# Mother Of Learning — Universe



## **Basics of Magic — Mana**

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If one asked two random scholars for a definition of magic, they would probably get five different answers. At its core, though, magic is pretty simple to understand — it is a process by which magical creatures and mages utilize mana to affect themselves and their surroundings. Most of the arguments stem from disagreements about how direct and conscious such mana utilization has to be in order to count as "magic." Do the "impossible" biologies of magical creatures and passive magical traits of some human bloodlines count as magic, even though there is no conscious shaping of mana? Should alchemy and other forms of magical artifice, which simply utilize magical materials and involve no actual mana shaping themselves, be classified as magic?

For many people, such questions are nothing more than pointless theorizing. For an average civilian, a mage is a very broad and fuzzy concept — a lot of them consider even products of mundane engineering, such as trains and guns, to be a form of magic. The fact that fancier versions of technology often include some form of magic in their construction doesn't help in that regard. However, for people whose lives depend on magic, the questions are not entirely academical. Magic and people involved with it are extensively regulated in most places, subject to closer scrutiny and higher taxes, so many people would object bitterly to the idea they are mages or working with magic. On the other hand, mages have a high status in society, and are often incentivized and protected in various ways, so a lot of people fight hard for their right to be considered "real mages."

Legal definitions aside, it is obvious that any explanation of magic is inextricably connected to an explanation of mana — the mysterious energy that provides the fuel and building blocks necessary for it to work.

### Mana:

Mana is an invisible, intangible substance that powers magical abilities and phenomena. Every soul produces it to some extent, and massive quantities of it well up from the depths of the planet to inundate the underworld and large portions of the surface. In many ways, mana behaves as a strange type of gas, although one that can pass through and permeate solid objects.

Mana comes in two main types: personal (or attuned) mana and ambient (or raw) mana.

### Personal Mana:

All beings with a soul have a pool of personal mana at their disposal. The size of this pool varies greatly between individuals of same species, but it's always there. Since this mana is attuned to the mind and body of the being producing it, it bends easily to its creator's will. This makes personal mana innately more malleable and controllable than anything else a magic user might use to power their magic, as it does not resist the caster's efforts to shape and wield it.

Mages refer to this pool of personal mana as their mana reserves. If any of these reserves are spent, they will gradually refill themselves on their own — souls generate mana *ex nihilo* at a rate proportional to the size of one's mana reserves. In addition, it is possible to speed this process up by absorbing a steady trickle of ambient mana and assimilating it into the one's mana reserves.

It takes anywhere between 30 minutes and 3 hours for a mage to regenerate their mana reserves from total zero to full if ambient mana levels are sufficiently plentiful, depending on their personal skill and willingness to risk mana poisoning. It takes about 9 hours to do the same if they're in one of the rare "dead magic zones" that have no ambient mana whatsoever. Most places have at least a little ambient mana floating around, however.

This is unaffected by the size of one's mana reserves — those with higher reserves will simply regenerate more mana per minute.

Although higher levels of ambient mana are helpful in speeding up personal mana regeneration, beyond a certain point the individual's ability to siphon ambient mana to regenerate their own will depend more on their ability to assimilate said foreign mana safely than actual mana availability. Generally, mana wells of

rank 3 or higher are important only in the sense they allow progressively more mages to siphon progressively more mana without depleting the ambient mana reserves.

If separated from the soul it has been attuned to, personal mana will rapidly degrade into ambient mana — which seems to be the default form of mana when not attuned to anything. This makes attempts to create an external storage of personal mana doomed to failure. Regardless of the method used, the mana will unattune itself in a matter of minutes.

Personal mana can be given to another, or be forcibly taken away from people and souls. Since this mana is already aligned with someone, it is difficult to shape and control. This is especially true if it was forcibly taken. The difficulty also depends on how similar the user and mana donor are in mind and body — creatures of two radically different species would find it almost impossible to use each other's personal mana in any manner, for instance. For the most part, mages only use other people's mana in ritual setups, where speed of spellcasting is not a concern and they can take steps to mitigate the additional shaping difficulty.

A soul bond, such as that between a familiar and caster, makes sharing mana easier. Frequent mana sharing between same people will cause them to gradually get used to each other's mana, likewise easing mana sharing ... though only between those specific individuals. Some creatures and bloodlines can innately use other people's mana with greater ease than normal.

### Ambient Mana:

Mana doesn't disappear on its own. Unless it is spent on magic use, any mana that is released into the environment will slowly disperse throughout the area it is in and linger there. This free-floating, ownerless mana suffusing the environment is called ambient mana.

Ambient mana is everywhere. Aside from a handful of rare (and mostly artificial) areas, most of the planetary surface has at least small amounts of ambient mana suffusing it. There is too much mana floating around for it to come from living beings, who are rarely in the habit of pointlessly venting their mana reserves into area around them. Where, then, does all this ambient mana comes from?

The short answer is that it comes from underground. Beneath the surface of the world is an extensive network of tunnels and caverns known by many names, but most commonly as the Dungeon and the Underworld. The Dungeon is very rich in ambient mana, and the deeper one goes, the higher the concentration of ambient mana becomes. Something down there seems to be generating incomprehensibly huge amounts of mana, which then gradually wells up to the planet's surface.

No one has ever descended deep enough into the Dungeon to find the source of all this ambient mana. Since the only other thing that produces mana are souls, most cultures have decided since ancient times that there must be something alive down there. Something so powerful that its soul produces all this mana to inundate the world with. For example, the Ikosian creation myth states that this something is the heart of the World Dragon, from whose body the entire world was fashioned. Ultimately, though, nobody knows the answer to this mystery, and it is unlikely it will be solved any time soon.

Although ambient mana is relatively abundant in most places, it cannot be used directly for spellcasting. Or more precisely, it is very unwise to do so. Ambient mana erodes and damages things that channel it, which makes it highly toxic to living beings. Even small amounts of it will cause people to sicken and become delirious for hours or days, and prolonged use will quickly result in permanent physical disabilities and incurable madness. Drawing too much of it at once will lead to the death of the user, usually via sudden body explosion or being cooked from inside out.

Despite these dangers, ambient mana is still in widespread use. The simplest, as well as the most reckless, form of this consists of outright ignoring the dangers in isolated occasions. This is certain to incapacitate the mage in question for quite some time afterward, but if the situation is desperate enough, they might feel the price is worth it. Since overuse of this tactic can easily result in reasonably healthy but thoroughly insane mages (with all the dangers this implies) the practice of drawing upon ambient mana is usually categorically banned in most places. Most mages do it anyway if they are backed into a corner or think they're about to die if they don't, so in most cases the authorities turn a blind eye to such usage of ambient mana.

Toxicity aside, ambient mana does not resist being wielded. It is relatively easy to shape into effects, though not as much as one's personal mana.

The second, and probably the most widely used method, is to utilize ambient mana to augment the regeneration of one's mana reserves. This is done by slowly drawing upon ambient mana and assimilating it into existing mana reserves. In the past, this was a rare and ill-understood ability — it is only in the last 200 years or so that mages figured out a reliable and easy-to-learn method to attune ambient mana into one's personal mana reserves. This was mostly done by closely studying magical creatures, who passively and unconsciously use this method to "feed" upon ambient mana. Even today, most magical creatures are still better at assimilating ambient mana than the average human mage.

Finally, it is possible to sidestep the toxicity of ambient mana by anchoring persistent spells upon inanimate objects and instructing them to draw upon ambient mana to power themselves. This is the method used in construction of some magical items and warding schemes. Although, technically speaking, this doesn't negate the destructive tendencies of raw mana usage, a chunk of stone or a block of wood are a lot less delicate than living beings. They cannot sicken, and have no minds that can be driven insane. However, if too much ambient mana is channeled through an object too inadequate to bear the pressure, it can still break, burn, or melt. This ambient mana overload is not necessarily an all-or-nothing deal, and it's perfectly possible for a spell to quietly erode the structural integrity of its anchor over long periods of time until the

damage becomes too much and it collapses under the weight of its accumulated flaws. Poorly made magic items can be quite dangerous for the wielder, and people trying to sell them for a living are often subject to official quality controls of a sort.

Higher order undead, such as liches and vampires, do not have living bodies but are capable of spellcasting nonetheless. At first glance, it may seem that they would be able to use ambient mana a lot more freely as a result. To an extent, this is true — they certainly won't be incapacitated by sickness in the aftermath of such use. However, in order to retain their sapience, such undead need to possess a sort of magical brain to think with ... and that brain is every bit as vulnerable to insanity as biological ones. Undead can't get sick, but that just means they can get insane without being physically crippled — most people, even *undead* people, agree this is not a good thing.

Posted in Worldbuilding | Tagged Magic, Mana | 14 Replies

### **Golems and Undead**

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The desire to foist one's own work and duties upon others is universal, even among mages. *Especially* among mages, if some people are to be believed. Consequently, it should not surprise anyone that many magical methods of acquiring servants have been invented over the ages. Many of these amount to slavery, however, with all the problems associated with that.

Eventually, many mages decided that in order to acquire a truly loyal servant, capable of performing the most demeaning and repetitive jobs without pause or complaint, they must create one themselves.

The two most popular methods for this are golem creation and necromancy.

#### Golems:

A golem is a magically animated doll. It can be built out of nearly any material, but wood and metal are most common — wood because it is cheap, and metal because it offers excellent durability and performance. They can't be built out of a solid block of material; they need joints and such to move and interact with the environment. Thus, the dexterity of a golem depends partially on the sophistication with which their body is crafted with.

Still, while building a proper body for a golem can be tricky, it is ultimately the easiest part of golem creation. The heart of the golem, and the part most difficult and expensive to make, is the animation core that allows it to move and interpret orders.

Essentially a fancy ward stone at its core, the animation core is imprinted with a multitude of animation spells that work together to give the golem a semblance of life and intelligence. The extreme amount of animation spells that have to be imprinted on such a small object mean that the animation core must be constructed out of very expensive materials and designed by a specialist in golem making. These specialists must have excellent skills in both animation magics and spell formula, and tend to be reluctant to share their craft. Consequently, golem creation is a relatively rare skill, and golems themselves are an unusual sight in most places. Most people find it cheaper and easier to just hire human laborers.

Like all animation spells, golem animation is limited to skills and abilities that the caster knows how to actually perform. As such, almost every golem is humanoid in appearance, as that is the easiest form to animate for humans. Creation of non-humanoid golems typically requires that the caster spend some time shapeshifted into the target form in order to familiarize themselves with it.

Although technically capable of autonomous operation, it is typically a bad idea to leave a golem completely unsupervised for large periods of time. No matter how sophisticated their animation core, they are still mindless constructs and often do shockingly stupid things if left on their own. Most operations that employ golems field them along with a human overseer (who doesn't have to be a mage) that makes sure they actually do what they're supposed to without complications.

Aside from their high cost of creation, golems are also limited by their need to consume mana to function. This means that golems need either mana-rich environments to work in, or their owner must pay extra for crystallized mana to serve as an internal battery.

Though rare in civilian environments, golems see heavy use in most countries' militaries. Most military golems are made out of alchemically treated metal, and have a wide variety of defensive wards imprinted onto their body and core, making them highly resilient and resistant to offensive magic.

#### Undead:

Although soul magic deals with all sorts of different aspects of the soul, one of the most iconic powers of necromancers is their ability to animate the dead. With sufficient access to corpses and appropriate souls, a necromancer can create a small (or not-so-small) army of tireless warriors and laborers. Unfortunately for necromancers, most people do not appreciate the enslavement of souls needed for this to work.

Mindless undead, such as most zombies and skeletons, are essentially golems that use souls as a substitute for an animation core. This makes undead a lot cheaper, easier, and quicker to make compared to regular golems. Using an existing body also helps to drive down costs, as it's a lot easier to make a corpse than a sophisticated puppet.

The first part of this process is to acquire a suitable soul for reanimating the body. Souls of most creatures

stay anchored to the body for a while after death — unless the body is totally destroyed — but after that they move on to the spiritual planes and are beyond the reach of mortal necromancers. Thus, extracting a soul from a body that had died a long time ago is not possible. A necromancer needs access to the recently dead to capture the souls they need to practice their craft. Getting access to the dying in their last moments can be tricky, so most necromancers resort to producing their own recently deceased corpses (through killing).

Once a necromancer has one or more souls captured and ready for use, they need a suitable body. A soul can only serve as an animation core for a body that is similar to the one it once inhabited, so one cannot use animal souls to animate humans and vice versa. Obviously, the quality of the animation is the highest if the necromancer uses a soul that was originally matched to the body in question, but any human soul will do to animate most human bodies.

The body that is to be animated is typically put through a preservation process to stop it from rotting, as it will not last very long otherwise. Despite this, most zombies will break down over time, depending on how intensely they are used, how good their preservation is, and on how hostile the environmental conditions they operate in are. Skeletons tend to last longer than zombies, but also tend to be weaker and less dexterous, as the soul is meant for controlling a body of flesh and not one of bone.

Despite some fanciful depictions in stories, zombies do not shamble and stumble about — they move with the speed and coordination their living forms once possessed. They are still as mindless as any other golem, however, and do poorly if left to execute orders without supervision.

The souls that animate the undead have another function besides being cheaper than a constructed animation core — they are sources of mana, meaning undead always have their own power sources. This makes undead easier to use outside of magic-rich areas than regular golems.

Despite its many advantages over classical golem making, undead creation is seen very unfavorably in most places. Necromancers desecrate the bodies of the dead and enslave their souls, which makes their actions completely taboo for most people, regardless of possible efficiency gains. Priests in particular hate the practice, as the gods pronounced it extremely blasphemous while they still talked to people. Any country that tried to legalize necromancy would inevitably find itself a target of a coordinated holy war from all their neighbors.

### Flesh Golems:

It is possible to animate a corpse with the aid of an animation core. Using a corpse instead of an artificial puppet cuts down on the costs somewhat and is often not outright illegal in the same way real necromancy is. On the other hand, flesh golems carry many of the same stigma that regular zombies do, regardless of what the law says, and flesh is not a terribly good material for golems. As such, flesh golems are rather

Particularly capable necromancers will sometimes make sophisticated flesh golems by fusing various corpses and body parts together, often drawing upon corpses of different magical creatures and incorporating non-biological parts into the construction. The resulting body is too different from its component parts to be animated with a soul and requires an animation core to function properly. Souls may be used in the construction regardless, in order to help power the thing.

Posted in Worldbuilding | 55 Replies

## Sapient Species of the World

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Posted on July 2, 2016

Humanity is undisputedly the most advanced sapient species in the world, both technologically and magically speaking. This is partially because humanity has been enthusiastically stealing and/or copying magic and secrets of other species. The other likely reason is the fact that humans, in addition to being far more unified than other sapients, are also more willing to trade with each other than the rest of the sapients of the world, who are largely tribal and insular. For all their infighting and wars, humanity is eerily well coordinated by other species' standards.

Still, there are some sapient species that have managed to hold their own in the steadily human-dominated world. This article will tackle the most successful ones — the ones that are not just surviving, but have even managed to thrive in face of human expansion. In some cases, it was precisely human expansion that empowered them, either by exposing them to novel magics and technologies, or by eliminating their traditional competition.

### Lizardmen:

The largest continent in the world is a serpentine landmass closely hugging the equator. There are very few humans here — treasure hunters, adventurers, and researchers occasionally launch expeditions to explore the area, but there are no permanent human settlements. The many unfamiliar and aggressive magical creatures that make their home in the jungles are one of the reasons why, but there is also the issue that the continent already has a dominant sapient species.

The lizardmen are the dominant force on Blantyrre. Their city-states and small kingdoms dot the entire continent, and though they quarrel often, they have a sufficiently unified identity that they cooperate against common threats. They were a Stone Age culture before human ships started trading with them, but even then they built great, walled cities and used surprisingly good tools made out of obsidian and some more

obscure magical materials. With the coming of the humans, they have learned the secrets of metalworking and even some of the human magics, allowing them to expand out of their traditional areas. Previously, the lizardmen lived almost exclusively along the costs and rivers of Blantyrre, but now they push ever further into the continent's interior with every passing day. The coastal communities are still the most advanced and powerful ones, however, due to the easiest access to human traders.

By human standards, the lizardmen are still awfully primitive. They have no firearms or advanced machines of their own making, and their native magics are weaker than human ones and restricted to their priestly caste. Nonetheless, the few times that humans have launched attacks on their city-states, the lizardmen have inflicted crushing defeats on the attacking forces. Their greater knowledge of terrain, the sheer number of warriors they can muster in response to aggression, and the tendency of their city-states to band together when faced with outside attacks have convinced humans that the only way to deal with lizardmen is through trade and diplomacy.

Lizardmen are perceived to be the only civilized species beside humans, which affords them a certain amount of respect and interest, but they are still a lesser species as far as most humans are concerned.

Lizardmen are just as intelligent as humans and stronger than them, but they tolerate the cold poorly and require moisture to keep their scales healthy, so they are far more limited about where they can live and form permanent settlements in. Fortunately for the lizardmen, "warm and wet" describes just about every part of Blantyrre. They are proficient swimmers and divers, but poor runners by human standards.

Socially, lizardmen are usually led by warrior societies (whose leader is also the king/chieftain of the polity), but the priesthood is a powerful and influential force. The two often but heads over which course a polity should take. The warrior societies are usually more liberal and outward-focused, but warlike. The priesthood is more insular and traditionalist, but more inclined to solve problems with diplomacy.

In addition to performing religious ceremonies, members of the priesthood are also practitioners of traditional lizardman magic, which only they are permitted to practice. Some lizardmen have begun to adapt human magic for their own use, claiming that its human origin makes it exempt from such restrictions, which puts them at odds with the priesthood that wants to maintain monopoly on magic use and considers human magic heretical.

Lizardmen travelers are rare outside Blantyrre, but not unheard of. The main problem is that most human polities have legal systems designed exclusively around humans, since wider definitions weren't necessary at the time of their making. Lizardmen visitors therefore tend to be in a bit of a legal vacuum as far as law enforcement is concerned. They're unlikely to be attacked on sight, but they will attract attention wherever they go.

The lifespan of a lizardman is roughly comparable to that of a human.

#### Aranea:

Aranea are a species of large, sapient jumping spiders. All aranea possess innate telepathic powers, which they use as their primary method of communication and self-defense. They are native to the continent of Altazia, where they tend to make home in the shallower sections of the Dungeon next to human communities. They naturally congregate into small tribes (called webs) that maintain influence over a particular territory, and usually exist in a form of symbiosis with the local human communities. They rarely make their presence known to the humans at large, however, preferring instead to interact with a select few individuals and use their mental powers to make sure their trust is not misplaced. If their existence is exposed and their webs threatened, the aranea simply pack up and leave for greener pastures.

Aranea were originally a species that struggled to survive, being relatively weak in body and lacking tool-making capabilities that most sapient species rely on to thrive. Their mental abilities, though impressive, were often insufficient against the world's various monstrous denizens. Worse, their habit of making their homes in the shallower portions of the Dungeon often caused them to clash with the local species of underground humans — the morlocks.

When the Ikosians started arriving on Altazia, they unintentionally helped the aranea by shattering morlock civilizations, getting rid of their main competitor. Since the Ikosians didn't live underground and ventured into the Dungeon only in a limited fashion, the shallow Dungeon was effectively given over to the aranea, who enthusiastically staked out their claim. The Ikosians then proceeded to slowly push back and eradicate the most dangerous magical monsters out of their territory, which also helped aranea, who even helped the Ikosians sometimes by alerting humans to hidden monster nests and other common threats. Finally, the Ikosians also brought with them their particular brand of magic, which was both very powerful and versatile ... and surprisingly easy to adjust to aranean purposes.

The aranean web beneath Cyoria was the first web to translate human magics into something suitable for an aranea, and they took advantage of their newfound power to rapidly expand throughout the continent, assimilating, coopting, and eradicating the less magical webs. Though the resulting new webs were still independent, their common origin resulted in them all sharing a relatively similar identity, which has been a major boon for the aranean species.

Aranea range 40–50 cm in length, about the size of an adult human's torso. Appropriately for what is essentially a larger jumping spider, they possess impressive jumping ability and great reflexes. Also like regular jumping spiders, they possess two large, forward-facing, pitch-black eyes that give them excellent vision. This is supported by three pairs of smaller eyes that give them fuzzier 360 degrees vision. An ability to sense vibrations through their feet also plays a large role in their perception of the world, as does their ability to "taste" things they are touching with their leg hairs. Most aranea are black in coloration, but brown hues and various patterns are not unheard of, and some have even lost all pigmentation and become white.

Aranea exhibit extreme sexual dimorphism. Males are much smaller than females, and subsapient.

Contrary to what one may think, this does not cause the aranea to look down on males from other species.

That said, most aranea are deeply prejudiced against non-psychic individuals, viewing them as fundamentally crippled and thus looking down on them as "flickerminds."

Aranea grow up to sexual maturity in only two years, but they are not considered proper adults until they are six years old or so. They can live up to 45 years under ideal conditions.

### Sulrothum:

The Cataclysm that turned northern Miasina into the Xlotic Desert did more than just devastate the Ikosian civilization through climactic changes. The desertification of the environment also allowed many magical creatures that thrived in the desert to extend their habitat northwards. One of those species was a type of giant, flying insects that the Ikosians named Sulrothum — which loosely translates into "devil wasp."

Sulrothum are a species of large (3 m long) intelligent insects, pitch black in color, and vaguely resembling long-limbed, emaciated wasps. Despite their thin builds, they are incredibly strong and durable, far more than their build would suggest. They have no stingers, poisonous or otherwise, their wasp-like appearance notwithstanding. They can raise themselves into a bipedal position when standing still, allowing them to use their four forward limbs as arms, but they cannot walk in a human manner and must drop to a horizontal position and use all six of their limbs if they want to walk somewhere. Walking is not their preferred form of movement, however, as their forward limbs are more suited as arms than legs — instead they prefer to fly, using the four dragonfly-like wings growing out of their back. They can fly quite fast, but their endurance and maneuverability is passable at best.

Sulrothum are a desert species, and originate from the dry, rocky wastelands of the Red Valley in central Miasina. There, they dug their settlements into the walls of the many cliffs and rocky outcroppings scattered around the region. The desertification of Xlotic allowed them to spread far to the north, and their shocking strength and resilience, coupled with the considerable mobility advantage that came from them being all fliers, allowed them to push out existing natives and establish their own territories. This even included human communities, who were by then deeply hurting from climactic shift and the frequent civil wars that accompanied it.

The Sulrothum cannot speak a human tongue, their mouthparts incapable of producing proper sounds to manage it, but they are quite intelligent and some have learned how to understand nearby human languages. Originally a Stone Age culture, the Sulrothum have adopted many human technologies, either by studying looted objects or questioning human captives. Things like firearms and complex machines are beyond them, but metal working skills and architecture are getting quite advanced.

Humans look at Sulrothum with great suspicion and distrust, seeing them as dangerous raiders. While they

are not inherently aggressive by nature, desert living is harsh, and many Sulrothum communities are desperate or opportunistic enough to attack caravans and communities near their territory. Their great strength and ability to fly means they can strike hard and retreat into their desert strongholds before an effective resistance can be organized. The goal of these raids is to steal rather than kill, but the Sulrothum won't hesitate to kill anyone who objects too vigorously to such appropriation.

Contrary to common human beliefs, Sulrothum do not eat human captives — eating intelligent prey is completely taboo to Sulthorum sensibilities.

Though largely antagonistic, more peaceful exchanges between humans and Sulrothum do occasionally happen. Sulrothum are perfectly willing to serve as mercenaries in human wars, or guide expeditions deep into the desert while warning them away from non-obvious dangers. Additionally, some Sulrothum tribes mine precious metals or cultivate rare plants, and will trade these to nearby human merchants.

The Sulrothum resist heat and drought extremely well, but they tend to rest during the hottest part of the day, only leaving their settlements in the evening ... mostly to hunt, which is their main method of feeding themselves. They are omnivores, much like humans, but much of their diet is carnivorous in nature — they feed primarily on various animals they catch, but will gladly supplement those with any edible plants they discover in their territory. Tribes that live in areas that border with more verdant regions eat plant matter more regularly, and coastal tribes are often fond of fishing. In any case, their large size and poor environment mean that they have trouble supporting large communities, and tend to be few in number.

Socially, the Sulrothum lifestyle revolves around religion. They have an extremely developed pantheon of gods and goddesses, the most important of which is their goddess of the sun, who is the head of their pantheon and the patron of their species. According to their creation stories, they were not actually created by the gods, but are instead the children of angels who serve the gods as their enforcers and messengers. The Sun Goddess, upon witnessing their birth, took them under her wing and decreed them to under her authority and protection as well, just as the angels they descend from. Accordingly, Sulrothum consider themselves celestial agents and place great importance on living up to their duties and not breaking any of their religious taboos.

Sulrothum are very superstitious and see divine influence everywhere, always searching for omens and prophecies. They make heavy use of hallucinogenic drugs made from certain desert plants during their religion ceremonies, believing the resulting visions to carry great meaning and messages from the gods. They consider fire to be sacred, due to its perceived link to the sun, and will cremate their dead if possible.

Sulrothum are not a hive species, despite their wasp-like appearance. They do not have the centralized queen-drone structure that most colonial insects use, and are instead composed out of numerous male-female couples that work together to form a single colony. Females can choose whether or not to become pregnant, and in normal circumstances only the high-ranking ones are allowed to do so on a regular basis:

resources are usually insufficient to allow every couple to raise their children to adulthood. Breeding restrictions are also the main reason for breakaway groups leaving to find new territories — if the lower-ranked couples feel they are being unjustly restricted (there is plenty of resources, but they are still not permitted to have children), they have a tendency to break off from the main colony and seek out a new place for themselves. The young start as maggot-like and non-sapient, but metamorphose into miniature, flightless versions of the adults within a matter of months. These "youths" are sapient and will spend anywhere from six to eight years learning and performing various menial chores in the colony.

A healthy Sulrothum individual can live up to 65 years, but most die sooner than that to disease, warfare, and accidents.

### **Dragons:**

Few magical creatures have inspired more fear, or more admiration, than the mighty dragons. Large, fantastically durable, magically resistant, armed with powerful innate magic, flight-capable, and smarter than humans on average ... the dragons possess many advantages over humanity. Even the spread of firearms and the gradual increase in magical sophistication among human mages have only chipped those advantages slightly rather than rendered them irrelevant. Despite their constant clashes with human communities and even the occasional campaign to wipe out their nesting grounds, the dragons for the most part continue to stubbornly resist human encroachment into their territories.

Dragons are very large magical creatures, measuring up to 8 meters in length in their adult form. They are fast and enduring fliers, despite their size and weight. Although their flight is clearly magical in nature, they do need their wings to fly, and damaging them will ground the dragon until they heal. Though shockingly durable, and thus hard to wound or put down for good, dragons do not possess supernatural regeneration and any wounds they suffer in battle will linger with them for a long time. Lost limbs will likewise not grow back, and it is possible for a dragon to end up permanently crippled if a fight goes poorly for them.

All of this means that dragons, contrary to their fierce reputations, dislike getting into even fights. When faced with something they think can actually hurt them, dragons prefer to launch surprise attacks, making use of their flight and innate magic to stay out of range of attackers. The advent of firearms has complicated this tactic somewhat, but adult dragons are capable and canny enough to lure entire army groups into traps, drop huge boulders from huge heights on top of static targets and make use of their superior senses to launch raids during night hours, heavy rains, dust storms, and other times of reduced visibility.

Dragons are highly magical creatures, and thus need highly magical areas to lair in. Fortunately for dragons, their powerful flight and huge mana reserves allow them to venture far from these places, which means this restriction limits them far less than most other highly magical creatures. They typically spend days or weeks touring their territories, periodically returning to their lairs to rest and recharge. If a dragon loses its lair, and cannot find a suitable replacement, it will either die of magical starvation or be forced to

spend a lot of its time in vulnerable sleep in some less magical location. Since a dragon's lair is so critical for their survival, and since highly magical locations are in great demand by just about everyone, dragons are fiercely territorial creatures, always ready to defend their claims against challengers — be they human, monster, or a fellow dragon.

Dragons mature very slowly, taking more than a hundred years to reach full size and maturity, though they are technically capable of breeding while still in their 40s. Females produce 4–6 eggs with each pregnancy, and can get pregnant every four years or so. Parenting is done primarily by the female in most cases, though the father often helps by bringing her food and helping her defend her territory while she's busy with their children. Despite their durability and impressive capabilities, most dragons will never reach adulthood, as their mothers have a tendency to kick them out of the nest as soon as they can fly and many things find young dragons to be a tempting prize. If they can actually reach full maturity, however, there is little than can truly threaten a dragon. Even if they encounter something that is beyond their means to defeat, they can usually retreat and live to tell the tale.

Dragons don't appear to grow weaker with age, and several have been confirmed to be more than a thousand years old.

Dragons possess their own brand of structured magic, which has never been successfully copied by human mages. Quite simply, the issue is that dragons possess far bigger mana reserves than humans, and the sheer amount of energies involved in dragon spellcasting is virtually impossible for human spellcasters to match. Not every dragon is proficient in this form of magic, however — most don't have the talent or patience for it, and instead simply rely on their innate magical abilities.

Probably the most serious weakness of the species is that they are highly solitary creatures. Although they do occasionally congregate into larger groups, this is usually induced by outside pressure and these groupings fall apart quickly without external threats to keep them together. Young dragons, especially siblings, will often form small bands and stick together for a while, but these tend to fall apart as they age, individual members gradually leaving to set up their own domains. There have been several known attempts by powerful dragons to start a dragon civilization, but all have ended in failure. Nonetheless, as humanity continues to advance and pushes into the wild corners of the world ever more insistently, these attempts are getting more common, and last longer and longer each time before they fail ...

Posted in Worldbuilding | 44 Replies

### **Story Format Converters**

Posted on May 15, 2016



Not a worldbuilding post, but something that readers of my story might want to see anyway. One of my readers — jkwrites — has made some scripts that automatically convert the story into PDF and other formats when you click on them. I know some of my other readers have been asking for things like, so this so here are the links if you're interested:

PDF: https://gitlab.com/jkwrites/mol-ebook/raw/master/mol.pdf

MOBI (Kindle): https://gitlab.com/jkwrites/mol-ebook/raw/master/mol.mobi

EPUB (Other readers): https://gitlab.com/jkwrites/mol-ebook/raw/master/mol.epub

Posted in Fanart | Leave a reply

### **Continents Overview**

2

Posted on May 1, 2016

The world has 5 major landmasses: Blantyrre, Oreina, Altazia, Miasina, and Hsan.

**Altazia:** The focus of the story. This is where Eldemar and the rest of the Splinter States are located. The south is firmly dominated by humans, while the northern forests and mountain ranges are still monster-infested wilderness. Native human societies of Altazia were conquered by Ikosian refugees coming from Miasina in the wake of the Cataclysm, adopting their magic and many of their cultural customs in the process.

**Miasina:** The place where the Ikosian Empire rose and fell. Roughly speaking, Miasina can be divided into the northern part (Xlotic) and the southern part (Koth). In the wake of the Cataclysm, the northern part of Miasina has been transformed into a giant desert. The south has always been largely covered in jungle. Miasina was once the center of the human civilization, but the fall of Ikosia and the creation of the Xlotic Desert has greatly reduced its global importance.

**Blantyrre:** The biggest continent, but also the one without significant human presence: the majority of the continent is covered with a thick jungle crawling with dangerous monsters and non-human races. The most advanced species (technologically and magically) are lizardmen, whose city-states and small kingdoms dot the entire continent.

**Hsan:** The third and last continent inhabited by humans. Hsan is rather distant from Altazia and Miasina, and has been isolationist and stagnant ever since the Ikosian Empire (its main trading partner) fell.

Outsiders view it as very mysterious place, and all sort of wild tales are told about it.

**Oreina:** Located near the South Pole and mostly covered in ice, Oreina is both very inhospitable and very far from existing human civilization centers. There are no native humans there, and no reason for any to settle on its shores either. Very little is known about this continent.

Posted in Worldbuilding | 2 Replies

## MoL Links, Fanart, Translation, etc.



Posted on May 1, 2016

As noted in the opening post, the main story can be found at fictionpress, here. In addition, my fictionpress profile also holds some important information, such as the next chapter release date and answers to some common questions.

For those who wish to send me money, I have a patreon page here.

There is a MoL Wiki at this web address. I'm not involved in filling it out, but my fans have been pretty active.

In case you're curious about how the setting looks like, you can see a rudimentary map of Altazia here. There is another map focused on political divisions and city placements here. Another map.

Also, I have fanart! Rizaki717 has drawn some illustrations for Chapter 1 and posted them on his DeviantArt Account (click here). Specifically, he has posted a picture of Kirielle wake-up scene, Ilsa's visit, The ever-mysterious bicycle girl, Benisek, Taiven, Magic staff, and Xvim's wonderful lesson. Taiven doesn't really look like that in my head, but hey. My favorite is the Xvim scene — the expressions are perfect.

Pocket Size Sleuth has been making fanart of MoL characters, and you can finally see two examples of that. Go see Zorian and Kirielle at sketchmemo.wordpress.com.

LUCA has done some drawings of Zorian. You can find them here and here.

Zyellowz has drawn an illustration of Zorian and his siblings that you can view here on his tumblr page.

Sheep has drawn a picture of Red Robe, which can be found here. Also another round of fanart here.

One of my readers is doing a Russian translation of the story. You can read it here.

Another one of my fans has been doing a reading/audiobook of Mother of Learning. The first three chapters

are done (but still pending some editing) and can be found here, here and here. Or you can just go to her website/tumblr stream at http://avtid-oftime.tumblr.com/.

Some helpful tables made by UII (who also did the audiobook up above):

MoL Character Appearance Chart: Lists all characters that appear in a particular chapter. If you ever wondered when a particular character showed up or when it was last mentioned, this will help.

MoL Time Table: Tries to keep track of how much time had passed in the story. That is, how many restarts did Zorian live though, and how long did they last (if they were cut short).

Armaell has made an epub of Arc 1 for people who prefer reading MoL that way. You can find it at http://ebooks.armaell.fr/author-nobody103#MotherofLearning.

Posted in Fanart | 9 Replies

# Welcome to MoL Worldbuilding

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Posted on May 1, 2016

Welcome readers. The site you are looking at is dedicated to posting worldbuilding content related to my story, *Mother of Learning*, which is posted on fictionpress here. MoL is a fantasy story about a teenage mage stuck in a time loop, trying to survive and figure out what is happening to him ... while figuring out important truths about himself and others around him along the way.

I have put a lot of thought into the setting of the story, and not all of them can be fitted into the plot without hurting the overall flow of the narrative. Since I feel it is a shame to simply let these background information sit uselessly on my hard drive, and since many people have expressed a desire to read these worldbuilding notes, I have decided to start posting them here.

I will also post other MoL related content here, such as fanart I have received.

I hope you will enjoy reading about Mother of Learning Universe as much as I have enjoyed making it.

Posted in Uncategorized | 1 Reply