synthesized Dungeon Stocking Method

1d20 Method

1-12 Empty
13 Dynamic element
14 Trapped
15 Obstacle
16-20 Monster
Further a room has a 2 in 10 chance of possessing treasure and that treasure has a 1 in 6 chance of being a magic item.

20 Rooms need a minimum of the following:

5 rooms have monsters 1 room is trapped 1 room is blocked by an obstacle 1 room has a dynamic elements

If the 1d20 rolls do not fulfill the minimum criteria, then empty rooms (which will have the highest distribution) would be swapped out to become mechanically "full" rooms.

Adding Treasure

20 rooms will have within them treasure worth [Dungeon Level * (2*XP needed for a level 1 character to reach level 2)] within them. Each room which contains a treasure will then roll for where the treasure is located. For the purpose of this post we'll use the B/X fighter value of 2000XP for this, our dungeon needing 4000 gold pieces worth of treasure. First, we would need to determine where the treasure is located and if the treasure is instead a magic item and then partition the treasure.

Treasure Location 1d8

1-4 Open Treasure
5 Trapped Treasure*: Single Damage Threat
6 Trapped Treasure*: Repeated Damage Threat
7 Hidden Treasure*: Passive
8 Hidden Treasure*: Active
*Roll again for Magic Item Chance

Treasure Portioning

So, we have 4000 gold pieces to distribute among the 20 rooms. The more treasure rooms you have, the less each room would contain. Assuming an average of 4 treasure rooms per 20 rooms, we could establish the following tiers of treasure.

Treasure room 1: Single Share, Treasure room 2 and 3: Double Share, Treasure room 4: Triple Share

This gives us a total of 1+2+2+3=8 shares.	4000/8= 500gold for each share	
Treasure room 1: 500 gold	Treasure room 2+3: 1000 gold	Treasure room 4: 1500 gold

Those values are a little "too clean" for me. So, let's remove 100 gold from rooms 2 and 3 and add it to room 4. Which gives us the following values.

Treasure room 1: 500 goldTreasure room 2+3: 900 goldTreasure room 4: 1700 gold

Minor Treasure

I would say that for set dressing 5% of the 20-room-treasure-value (200 gold) could be added to "empty rooms" as set dressing. Say the dungeon was an abandoned temple to a chthonic diety, you could easily add 10 stone statues, each etched with silver filigree (worth 20 gold), of the deity around the complex to give it more "character".

Aesthetics

This gives us the mechanical components of a dungeon but we still need to add the aesthetic elements of a dungeon. Ones that would contribute to the thematic unity of the dungeon and also incentivize exploration of the complex further. For this we have Motifs and Foreshadowing. A motif will refer to set-dressing which contains the thematic elements of a dungeon, and each motif will have 4 set-dressings within it to unify the dungeon through placement. Foreshadowing presents thematic unity to the mechanical elements which are the most important discrete mechanical parts of the dungeon in an attempt to mediate the flaw of Down-Up dungeon design. Further foreshadowing allows players to make informed decisions about exploring the dungeon. Foreshadowing of the medusa by having a few petrified men in the dungeon allows player skill utilization in physically exploring a dangerous location.

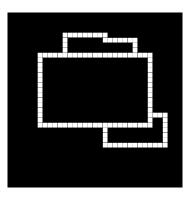
Motif1= 1 Motif1a: 2 Motif1b: 3 Motif1c: 4 Motif1d: Motif2= 5 Motif2a: 6 Motif2b: 7 Motif2c: 8 Motif2d: Motif3= 9 Motif3a: 10 Motif3b: 11 Motif3c: 12 Motif3d: 13 ForeshadowingMonster1a: 14 ForeshadowingMonster1b: 15 ForeshadowingMonster2a: 16 ForeshadowingMonster2b: 17 ForeshadowingTreasure: 18 ForeshadowingTrap: 19 ForeshadowingDynamicElementa: 20 ForeshadowingDynamicElementb:

Though this list seems daunting, creating these aesthetic connections is actually much easier than it seems. We can draw up a conceptual idea of the dungeon by deciding what the dynamic element, obstacle, trap, and some of the monsters are.

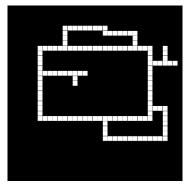
Example of Constructing a Dungeon

Quick Dungeon Layout

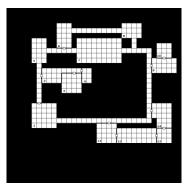
So, we're gonna use a large loop and 2 small loops as the base of the dungeon layout.



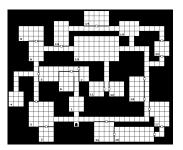
Now we are going to add 2 small branches to the large loop.



Now that we have a rough outline, we're going to expand the loops into rooms instead of lone hallways.



Now we simply add rooms until we have 20 in total, and an entrance into the dungeon.



Crafting the Mechanical Skeleton of the Dungeon

Now that we have the dungeon layout, we are going to stock the dungeon by using the chart below

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1d20 Method
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1-12 Empty 13 Dynamic element 14 Trapped 15 Obstacle 16-20 Monster Further a room has a 2 in 10 chance of possessing treasure and that treasure has a 1 in 6 chance of being a magic item. Room1 empty Room2 empty Treasure1 Room3 empty Room4 empty Treasure2 (Magic Item) Room5 empty Room6 monster1 Treasure3 (Magic Item) trapped single damage threat Room7 dynamic element1 Room8 empty Room9 monster2 Room10 dynamic element2 Treasure4 hidden active Room11 empty Room12 monster3 Treasure5 (Magic Item) hidden passive Room13 empty Room14 monster4 Treasure6 Room15 empty Room16 dynamic element3 Room17 empty Room18 obstacle Room19 empty Room20 monster5

Our dungeon doesn't fit the minimum criteria so we are going to fill an empty room with a trap. Looking at our dungeon layout, we are going to change room 19 to instead be a trapped room. Room 18 isn't neccesarily fit to be an obstacle room, so let's change it to instead be Room 8.

Now we are going to roll up the wandering monster table by rolling on the Dungeon Level 1 wandering monster table 6 times.

Dungeon Level 1: 1d6

1 3HD + Exceptional ability 2 1d4 2HD + Special ability 3 1d6 1HD + Exceptional Ability 4-5 1d8 1HD + Special Abiliy 6 2d8 1 HD

We rolled the following: 5,1,5,4,3,3

S,o our wandering monster list is
1-3: 1d8 1HD + Special Abiliy (Monster 1)
4-5: 1d6 1HD + Exceptional Ability (Monster 2)
6: 3HD + Exceptional ability (Monster 3)

and then we can assign each of the monsters into the dungeon's rooms which gives us

Which we can add to the dungeon rooms as follows Room1 empty Room2 empty Treasure1 Room3 empty Room4 empty (Magic Item1) Room5 empty Room6 (Monster 2)(Magic Item2) trapped single damage threat Room7 dynamic element1 Room8 obstacle Room9 (Monster 1) Room10 dynamic element2 Treasure2 hidden active Room11 empty Room12 (Monster 2) (Magic Item3) hidden passive Room13 empty Room14 (Monster 1) Treasure3 Room15 empty Room16 dynamic element3 Room17 empty Room18 empty Room19 Trapped Room20 (Monster 3)

We are left with 3 treasures which sum up to make 2000 silver (twice the treasure need to get a level 1 character to level 2).

If we do a 1/2/3 ratio of treasure shares we get 2000/6 = 333 silver. That's a rough number so we'll go with treasures of 350, 550, and 1000 silver.

Treasure 1: 350 silver, lets go with a chest of 15 silver rods the length of man's forearms (10s each) and a silver diadem (100s) upon the brow of a corpse wearing silken rags in chains.

Treasure 2: 550 silver, this is a hidden treasure so let's have a secret alcove which contains 8 skeletons covered in melted silver (50 silver) and 1 massive chunk of silver (150)

Treasure 3: 1000 silver, this is guarded by monsters so let's have this be a treasure vault. Let's do 2 chests of 300 silver coins each, an erotic statue of two women fighting each other with curved sword made out of brass and silver the size of a man's chest, and a silver chain amulet which holds a large emerald (150s)

As we have the mechanical skeleton of the dungeon, we need to fill it it. In order to do so we will need to write out previously mentioned 20 aesthetic elements.

Motif1= 1 Motif1a: 2 Motif1b: 3 Motif1c: 4 Motif1d: Motif2= 5 Motif2a: 6 Motif2b: 7 Motif2c: 8 Motif2d: Motif3= 9 Motif3a: 10 Motif3b: 11 Motif3c: 12 Motif3d: 13 ForeshadowingMonster1a: 14 ForeshadowingMonster1b: 15 ForeshadowingMonster2a: 16 ForeshadowingMonster2b: 17 ForeshadowingTreasure: 18 ForeshadowingTrap: 19 ForeshadowingDynamicElementa: 20 ForeshadowingDynamicElementb:

There are quite a bit of dynamic dungeon elements and quite a few magic items so conceptually I'm thinking about the abandoned domain of some great sorcerer.

For this dungeon we'll go with the following:

Dynamic Element1: Lever on a machine, which disables the enchanted darkness

Dynamic Element2: Massive Stone Statue of a horned atavistic diety, which bears a single rune rather than a face, surrounded by six floating flames, slowly spiraling around it. The statue will telepathically communicate with those who enter the room to imbibe a flame with promises of power. Those who imbibe a flame must save or immolate to death, successful saves halve their HP and are able to throw a orb of flame 15' dealing 1d6+1 damage of flame, but this causes 1d6 damage to themselves.

Dynamic Element3: Every other turn, a large plant 25' in diameter, births a grown man from it's central bulb. A few moments later, shadows with long knives emerge from the corners and butcher the elephant. The corpse is then swallowed by the plant in the center of the room, which will return that same corpse to life in 2 turns. The grown man has gone mad from repeated slayings of centuries. There are 2d4 shadows which emerge and must be fought off to get a corpse from the plant.

Obstacle: Room of enchanted darkness, torches and lanterns do not provide light.

Trap: Miasma eminates from ancient machines now broken. Those who breath it in must save or fall paralyzed after 1 turn for 1d4 turns.

Monster1: Men with no faces and a single long tooth which drains blood, Foul creatures called forth by the sorcerer to do his bidding, Special ability: Blood Drain

Monster2: Terrible Spiders, Exceptional Ability: Poison

Monster3: Sorceror's Apprentice Cursed for slaying him, Exceptional Ability: Cast Spells

Magic Item1: Magic Ring on the Sorceror's Corpse

Magic Item2: Pair of scrolls inside a trapped chest (two handles open the chest like an exposed ribcage and razor blades emerge from the handles each dealing 1d4 damage)

Magic Item3: Flask which contains wine which heals for 1d4+1 HP, every time the flask is emptied, a little bit of fluid remains within. The flask refills completely every other day. Hidden beneath the spider's webbing.

Which we can use to give us Motif's 1, 2, and 3.

Motif 1: Study of an ancient people (those who venerated the horned diety in room 10)

Motif 2: Calling forth terrible beasts

Motif 3: Trophies of a past age

Now that we have mechanical aspects of the dungeon let's go back to those aesthetic elements and write them out based on the dungeon concepts.

Motif1=Study of an ancient people

Motif1a: Five wooden crates hold ugly stone statues amid straw. The statues are now broken into large chunks.

Motif1b: A pair of stone sarcophagi, each bearing the symbol of a spider inside a triangle, are wrapped in chains. If either

sarcophagus is opened, they both reveal mummified figures clad in rusted armor which disintegrate if touched.

Motif1c: Amid collapsed and rotted wood lies is a cylinder which bears the symbol of a spider inside a triangle. Bound inside is a thick scroll made of leather, rather than paper, that drips black ichor.

Motif1d: A ragged tapestry, the length of a man is held up by hooked chains embedded in the ceiling. Several more hooked chains dangle empty.

Motif2=Calling forth terrible beasts

Motif2a: A skeleton, with a gaping hole at the top of it's skull, stands in the center of a summoning circle. The room reeks of blood and sweat.

Motif2b: Dozens of scrolls have slowly faded to dust in their racks. A single scrolls inside of a case remains and depicts a series of rituals which will

Motif2c: A desk has a single scroll opened upon it, those who approach hear violent screams and then the scroll catches flame. A broken chair rests beneath the desk.

Motif2d: A pit at least 15' deep is the center of the room, the bottom of the pit is filled with dark fog.

Motif3=Trophies of a past age

Motif3a: A pair of men wearing crowns and wielding swords have been turned into petrified statues of stone.

Motif3b: Alongside three glass jars as tall as a man. A cage holds a child like skeleton which has a single eye hole and a pair of horns. Motif3c: Resting on a desk filled with rotted scrolls is a glass orb 2" in diameter contains a few burning buildings and a few burnt fields all beneath falling snow. Tiny skeletons can be seen.

Motif3d: A large metal chest lies broken in two pieces in the corner of the room, if either piece is investigated dozens of spiders emerge from beneath.

ForeshadowingMonster1a: A pile of skeletons fills the corner of the room, each skull has a hole at the top of its skull. ForeshadowingMonster1b: A dessicated corpse of a man with who has no facial features and a rather than a mouth has a single long tooth has been caught in a cobweb that stretches from one wall to another.

ForeshadowingMonster2: A massive cobweb fills the roof of the ceiling, and holds thousands of spiders crawling within. ForeshadowingMonster3: A painting has been ruined by being slashed, if the segments are held taut it depicts a bearded man and a bald youth with tattoos under both his eyes. The slash bisects the bearded man.

ForeshadowingTreasure: Skeleton clad in rusted armor, a scroll case holds a writ declaring that "who ever returns princess Olra from the vile sorceror will wed her and enter the royal family."

ForeshadowingTrap: Pair of rusted and now useless gas-masks each attached to a large metal cannister.

ForeshadowingDynamicElement2: Two stone basins hold burning oil, in front of a stone statue of a man with a stone sword stabbed through his chest.

ForeshadowingDynamicElement3: A large crystal holds a shadow, holding a long knife, within it. It slams itself against the crystal when light sources are brought near attempting to slay the light bearer.

Now that we have those aesthetic elements, we can add them into the dungeon rooms where they seem to fit. So now our dungeon will look like.

Sample Dungeon: Old Sorceror's Lair

Room1 A ragged tapestry, the length of a man is held up by hooked chains embedded in the ceiling. Several more hooked chains dangle empty.

Room2 A pile of skeletons fills the corner of the room, each skull has a hole at the top of its skull. Further there is a chest of 15 silver rods the length of man's forearms (10s each) and a silver diadem (100s) upon the brow of a corpse wearing silken rags in chains. Room3 A pair of stone sarcophagi, eaching bearing the symbol of a spider inside a triangle, are wrapped in chains. If either scarophagus is opened, they both reveal mummified figures clad in rusted armor which disentigrate if touched.

Room4 Resting on a desk filled with rotted scrolls is a glass orb 2" in diameter contains a few burning buildings and a few burnt fields all beneath falling snow. Tiny skeletons can be seen. A bed contains a corpse of an old sorceroer, a dagger now rsuted embedded in his chest, there is aMagic Ring on one of the fingers of the Sorceror's Corpse.

Room5 A painting has been ruined by being slashed, if the segments are held taut it depicts a bearded man and a bald youth with tattoos under both his eyes. The slash bisects the bearded man.

Room6 Amid collapsed and rotted wood lies is a cylinder which bears the symbol of a spider inside a triangle. Bound inside is a thick scroll made of leather, rather than paper, that drips black ichor. Terrible Spiders. Further there are a pair of scrolls inside a trapped chest (two handles open the chest like an exposed ribcage and razor blades emerge from the handles each dealing 1d4 damage) Room7 A large metal chest lies broken in two pieces in the corner of the room, if either piece is investigated dozens of spiders emerge from beneath. Further there is aLever on a machine, which disables the enchanted darkness in Room 8.

Room8 Two stone basins hold burning oil, in front of a stone statue of a man with a stone sword stabbed through his chest. Further it is a Room of enchanted darkness, torches and lanterns do not provide light.

Room9 Skeleton clad in rusted armor, a scroll case holds a writ declaring that "who ever returns princess Olra from the vile sorceror will wed her and enter the royal family." Further there are Men with no faces and a single long tooth

Room10 A skeleton, with a gaping hole at the top of it's skull, stands in the center of a summoning circle. The room reeks of blood and sweat. Further there is a Massive Stone Statue of a horned atavistic diety, which bears a single rune rather than a face, surrounded by six floating flames, slowly spiraling around it. The statue will telepathically communicate with those who enter the

room to imbibe a flame with promises of power. Those who imbibe a flame must save or immolate to death, successful saves halve their HP and are able to throw a orb of flame 15' dealing 1d6+1 damage of flame, but this causes 1d6 damage to themselves. Further there is a secret alcove on the southern wall which contains which contains 8 skeletons covered in melted silver (50 silver each) and 1 massive melted chunk of silver (150).

Room11 Five wooden crates hold ugly stone statues amid straw. The statues are now broken into large chunks.

Room12 A pair of men wearing crowns and wielding swords have been turned into petrified statues of stone. Further there are Terrible spiders and hidden bebeath numerous cobwebs made by the spiders is a Flask which contains wine which heals for 1d4+1 HP, every time the flask is emptied, a little bit of fluid remains within. The flask refills completely every other day.

Room13 Dozens of scrolls have slowly faded to dust in their racks. A single scrolls inside of a case remains and depicts a series of rituals which will

Room14 Pair of rusted and now useless gas-masks each attached to a large metal cannister. Further and Men with no faces and a single long tooth which drains blood. Further there are 2 chests of 300 silver coins each, an erotic statue of two women fighting each other with curved sword made out of brass and silver the size of a man's chest, and a silver chain amulet which holds a large emerald (150s).

Room15 A large crystal holds a shadow, holding a long knife, within it. It slams itself against the crystal when light sources are brought near attempting to slay the light bearer.

Room16 A massive cobweb fills the roof of the ceiling, and holds thousands of spiders crawling within. Further every other turn, a large plant 25' in diameter in the center of the room, births a grown man from it's central bulb. A few moments later, shadows with long knives emerge from the corners and butcher the elephant. The corpse is then swallowed by the plant in the center of the room, which will return that same corpse to life in 2 turns. The grown man has gone mad from repeated slayings of centuries. There are 2d4 shadows which emerge and must be fought off to get a corpse from the plant.

Room17 Alongside three glass jars as tall as a man. A cage holds a child like skeleton which has a single eye hole and a pair of horns. Room18 A dessicated corpse of a man with who has no facial features and a rather than a mouth has a single long tooth has been caught in a cobweb that stretches from one wall to another.

Room19 A desk has a single scroll opened upon it, those who approach hear violent screams and then the scroll catches flame. A broken chair rests beneath the desk. Miasma eminates from ancient machines now broken. Those who breath it in must save or fall paralyzed after 1 turn for 1d4 turns.

Room20 A pit at least 15' deep is the center of the room, the bottom of the pit is filled with dark fog. Further there is the Sorceror's Apprentice now a monster cursed for slaying Him.

Dungeon Construction Procedures:

1. Make Dungeon Layout (Or used the attached dungeon map provided on the next page)

Use the syncretic dungeon stocking table to determine the mechanical contents of each room
 If the dungeon does not meet the minimum criteria, replace empty rooms with the missing elements

Partition the total treasure between the rooms
 For hidden or trapped treasure determine specifics

4. Roll for wandering monsters, determine their special properties, and determine the monsters found within each of the rooms
4a. Determine the mechanical properties of the Obstacles and Traps
4b. Determine the mechanical properties of the Dynamic Dungeon Element

5. Determine the aesthetic elements that foreshadow the dungeon's mechanical elements

5a. Determine the 3 Dungeon Motifs

5b. Make 4 aesthetic elements for each dungeon motif

6. Edit the dungeon for thematic unity and clarity

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Dungeon Stocking Table 1d20

1-12 Empty

- 13 Dynamic element
- 14 Trapped
- 15 Obstacle
- 16-20 Monster

Further a room has a 2 in 10 chance of possessing treasure and that treasure has a 1 in 6 chance of being a magic item.

Treasure Location 1d8

1-4 Open Treasure
5 Trapped Treasure*: Single Damage Threat
6 Trapped Treasure*: Repeated Damage Threat
7 Hidden Treasure*: Passive
8 Hidden Treasure*: Active
*Roll again for Magic Item Chance

Wandering Monsters of Dungeon Level 1: 1d6

1 3HD + Exceptional ability 2 1d4 2HD + Special ability 3 1d6 1HD + Exceptional Ability 4-5 1d8 1HD + Special Abiliy 6 2d8 1 HD

Aesthetic Elements:

Motif1= 1 Motif1a: 2 Motif1b: 3 Motif1c: 4 Motif1d: Motif2= 5 Motif2a: 6 Motif2b: 7 Motif2c: 8 Motif2d: Motif3= 9 Motif3a: 10 Motif3b: 11 Motif3c: 12 Motif3d: 13 ForeshadowingMonster1a: 14 ForeshadowingMonster1b: 15 ForeshadowingMonster2a: 16 ForeshadowingMonster2b: 17 ForeshadowingTreasure: 18 ForeshadowingTrap: 19 ForeshadowingDynamicElementa: 20 ForeshadowingDynamicElementb:

