Ars Magica

A unified approach to Illarion's magic classes

Table of Content

1   Preamble

Dear fellow Illarionites,

In the following text, I want to plot the future development of Illarion's magic system. This document is meant to be the seed of our master plan for magic development and, for the first time, is an overall concept for all magic classes and their distinction. It does not include detailed lists or concrete numbers for this won't fit the scope of an overall concept and is up to the actual development process.

Note that this draft replaces all former drafts of mine and incorporates most drafts of others I read about. I want this document to become a cooperative work of all interested developers – so I will gladly add your ideas and consider your concerns in every aspect. Just quote the paragraphs that need a change and propose your concrete modifications. Take this concept as the seed and let us make the tree grow to heaven!

Estralis

2   Reference Documents

Please also read these documents and try to extract ideas and details that are not listed here but are in your favour. Please note that we still should follow the KISS principle and keep things simple - for we shall not be without magic for another four years due to an unreasonable high level of complexity of the systems.

- Evie's overall magic conception:
  http://illarion.org/community/forums/viewtopic.php?f=24&t=38975
- Teflon's priest system proposal:
  http://illarion.org/community/forums/viewtopic.php?f=14&t=38701
- Estralis' group forming idea (German):
  http://illarion.org/community/forums/viewtopic.php?f=24&t=33200
- Aragon's original priest magic concept (German):
  https://illarion.org/mediawiki/index.php/Priest_concept
- Rincewind's rune magic document:
  http://illarion.org/community/forums/viewtopic.php?f=24&t=37480
- Rune magic by Silverwing:
  http://illarion.org/community/forums/viewtopic.php?f=14&t=38604
- Alchemy II by Merung:
  http://illarion.org/community/forums/viewtopic.php?p=687183#p687183

3 Overview

Illarion will feature three exclusive magical classes. A character can only follow one magical path or none but not two or three. Switching classes will be possible but at total loss of all skills and abilities of the former class. For each class, there is a set of actions that focuses on direct effects while another set of actions provides "crafted"/"modified" items that can be used by anyone. Every magic user is free to use both types of actions at will even though their mechanics differ significantly.

3.1 Arcane Magic

3.1.1 Arcanians
The mysterious Arcanians combine secret runes to magical spells of devastating power.

3.1.2 Glyph Forgers
Using ancient lore, a glyph forger enchants pieces of jewellery that channels magical force.

3.2 Priest Magic

3.2.1 Templars
The champions of the Gods lead their blessed comrades to battle or the next beer drinking festival.

3.2.2 Sanctificators
Holy men of the Gods bless powerful artefacts of divine protection.

3.3 Nature Magic

3.3.1 Alchemist
These experts of herb lore brew powerful potions that might enhance its consumers' abilities or cause serious headache.

3.3.2 Druids
Being one with nature, manipulating the forces that formed the world Illarion is the domain of druids.

4 Basic assumptions and requirements

Illarion's magic classes should base on a common core and conception to avoid contradictions and overlaps, make balancing easy and also, reduce the workload for the developers. This common core manifests in common methods and functions in scripts. Likewise to all skills using the same learn script, all magic classes use the same basic functions to e.g. determine times, successes and influences of skills and attributes. By distinct differences, the magic classes are defined and in no way will they all be like former arcane magic just with different runes and spells. Illarion's position as indie game governs that we have to find unique ways and not just old or stolen ideas. Still, our conceptions have to be realisable and the result must be fun for the vast majority of casual roleplayers out there.

We can and should treat the magic systems as a modular tool box. Release of any magic system must not be blocked by a single spell being not finished or a magic category lacking effect graphics. A modular approach guarantees that we could release even a single spell without having to reinvest any additional work on said spell ever again. Hence, to have the common core first and an overall conception are vital to the whole milestone.

Part of the common conception is that all magic classes make use of the blue bar ("mana") in one way or another, they use a number of five (spell part) plus two skills (crafting part) and have one lead attribute for all their skills. Secondary attributes may support actions and be used in calculations. The role of "mana" (to be renamed to e.g. divine power, mana is just cheesy) differs for all magic classes, but commonly, it is consumed by magic uses and restores over time, scaled by the essence attribute. The restoration of "mana" is very slow compared to hitpoints but also the individual magic use does not consume high amounts of "mana". This enables magic users to use their magic for an extended time, paired with recovery times. Refer to The Elder Scrolls - Morrowind for a similar implementation. As an order of magnitude, the mana bar restores in around twenty minutes for normal characters, to be scaled by the essence attribute. Every magical action consumes mana and may increase a skill - so every action that consumes mana potentially raises a skill.

For all magic classes holds that they are exclusive; no character can join more than one magic class. Consequently, there has to be a fourth "class", the characters that did not yet learn any magic. Changing or completely abandoning magic classes should be possible anytime by removing all skills and benefits from one class before learning the new class from scratch. The actual method - e.g. dedicated NPCs or altars that guide through selection dialogues - is left open for discussion at this point.

A quirky foible of former magic implementation was to impose requirements on learning magic - such as learning a new language, a certain choice of attributes and having cybersex with the right players. A core conception of Illarion is to be a class free game. Hence, there

should be no special requirements on becoming a magician of any kind as there are no requirements for becoming a crafter or fighter. Magic shall be a specialisation for possibly every char. Nevertheless, the exclusive nature of the magic classes imposes limits to the free shaping of a character. At one point, we need a clear rational why we design classes in a class free game - and this rational must not be of technical nature.

In the following, the three magic classes are described in more detail, including supporting circumstances and their general role for the game.

5 Magicians

Magicians can perform the magic of Arcanians and the Glyph forgers. A character can decide to become both or follow only one way of magic, depending on roleplaying preferences.

5.1 Arcanians

The main role of the Arcanians resembles the pre-VBU magicians as invokers of instant effects. Even though most effects can be useful in combat, their options are not limited to damage dealing. These second line supporters need protection to be able to fully exploit their potential as they will most likely be unarmoured.

5.1.1 Typical effects

The spells of Arcanians are divided in five categories, each one being associated to one element. All spells of one category are of comparable effect with a huge variation of parameters that make up the individual spells. Each basic effect contains one aspect that can be scaled by the skill of the character (e.g. damage, reach, duration). The player has a complete tool box to tailor individual spells with a huge variety of possible effects.

- Fire: Direct damage (fireballs, area effects, ...)
- Water: Damage over time (poison, drain effects,...)
- Air: Movement manipulation (warps, pushes, ...)
- Earth: Snares and roots (slowing down, paralyze, ...)
- Spirit: Information about and to characters (position, messages, ...)

Note: There are no pure healing spells for Arcanians but spells can have leech effects that transfer hitpoints.

5.1.2 Invoking of effects

Magical spells are made up of runes. Each rune adds properties to the basic spell of the category. In theory, every rune supplementary to the basic rune (e.g. fire rune) can be added in every combination. The spells are prepared by combining the runes in a proper GUI and can be stored in a GUI element with limited space for future use. Preparing ("crafting") spells takes some time, mana and is done at a static tool (e.g. desk). On the fly combinations of runes are possible, but the prepared spells can be used instantly from the spell book without too much clicking. A spell requires a short casting time that depends on the skill, the number of runes in the spell and attributes. A spell always succeeds unless the caster gets interrupted, but the actual impact on the target differs with its properties. While the spells are generally of instant effect, some spells may have short term effects that last for a while. Every combination of the runes of one category will have an effect; there are no rune combinations that have no effect. Hence, the combination of runes can be regarded a tool kit to tailor distinct spells. Each rune has its own impact on overall mana consumption and difficulty of

the spell (low, medium, high). Thus, the most powerful spells are extremely mana consuming and require high skills.

Example

A basic fire spell gets modified by a rune that extends its range and another rune that increases the affected area. The result is a fireball that can be shot at a distance and deals damage to all characters in an area.

Each spell can of individual, unique runes, with one rune filling one slot of a spell. This means you cannot combine e.g. five times the same rune but need five different runes. Each spell must contain one basic rune (fire, water,…) and modifying runes. Even the most basic spell of one basic rune should have an effect while additional runes modify the basic spell. The total number of runes possible per spell is a matter of discussion, a number between 4 and 6 in addition to the basic rune seems reasonable. Beyond, mana consumption could theoretically exceed 100 % or a minimum skill >100 would be needed.

It should be considered to allow arcanians to "store" their spells in wands. The requirements would be same as for casting (skills, mana consumption etc.). Using the wand unleashes the spell without mana consumption. A wand can only store one spell. The parameters of the caster are saved in the wand's data. It is a matter of discussion if the wand can be used by someone else but the original caster or not.

Implementation details

An effect matrix that gives the effect of every rune on the five basic spell categories is provided below in this document. It includes proposed impacts on mana consumption and increase in minimum skill per rune. Concrete numbers for scalable parameters of the spells (range, area,…) will be generated for the next issue.

Rune		CUN	JUS	PEN	RA	SOLH
	Meaning	**Water Poison**	**Wind Movement**	**Spirit Information**	**Fire Direct damage**	**Earth Immobilisation**
Anth	**Static objects**	Items may be covered in an ice flame	Affects moveable objects	Gets item properties	Items may be set ablaze (flame item)	Items may be covered in a cloud that slows you down
Bhona	**Teaching**	Adds impressive GFX/SFX	Adds impressive GFX/SFX	Adds impressive GFX/SFX	Adds impressive GFX/SFX	Adds impressive GFX/SFX
Dun	**Area**	Increases the area	Area effect	Increase the radius of got information	Increases the area	Increases the area
Fhan	**Sending**	Homing poison attack can bypass obstacles	Moves targets away from the caster	Allows to send gathered information to another player	Homing fireball can bypass obstacles	Homing plant rooting can bypass obstacles
Fhen	**Fetching**	Changes starting point of the spell to chosen location. Closest target is chosen.	Moves targets towards the caster	Get players	Changes starting point of the spell to chosen location. Closest target is chosen.	Changes starting point of the spell to chosen location. Closest target is chosen.
Hept	**Ice**	Adds a stun effect (movepoints)	Adds a stun effect (movepoints)	Set time for information to be fetched when casting identical spell again with Lev	Adds a stun effect (movepoints)	Adds a stun effect (movepoints)
Ira	**Unnatural**	Reduces mana over time	Leeches some mana from the target to the caster	Get mana information	Reduces mana instantly	Stalls mana regeneration of target briefly
Kah	**Food**	Target loses stamina over time	Affects fruits on bushes/trees	Get information on stamina of characters	Target loses stamina	Target gains stamina
Kel	**Flight**	Increases the range	Increases movement distance of one (random) target	Sends a free text to players	Increases the range	Increases the range

Rune		CUN	JUS	PEN	RA	SOLH
Lev	Change	Spell jumps from the initial target to the weakest target nearby	Makes target walk into a random direction	Get information change since casting identical spell with Hept	Spell jumps from the initial target to the weakest target nearby	Spell jumps from the initial target to the slowest (agility) target nearby
Lhor	Illusion	Negates all damage dealt	Does not reveal who casted	Fakes/forges information	Negates all damage dealt	Negates all effects
Luk	Evil	DoT is changed from constant DoT to linearily descreasing DoT with same total damage	Turns targets away from the caster	Gets a player outside the normal radius	Increased damage against priests/bypasses or reduces priests' protection (sanctum)	Entangling plants may grow on affected, suitable tiles
Mes	Light	Target area is illuminated for a while	Makes light beams go from the caster to the targets	Get positions	Target area is illuminated for a while	Target area is illuminated for a while
Orl	Creation	Ice flames may remain on empty tiles	Duplicates effect in a reduced form some moments later	Get skill information	Flames may remain on empty tiles	Spell effect is stored in a trap (poison cloud). Effect is triggered if someone enters the field.
Pherc	Pain	Adds instant damage	Adds instant damage	Get magical resistance information	Adds DoT fire damage	Adds instant damage (thorns)
Qwan	Strength	Increased overall damage	Increases movement distance	Get attribute information	Increased overall damage	Increased effect duration
Sav	Protection	Magic resistance is partially bypassed/reduced	Moves the caster away from targets	Get equipment information (very useful with Anth)	Magic resistance is partially bypassed/reduced	Magic resistance is partially bypassed/reduced
Sih	Healing	Leeches a percentage of the dealt damage to the caster	Transfers some hitpoints from the caster to the affected targets	Get health status	Leeches a percentage of the dealt damage to the caster	Leeches a percentage of the reduced fightpoints to the caster

Rune		CUN	JUS	PEN	RA	SOLH
Sul	Slowness	Spell is changed from an instant to a slowly flying one that can be dodged. Increased effect.	Adds a snare (movepoint reduction over time) to the effect	Get movement information	Spell is changed from an instant to a slowly flying one that can be dodged. Increased effect.	Adds a snare (movepoint reduction over time) to the effect
Tah	Inversion	Spell can be cast without target. Weakest target in range is selected.	Turns targets towards the caster	Allow other players to send a free text to the caster	Spell can be cast without target. Weakest target in range is selected.	Inverts effect to add fightpoints. Less effective than the reduction (handle with care)
Taur	Creatures	Increased damage against sentient beings	Affects sentient beings stronger	Get sentient beings	Increased damage against sentient beings	Increased effect against sentient beings
Ura	Nature	Increased damage against animals	Affects animals stronger	Get animals	Increased damage against animals	Increased effect against animals
Yeg	Death ~~Poison~~	Increased damage against undeads	Affects undeads stronger	Get undeads	Increased damage against undeads	Increased effect against undeads
NEW (optional)	Speed	Decreases casting time	Decreases casting time	Decreases casting time	Decreases casting time	Decreases casting time
NEW (optional)	Mana lines	Weaken defence of mana lines	Show mana lines	Get mana lines status	Attacks mana lines	Fortify mana lines
NEW (optional)	Mana nodes	Draw mana from mana node	Draw mana from mana node	Draw mana from mana node	Draw mana from mana node	Draw mana from mana node
Mana cost Minimum skill		Low	Medium	High		

5.1.3   Learning effects

Since each spell is constructed out of runes, learning these runes is the way to learn spells. For this, NPCs are used. These NPCs are not at static positions on the map but change their location dynamically. The NPCs could be wise eremites or ghosts/spirits that roam the world. The NPCs walk on the map almost freely and hence, can be difficult to find even for players who already found them before. Each NPC teaches one rune. The NPC demands certain items, related to the rune, to start the process. He sends the character on a quest to find another specific NPC. It is proposed that the NPCs send the player to a NPC who is responsible for a diametrical rune; Fire sends you to Water, Evil to Light and so on. Once found, the player has to return to the original NPC to receive the rune.

For the quest, an ingame time limit is set, failing the quest resets the quest. New items have to be provided for another attempt without cooldown. It is only possible to have one rune quest at one time and solving a rune quest results in a cooldown that has to expire before another rune quest can be accepted. Rune quests for basic runes can be found in or near the towns while advanced runes require quests that lead the player into dangerous dungeons or hidden places with restricted access (item donation, mazes,...). With the learned runes, spells can be prepared, similar to a crafting process. Spells, prepared once, can be cast unlimited times without having to re-prepare the spell.

5.1.4   Becoming an Arcanian

To become an Arcanian, it is necessary to solve a "rune quest" for one of the five basic elemental runes (fire, water,...) first. Before one of these quests is solved, no other rune quests can be started. There are no formal requirements on attributes nor is the number of runes one can learn limited except for the temporary cooldown.

5.1.5   Skills

Each magical category is one skill (fire magic, water magic,...). The skills are raised with the casting time of each spell being taken into account. Basically, learning magic skills will work like any other skill, using the server.learn script. For casting spells, a minimum skill in the given category is required; this minimum skill is derived from the number of runes in one spell. A spell with just the base rune requires a minimum skill of 0 and every rune adds +10/+20/+30 to the minimum skill, depending on their impact on the skill. This means that the most powerful spells require high minimum skills and some spells cannot be cast at all due to the minimum skill being over 100.

Learning from a low level spell is restricted to the minimum skill +20. One can master all five magic categories as there is no overall cap or limit to the skill points. However, mastering all magic categories will require immense effort and is generally not to be recommended. The skill scales the effect of spells; spells never fail but can fail to have a serious effect on the

target. For example, a stun spell that lasts 1/10 of a second or a fireball that does 100 damage won't really bother anyone. It is possible to convert the old magic skills to the new skills according to the following proposal by Evie:

- Decisio ⇨ Earth magic
- Transformo ⇨ Wind magic
- Commotio ⇨ Fire magic
- Pervestigatio ⇨ Water magic
- Transferto ⇨ Spirit magic

5.1.6 Supporting circumstances

In addition to skills and attributes, robes, jewellery and other items grant an additional bonus on the effects of spells. The bonus of all items stack; the bonus is a scalar number that can sum up to 100 for perfect equipment. Its actual effect is handled in the magic scripts. The magic gem bonus does not apply to this bonus.

Basic resistance against spells is provided by the attribute willpower. The same item bonus applies as described above with the meaning of 100 being determined by the script. If it is decided that magic resistance shall be a skill, then learning this skill shall take the casting time of the spell into account. There should be one skill for resisting each magic class (arcane, priest, nature). Wands grant an additional benefit such as modifying the mana consumption or casting time. Elemental wands are most effective with the corresponding category (Fire wand for fire spells). The non-elemental wand grants an equal bonus on all categories. Proposed factors: Non-elemental wand: 2/2/2/2/2, elemental wand 6/1/1/1/1.

5.1.7 Attributes

Lead attribute of all skills of the Arcanians is Intelligence. As for all magic classes, their mana regeneration is scaled by Essence. Willpower assists them in resisting magical effects.

5.1.8 Use of mana

Mana is directly consumed by the spells instantly upon casting them. To cast a spell successfully, the needed amount of mana has to be there before starting to cast. Mana consumption is not scaled by anything, it is a constant, depending on the runes. The more runes a spell has, the more mana is consumed. Each rune adds a fixed amount to the overall mana consumed. This mana drain scales with the added minimum skill, see 5.1.5. A spell usually consumes just a little of the total mana but a lot more than is regenerated during the casting time. An arcanian can, hence, cast many spells before running out of mana that regenerates slowly.

5.1.9 GUI

Spells are prepared in one GUI element and can be invoked, using another GUI element. The preparation element shall have e.g. five slots for the runes. The runes are dragged from a list to the slots. The slots, e.g. next to the rune list, can be filled in any order or with gaps, see Figure 1. Once the "prepare spell" button is clicked, the runes are sorted and the spell is moved the 2nd GUI element, a quick access bar. This quick access bar has e.g. ten slots. It shall also be possible to cast the spell directly, not using the quick access bar. Preparation for the quick access bar takes the same times as casting the spell and makes the caster learn as if he has casted the spell. The slots of the quick access bar can be cleared by right click and confirming a "Are you sure?" dialog. All runes are represented as icons that give a hint on the use of the rune. The spells are represented by generic icons that represent the magic category and the number of runes. Hence, a two rune spell of fire magic would look like any other; a tool tip reveals the concrete spell and the contained runes. It should be possible to name spells in the GUI element. To cast the spell, the spell is clicked in the quick access bar and the target is clicked on the map. It shall be investigated if auto targeting by using wands is possible and helpful. By right clicking a character or monster, the target would be pre-selected and made target of the spell automatically. Note that not every spell requires a target and no target needs to be selected for those spells.
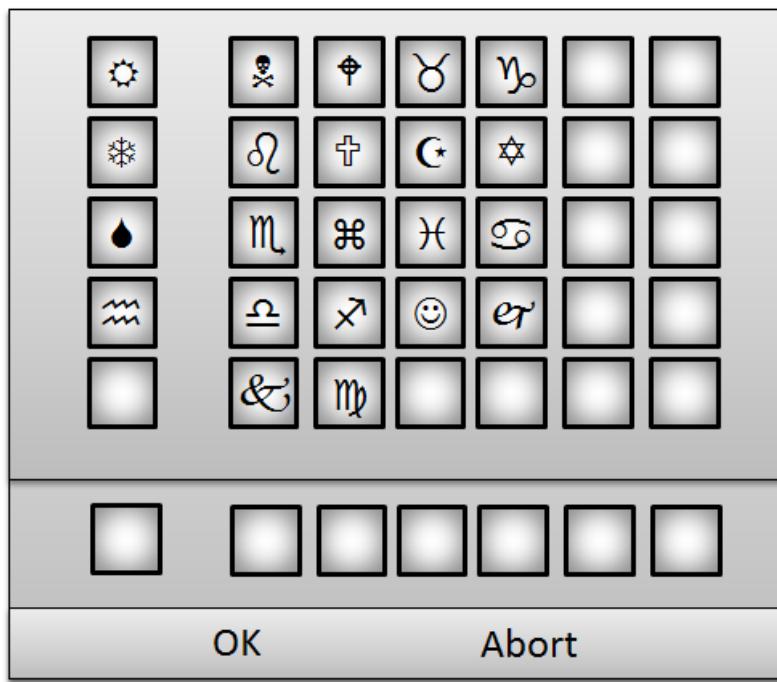
Figure 1: Draft GUI for preparing spells

5.2 Glyph Forgers

Glyph Forgers craft magical artefacts out of jewelleries (rings, amulets) that store a given number of magical effects that can be invoked by anyone. The effects are applied directly and focus on enhancing the capability of close quarter fighters.

5.2.1 Typical effects

The magical effects of the artefacts are of instant nature. Since we have seven gems, three common materials (copper, silver, gold) and two types of jewelleries (rings, amulets), a very obvious approach is to 14 base effects with three levels each.

A typical effect of a glyph forger's artefact is a direct effect that harms the ability of an opponent to fight or enhances the own abilities. Consider special elemental attacks that deal additional damage or debuff the opponent as typical effects. Their effects should all be of elemental nature and orientate roughly on effects of Arcanian spells. Snares, position manipulations and DoT are additional examples. Generally, buffs are excluded except for short time effects. There are no healing effects for glyph forgers' artefacts.

Example

A glyph forger invokes an effect from his artefact. The next hit on a monster will create an additional fire flame that harms the opponent.

With our seven rings being staged, amethysts being the cheapest and diamonds the most expensive ones, the use of the effects should scale likewise. As we have two types of jewelleries, having two classes of effects is also a reasonable approach. Rings should fill the more offensive, active role while amulets might be the more defensive, reacting items. Since one can equip two rings but only one amulet, the amulet effects may be stronger. All effects are invoked at a certain chance (10-20 %), not always. Note: The proposed effects are drafts, your ideas are very welcome!

Rings

- Amethysts: The next target hit loses some actionpoints (stun) but not below a certain threshold.
- Rubies: The next target is engulfed in a flame that causes instant damage
- Obsidians: Upon hitting a target, the bearer is warped to a nearby safe position to avoid counter fire. Especially useful for archers
- Sapphires: The hit target is warped away from the bearer over a small distance
- Emeralds: The affected target is slowed down for a while (snare)
- Topazes: The next target hit takes doubled damage
- Diamonds: The hit target suffers from damage over time. Each additional hit raises the duration of the effect

Amulets

- Amethysts: The next attacker loses additional actionpoints by his attack. The bearer "leeches" a fraction of those actionpoints
- Rubies: Attacking the bearer fires back the dealt damage with an instant fire damage
- Obsidians: The bearer gets warped to a safe place
- Sapphires: Dealing damage to the bearer warps the attacker away
- Emeralds: Attacking the bearer locks the attacker in place for a short time (root)
- Topazes: Attacking the bearer does not damage the bearer but the attacker
- Diamonds: Attacking the bearer makes the attacker suffer from damage over time. Each additional attack increases the duration of the DoT

5.2.2 Invoking of effects

The forging of artefacts is the main action of the glyph forger. Once the artefacts are forged, they can be used by everyone without restriction and help everyone in the same way. Of course, the glyph forger is free to use the artefacts himself. Forging an artefact first requires a bare item, such as a ring. This item can be enhanced with one glyph, see below. Each glyph fits only in one type of item – the glyph for amethyst rings fits just in amethyst rings out of copper, silver or gold. If there is a glyph socketed to an item, no second glyph can be added. The adding of the glyph itself is a process, closely related to a crafting process. However, we should avoid to use a normal crafting dialogue if feasible to stress that glyph forgers are magic users, not some type of tinker, see GUI.

Once the glyph is socketed, the item has to be equipped to make use of it. Obviously, only three jewelleries can be equipped at the same time. Using the item is not an option since this is just too strange to be a serious approach. Upon equipping the glyph, either the next hit target (rings) or the next attacker is affected by the effect of the glyph until the glyph is deactivated again. The effect is triggered at a certain probability such as 10-20 %, not 100% (tbd). An obvious alternative is a cooldown for each piece of jewellery. This cooldown should be in the range of many seconds but less than a minute.

Each glyph provides a fixed number of charges. This number is the same for all items, regardless of the type of glyph or the material used for the jewellery. The material of the jewellery just supports the effect and grants a bonus that is highest for gold items. Once all charges are used, the glyph is removed from the item. Hence, the glyphs are consumables. Glyph cannot be removed from an item. If the item that contains the glyph is also destroyed is left open at this stage. Another option is that the glyphed items loses durability.

5.2.3 Learning effects

Glyphs are not learned but collected. Each glyph consists of seven shards. In total, there are 7x7=49 different shards. These shards are ordinary items that can be combined to glyphs by the glyph forger. Consider the glyphs to have designations from A1 to G7, just like a small field for the game "Battleships", see Figure 2.

A glyph consists either of shards of one row horizontally or vertically; so e.g. A1 to A7 or B3 to G3. The shards belonging to one row share graphically either the same symbol or the same colour – so combining the shards with the same colour OR same symbol is possible. This means we have seven colours and seven symbols. Combining the seven shards of the same colour results in a glyph for a ring (e.g. all green shards with the seven different symbols = glyph for emerald rings), while combining the seven shards with the same symbol gives a glyph for an amulet (e.g. all shards with a star of the seven different colours = glyph for diamond amulets).

	Amethyst ring	Ruby Ring	Sapphire ring	Obsidian ring	Emerald ring	Topaz ring	Diamond ring
Amethyst amulet	Shard A1	Shard B1	Shard C1	Shard D1	Shard E1	Shard F1	Shard G1
Ruby amulet	Shard A2	Shard B2	Shard C2	Shard D2	Shard E2	Shard F2	Shard G2
Sapphire amulet	Shard A3	Shard B3	Shard C3	Shard D3	Shard E3	Shard F3	Shard G3
Obsidian amulet	Shard A4	Shard B4	Shard C4	Shard D4	Shard E4	Shard F4	Shard G4
Emerald amulet	Shard A5	Shard B5	Shard C5	Shard D5	Shard E5	Shard F5	Shard G5
Topaz amulet	Shard A6	Shard B6	Shard C6	Shard D6	Shard E6	Shard F6	Shard G6
Diamond amulet	Shard A7	Shard B7	Shard C7	Shard D7	Shard E7	Shard F7	Shard G7

Figure 2: Glyph shards

The shards are items that can be found as followed:

- Monster drops
- Treasure maps
- Quest rewards
- Random findings at dedicated, "magical" places in dungeons

Searching for the shards, trading them to get a set and collecting them should pose a main motivation factor to play a glyph forger. Once one has all shards for a set, combining the shards to a glyph is necessary. Since all magic classes should be supported by every town, we should have a dedicated static tool for glyph forgers in every town and one in the wilderness. Since an anvil might result in confusion with normal anvils, we should have a more magical static tool. This static tool can be combined with a 7x7 array of columns for a lightshow when a glyph is combined. Glyph forging requires no hand tool. It is magic and no craft, after all.

5.2.4 Becoming a glyph forger

To become a glyph forger, it is necessary collect the shards of a complete glyph. A NPC in each town guides the player through the methods of the glyph forger and combines the first glyph for him, making the player a glyph forger in that process. There are no formal requirements on attributes.

5.2.5 Skills

In total, there are two skills for the glyph forger, one for each type of jewellery (rings, amulets). Each action of the glyph forger related to the jewellery in question triggers the learn function. This covers the socketing of the glyphs, not the combining of glyphs. Since these actions do not happen frequently, they should take very long, comparable to the longest crafting actions, up to three minutes and the duration does not become shorter with rising skill. There is no minimum requirement in a skill for glyph forgers' actions. A newbie glyph forger can, in theory, do the same wonders as a maxed out veteran. The invoking of effects does not contribute to learning the skills as non-glyph forgers can also use the jewelleries.

The actual effect of the skill lies in the quality of the socketed jewelleries. A more experienced glyph forger will socket glyphs in a more efficient way, resulting in better effects. The quality of the used jewellery plus the material of the jewellery (copper, silver, gold) determine the overall power of the jewellery. This power manifests in a quality value for the socketed jewellery that is calculated from the equipment bonus, the quality of the jewellery and the skill of the glyph forger. The charges are determined by the skill of the glyph forger, equipment bonus and the material used with the material granting a bonus. This means that a newbie glyph forger will create low quality jewelleries with a low number of charges. The lower threshold for charges shall be 5 and the maximum in the range of 20-50 (to be discussed). The material grants an absolute bonus of +0/+5/+10 for copper/silver/gold

items. This means that for newbie glyph forgers, the material used matters more than for experienced glyph forgers. Combining glyphs or socketing glyphs into jewelleries does always succeed. There is no risk of failure.

5.2.6 Supporting circumstances

The glyph forgers benefit from the same magical bonus of clothes and jewelleries as the Arcanians. Its actual effect is handled in the magic scripts. This bonus is granted upon the actual effects and the process of socketing glyphs.

Since the jewelleries themselves grant a remarkable bonus, no significant effect staging is needed. When designing the effects, the intrinsic bonus should be taken into account. Hence, the basic diamond ring effect does not need to be much, much more powerful than the amethyst ring effect as the diamond ring itself provides a bonus to its own effect. Likewise, an amethyst ring effect benefits from the presence of a diamond necklace or an emerald ring much more than from the presence of other amethyst jewelleries.

Resistance against glyph forgers' artefact effects is handled as the resistance against arcane spells, using the item bonus, see 5.1.6. As some effects are proposed as non-scalable, the magic resistance should affect the probability of the effect being triggered.

5.2.7 Attributes

Lead attribute of all skills of the Glyph Forgers is Intelligence. As for all magic classes, their mana regeneration is scaled by Essence. Willpower assists them in resisting magical effects. Since combining glyph forging with finesmithing will be an obvious combination, dexterity is also a helpful attribute.

5.2.8 Use of mana

Socketing glyphs into jewelleries consumes mana. The use of mana does not depend on skills or other circumstances. Since socketing the glyphs into jewelleries takes a long time and happens rarely, it shall simply consume the complete mana bar in one action. Hence, mass production is not possible but the demand for simplicity is obeyed. Combining shards to glyphs does not consume mana as it won't raise a skill (common conception of all magic classes).

The actual invoking of effects does not use mana. This would mean a potential conflict with other magic categories and the lore. Also, characters that are no magic users would have to have mana what might result in undesired talks about orc bullies waiting to recover their mojo.

5.2.9 GUI

For glyph forgers, we need two distinct GUI elements: One element for combining the shards to glyphs and one for socketing glyphs into jewelleries. For both GUI elements, a preferred solution with new GUI elements and an alternative with existing GUI elements is given.

As combining shards to glyphs is related to shards in a grid of 7x7 (colours, symbols), it is an obvious idea to have a GUI window with exactly this grid. The shards the player has in his inventory or bag are "highlighted" in the grid while those he does not have are faded out. At the end of each column and row, the resulting glyphs are shown - either highlighted if the player has all the shards for it or faded out. Out of the highlighted glyphs, the player may select one and click on a "Combine" button. Alternatively, he can abort the whole process. The GUI element also shows the needed time for combining the shards and a progress bar is loaded just like in a crafting process. Since shards are stackable, it is not necessary that players "drag" the shards to the GUI window manually but it can be "auto filled". The manual filling is an alternative in case the "auto filling" is technically not feasible or the manual filling grants a much higher level of immersion (to be discussed). If the proposed GUI element is not feasible, a simple selection dialog can be used upon evaluating which glyphs the user could produce.

For socketing, a simple window with two slots is an obvious approach. Drag the jewellery into a first slot, labelled "Item" and the glyph into the second slot, labelled "Glyph". Upon clicking on a button "Socket", the socketing process is started if the glyph fits the item or aborted otherwise. Time and progress bar are shown as above. Alternatively, a simple selection dialog series (Chose the item to socket - chose the glyph to socket) can be used. Since not every glyph can be socketed in every jewellery, some evaluation is necessary between the dialogs.

Combining and socketing is done at a static tool such as an altar. As proposed by Merung, this altar could be near an array for 7x7 columns that show GFX during the combination of glyphs and/or the socketing to increase immersion. To put the shards on the columns manually to combine them is an alternative, even though I deem it clumsy and error prone.

Invoking of the actual effects of the glyphs is triggered not by the user but by events (see above). Nevertheless, the jewellery with the glyph has to be equipped. The number of charges should be shown in the lookAt of the item, together with the power (quality) of the item and the effect.

6   Priest Magic

Priest magic covers the magic of Templars and Sanctificators. Both types of magic can be combined at will.

To support priest magic, an alignment system as proposed by Teflon shall be used. For each young god, each character (also arcanians, crafters, fighters, ...) has an alignment value. This value starts out neutral (value 100). Increasing the value is done by either being member of a Templar's group or equipping a sanctified item for some time. Additionally, prayers (=donating items) at altars or special events may increase the alignment towards a god. If the value of one god increases, it is on cost of the other gods. It is suggested that each "+1" for a god causes a "-1" for another god. The probability could be scaled by the distance in the god circle depicted below. The gods are sorted by their supporting factions and can be swapped within their group at will. Cherga and Moshran are considered special gods with fixed probabilities. The maximum alignment to one god is capped at 1100 while the minimum alignment is capped at 0. The sum of all alignments stays at 1100. Note that the elder gods have nothing to do with this and are not affected at all.
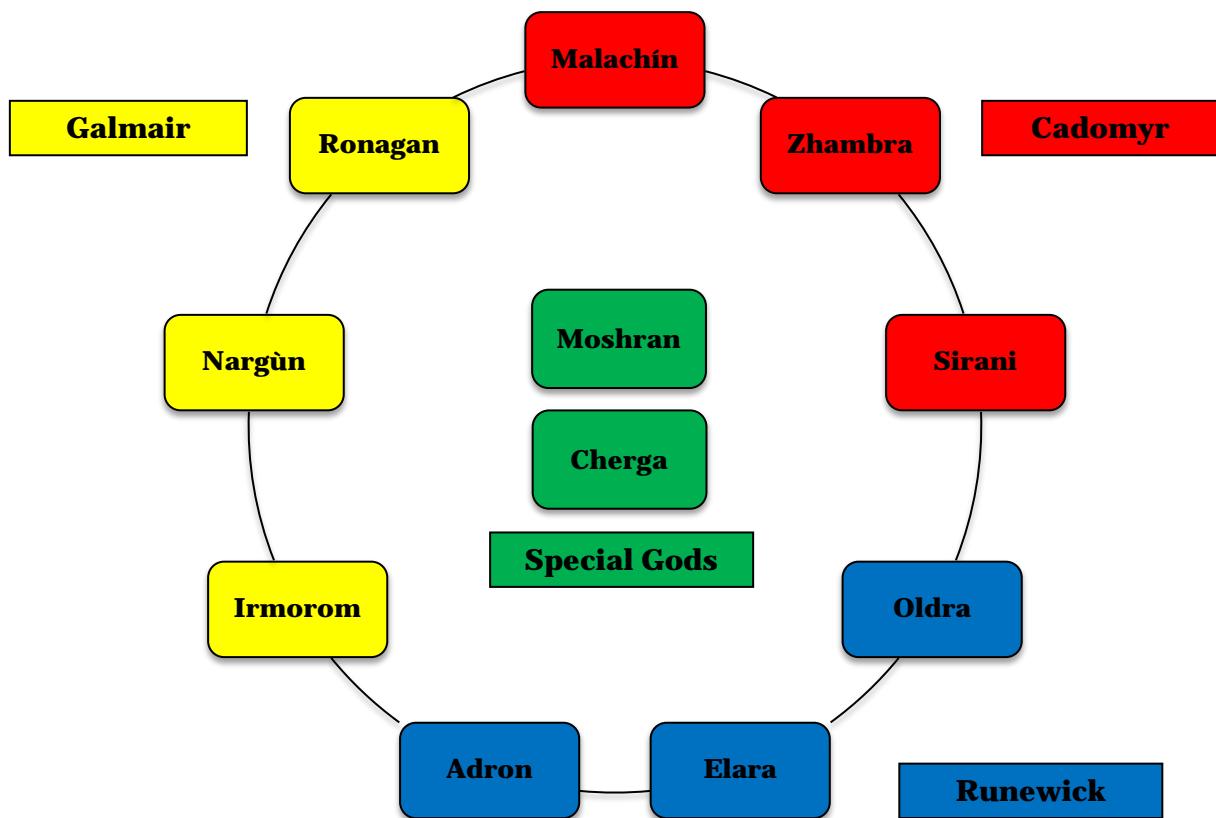

Figure 3: God alignment circle

Example

A priest is about to increase his alignment with Ronagan by +1. The chance that the alignment with Elara drops by -1 is four times higher than the probability for Nargùn alignment to drop by -1 as long as none is already at 0.

Using the mathematic approach in above example, the following values are calculated. Moshran and Cherga have the average probability of 10 % each.

	Malachín	Zhambra	Sirani	Oldra	Elara	Adron	Irmorom	Nargùn	Ronagan
Malachín	0,0%	4,8%	6,4%	9,6%	19,2%	19,2%	9,6%	6,4%	4,8%
Zhambra	4,8%	0,0%	4,8%	6,4%	9,6%	19,2%	19,2%	9,6%	6,4%
Sirani	6,4%	4,8%	0,0%	4,8%	6,4%	9,6%	19,2%	19,2%	9,6%
Oldra	9,6%	6,4%	4,8%	0,0%	4,8%	6,4%	9,6%	19,2%	19,2%
Elara	19,2%	9,6%	6,4%	4,8%	0,0%	4,8%	6,4%	9,6%	19,2%
Adron	19,2%	19,2%	9,6%	6,4%	4,8%	0,0%	4,8%	6,4%	9,6%
Irmorom	9,6%	19,2%	19,2%	9,6%	6,4%	4,8%	0,0%	4,8%	6,4%
Nargùn	6,4%	9,6%	19,2%	19,2%	9,6%	6,4%	4,8%	0,0%	4,8%
Ronagan	4,8%	6,4%	9,6%	19,2%	19,2%	9,6%	6,4%	4,8%	0,0%

Additionally, every character can devote himself to one of the Eleven young god to affirm his/her believe. For this, a minimum alignment of 200 with that god is necessary. Dropping below that value temporarily deactivates the status of being a devotee until he either re-devotes himself to another god or recovers alignment by e.g. prayers. Devoting is a simple procedure of sacrificing a specific set of items that is somewhat related to the god. A draft list for this already exists in the altar script but needs to be revised during implementation phase. For example, devoting to Oldra could require wheat, vegetables, and herbs while Irmorom could demand ores and gold.

- devoteItems[6]={80,356,733}; --Nargùn: Banana, Slouch hat, Stone block
- devoteItems[7]={2745,43,463}; --Elara: Parchment, Candle, Quill
- devoteItems[8]={223,2500,388}; --Adron: Iron Goblet, Bottle of Wine, Grapes
- devoteItems[9]={258,534,259}; --Oldra: Flail, Onion seeds, Grain
- devoteItems[10]={24,43,182}; --Cherga: Shovel, Candle, Black shirt
- devoteItems[11]={19,65,2586}; --Malachín: Metal shield, Short bow, Fur
- devoteItems[12]={3077,23,2140}; --Irmorom: Silver coin, Hammer, Tongs
- devoteItems[13]={235,144,174}; --Sirani: Gold ring, Virgins weed, Red cloth
- devoteItems[14]={2760,17,78}; --Zhambra: Rope, Wooden shield, Short sword
- devoteItems[15]={2760,190,48}; --Ronagan: Rope, Ornate dagger, Leather gloves
- devoteItems[16]={16,63,2757}; --Moshran: Orcish helmet, Entrails, Scimitar

Devoting takes place at an altar of the god. So it is necessary to have a sufficient number of altars all across the map, following a clear pattern and plan. For every god, there shall be one altar in the wilderness. For the homelands, the following distribution is proposed:

- Cadomyr: Malachín, Zhambra, Sirani
- Galmair: Irmorom, Ronagan, Nargùn
- Runewick: Elara, Oldra, Adron
- Second altar in the wilderness: Moshran, Cherga

Changing devotion should be possible anytime by re-sacrificing items as long as the minimum alignment is fulfilled. It should be noted that alignment and also devoting oneself should be mainly a roleplaying thing and less a "skill" you can train. Nevertheless, alignment and devotion status has some influence on priest magic, see below.

6.1 Templars

The Templars are buffers that support their comrades by healing and long term effects. Unlike Arcanians, their effects are generally of long term nature. Templars are the centre of a group and only this group benefits from the prayers of the Templar. There is a strong relation to the faith in the Eleven young gods that directly influence the ways of the Templars.

6.1.1 Typical effects

Templars are no spell slinging deputy mages but true beacons of hope for those who follow their words and commandments. A Templar, while possibly being a formidable fighter, resembles paladins of other games much more than wise guys who conjures cheap tricks.

Templars call on the Eleven young gods in rituals to receive blessings for those who participate in the ritual. This way, parties (teams) are formed with the Templar being founder and centre of the party. The blessings are usually long term effects that buff and heal the members of the party. These effects fall into five (consistent with Arcanians) specific categories. Out of each category, only one blessing may be active at the time. Within each category, there are a reasonable number of blessings (5-10) available to choose from.

These are the categories:

- Blessing - Buffing of physical attributes
- Prayer - Healing of hitpoints over time and under special circumstances
- Vows - Resurrection and life saving
- Confession - Protection and creation of sanctums
- Ceremony - Affection of enemies, especially undeads and demons

Implementation details

Find below a list of proposed effects the Templar can invoke. The list shall be completed during implementation. Any ideas are welcome. Effects that require active triggering are marked accordingly.

Category	Name	Effect
Blessing	Strength	+1 Strength
Blessing	Endurance	+1 Constitution
Blessing	Swiftness	+1 Agility
Blessing	Guided hand	+1 Dexterity
Blessing	Righteous strength	+2 Strength
Blessing	Righteous endurance	+2 Constitution
Blessing	Righteous swiftness	+2 Agility
Blessing	Righteous hand	+2 Dexterity
Blessing	Divine strength	+3 Strength
Blessing	Divine endurance	+3 Constitution
Blessing	Divine swiftness	+3 Agility
Blessing	Divine hand	+3 Dexterity
Prayer	Blessing	Increased regeneration like 2 CON
Prayer	Dignified blessing	Increased regeneration like 3 CON
Prayer	Reverent blessing	Increased regeneration like 4 CON
Prayer	Life salve	Hit points get transferred from the strongest to the weakest character if there is an unblocked LoS each 60 seconds
Prayer	Life gift	Hit points get transferred from the strongest to the weakest character if there is an unblocked LoS each 40 seconds
Prayer	Life donation	Hit points get transferred from the strongest to the weakest character if there is an unblocked LoS each 20 seconds
Prayer – Triggered	Atonement	The Templar transfers 500-1500 hitpoints to a target from his own hitpoints. Short cooldown.
Prayer – Triggered	Honest atonement	The Templar transfers 1500-2500 hitpoints to a target from his own hitpoints. Short cooldown.
Prayer – Triggered	Convinced atonement	The Templar transfers 2500-3500 hitpoints to a target from his own hitpoints. Short cooldown.

Category	Name	Effect
Prayer – Triggered	Cure light wounds	The Templar heals the target for 500-1500. Medium cooldown.
Prayer – Triggered	Cure strong wounds	The Templar heals the target for 1500-2500. Medium cooldown.
Prayer – Triggered	Heal	The Templar heals the target for 2500-3500. Medium cooldown.
Vows – Triggered	Resurgence	A killed character gets resurrected with 1 HP. Extremely long cooldown (>1 h).
Vows – Triggered	Resurrection	A killed character gets resurrected with 1 HP. Very long cooldown.
Vows – Triggered	Rebirth	A killed character gets resurrected with 1 HP. Long cooldown.
Vows	Safety	A character that stumbles back (coupe de grace) is warped a short distance to the Templar if there is an unblocked LoS
Vows	Secureness	A character that stumbles back (coupe de grace) is warped to the Templar if there is an unblocked LoS
Vows	Concealment	A character that stumbles back (coupe de grace) is warped to the Templar
Confession	Blessed armour	Damage taken from a selected weapon type is reduced by 10 %
Confession	Holy armour	Damage taken from a selected weapon type is reduced by 20 %
Confession	Armour of Faith	Damage taken from a selected weapon type is reduced by 30 %
Confession	Arcane mercy	Reduces all negative effects from arcanian magic by 10 %
Confession	Arcane shelter	Reduces all negative effects from arcanian magic by 20 %
Confession	Arcane shield	Reduces all negative effects from arcanian magic by 30 %
Confession	Spurn magic	5 % chance to backfire a negative effect from arcanian/glyph magic to the caster/invoker
Confession	Darn magic	10 % chance to backfire a negative effect from arcanian/glyph magic to the caster/invoker
Confession	Condemn magic	15 % chance to backfire a negative effect from arcanian/glyph magic to the caster/invoker
Confession	Natural mercy	Reduces all negative effects from druid magic/potions by 10 %
Confession	Natural shelter	Reduces all negative effects from druid magic/potions by 20 %
Confession	Natural shield	Reduces all negative effects from druid magic/potions by 30 %
Confession	Spurn nature	5 % chance to backfire a negative effect from druid magic/potions to the caster/invoker

Category	Name	Effect
Confession	Darn nature	10 % chance to backfire a negative effect from druid magic/potions to the caster/invoker
Confession	Condemn nature	15 % chance to backfire a negative effect from druid magic/potions to the caster/invoker
Confession – Triggered	Peaceful aura	Creates a 3x3 area where no damage is taken nor damage can be dealt from for X seconds. Extremely long cooldown (1 h).
Confession – Triggered	Gleaming aura	Creates a 4x4 area where no damage is taken nor damage can be dealt from for X seconds. Extremely long cooldown (>1 h).
Confession – Triggered	Holy aura	Creates a 5x5 area where no damage is taken nor damage can be dealt from for X seconds. Extremely long cooldown (>1 h).
Ceremony	Turn undeads	Undeads are turned by the priests each X seconds at maximum distance of 2 tiles
Ceremony	Repell undeads	Undeads are turned by the priests each X seconds at maximum distance of 3 tiles
Ceremony	Get hence, undeads	Undeads are turned by the priests each X seconds at maximum distance of 4 tiles
Ceremony	Confirmation	Demons lose X fightpoints each Y seconds at a maximum distance of 2 tiles
Ceremony	Beatification	Demons lose X fightpoints each Y seconds at a maximum distance of 3 tiles
Ceremony	Canonisation	Demons lose X fightpoints each Y seconds at a maximum distance of 4 tiles
Ceremony	Summon slave	Summons a low level undead that attacks foes of the group
Ceremony	Summon servant	Summons a mid-level undead that attacks foes of the group
Ceremony	Summon minions	Summons a group of mid to low level undeads that attack foes of the group
Low mana / minimum skill	**Medium mana / minimum skill**	**High mana / minimum skill**

Available symbols:

Example

A Templar holds a mass to honour Oldra. All who prayed along and stay close to the Templar get a temporary buff of +1 on their constitution as long as the blessing lasts.

6.1.2 Invoking of effects

The magic of the Templars is not of spontaneous nature and has to be regarded in two steps: The ceremony to call on the god and to found the group versus the actual application of the effects. A Templar has to decide what kind of magic he wants to ask from the gods before the

actual effects are granted and can be used. Anticipation is a keyword; also, the members of the group have an actual influence on the effects.

Mainly, Templars shall act as the centre of a group of player characters. This will vastly encourage interaction and make ingame religion a vital part of the game. Furthermore, the foundation of groups and parties is a core element of most MMORPGs and with the Templars, Illarion can find its very own, unique way to offer such a feature to the players.

The action to found a group is a ritual/ceremony/mass/divine service. A divine service always succeeds in forming a group out of those who attend the ceremony. Every character that stands close to the Templar and the altar (same z level, radius 10-15 tiles) on the same level is counted as attender. A group consists of three characters including the Templar at minimum. It can be considered during implementation to allow smaller groups (including "solo") at very low effect. A character cannot be member of two Templar groups. Divine services shall be held at altars. The altar has to be an altar of the god the Templar follows, see "Becoming a Templar". Ceremonies without an altar can be considered during implementation phase. As we cannot require our players to form eleven distinct groups that cannot play together due to faith restrictions, devotees of any god are allowed in the group of any Templar. The divine service itself is handled by specific GUI dialogs of the Templar, comparable to the way an Arcanian prepares his spells, see GUI. In any case, the Templar may chose up to five (tbd) effects, out of five categories, for his divine service. These effects help all members of the group that is formed, be it by a buff or by healing. Hence, the Templar provides buffs for his temporary followers. It can be considered that the effects do not get invoked immediately but are saved in items, so called talismans. Upon using the talismans later, the effects and mana consumption start. The status of the group is checked from this time on. This way, a much bigger ceremony can be held to support a smaller group.

The group can only exist as long as the Templar is around, it has at least three members, and as long as the Templar still has "mana". Technically, the group membership is handled by an LTE of the Templar. The members have to stay within X (20-50) tiles of the Templar and on the same level to stay a member of the group. Each minute, the LTE checks for all members being around. If a member is offline or not close to the Templar, a warning is issued via inform to the Templar and the member. If the member is away for more than three minutes (tbc), he drops out of the group. If the group becomes too small (<3 members including the Templar) or the Templar is removed from the group, the whole group is dissolved with the blessings of the Templar losing their effect immediately. Since effects are bond to the LTE of the Templar, a Templar that goes offline won't provide any effects to the members anymore. Effects that are themselves LTEs for the members (e.g. attribute buffs) vanish if the Templar is not online anymore for three minutes or if the members drop out of the group. Whether the Templar needs a tool to list and expel members or add new members to an existing group

is a matter of discussion. The Templar should not be able to dissolve the group manually to prevent abuse by refounding the same group over and over again just for skillgain.

The actual effects are invoked by the Templar by an LTE, not by slinging spells around. The LTE itself evaluates the supporting circumstances each time the effect is invoked, triggered or upkept. For the example of a healing prayer, the additional healing is healing over time that is applied to each member with every call of the LTE (around once each 10 seconds). An attribute buff is upkept constantly, but the LTE checks all circumstances also each 10 seconds. The active effects are displayed in a designated GUI element. At this moment, it appears to me that no active action of the Templar is needed to upkeep the effects each time - this is a clear difference to the Arcanians that have to trigger each of their spells each time manually. By no mean should Templars be mages with different spells. For certain effects, active triggering can be considered if the effects have a cooldown.

For the members of the groups, including the Templar, the membership time increases the alignment with the god of the Templar. For gaining a "+1" in alignment with the god, another god's alignment is reduced by -1 as per chapter 6. Note that these changes should happen comparable slow (e.g. +1 each ten minutes).

6.1.3   Learning effects

As the effects of the blessings are distinct, we can also have distinct actions to acquire/learn them. Since the Templar shall gather followers of the Gods and generally be a character that promotes interaction, special tasks to gather certain selections of characters shall be necessary to learn new effects.

The entry points for this are once again the altars of the god the Templar follows. Guided by a selection dialog, the Templar may choose which effect out of which category he wants to learn. The requirements are given clearly; so learning the effect can be done once the necessary characters are within X tiles of the altar. The requirements may contain any selection of these characters:

- Male/female characters
- Characters of a certain race (dwarf, orc,...)
- Characters that are devotees of same the god the Templar follows
- Characters that are devotees of a certain god (Ronagan, Elara,...)
- Characters with certain minimum or maximum attributes
- Characters that are born in a certain month (tbc)
- Characters of a certain age range (tbc)
- Characters of a certain tallness range (tbc)
- Characters of a certain weight range (tbc)

- Characters with beard or without beard or haircut (tbc)

There are no additional requirements on learning effects such as minimum attributes. We can and should restrict learning the most powerful effects by the skill of the Templar in the specific category. For this, we should use a similar staging like for the Arcanians and have the most powerful effect be available with a skill of 80-100. A very simple idea would be to have a new effect each 20 levels, so at 0, 20, 40, 60, 80 and 100 (5x6=30 effects) or even every 10 levels (5x11=55 effects). A cooldown can be considered to restrict learning too many effects within short time.

6.1.4 Becoming a Templar

A Templar has to choose one of the Eleven Young gods as his god to devote to, see preface in chapter 6. Becoming a Templar requires to be a devotee of the god. After becoming a devotee, the apprentice has to sacrifice another set of items with rather rare items (e.g. merinium, pure elements, crafted items, artefacts) to become a Priest (Templar plus Sanctificator). Find a draft list below that shall be refined during implementation phase.

- priestItems[6]={2418,445,355,225,290}; --Nargùn: Grey priest robe, Wooden sword, Salmon, Crown, Cabbage
- priestItems[7]={368,76,397,3110,222}; --Elara: Yellow priest robe, Mage's staff, Oil lamp, Pell, Amulet
- priestItems[8]={2419,224,335,2744,155}; --Adron: Red priest robe, Golden goblet, Lute, Pipe, Sibanac leaf
- priestItems[9]={2416,271,126,2786,249}; --Oldra: Brown priest robe, Scythe, Sickle, Branch, Bundle of grain
- priestItems[10]={2420,271,138,314,726}; --Cherga: Black priest robe, Scythe, Night angels blossom, potash, Coarse sand
- priestItems[11]={2421,20,391,2291,78}; --Malachín: White priest robe, Large metal shield, Torch, Salkamaerian Paladin's helmet, Shortsword
- priestItems[12]={2418,226,74,2763,2752}; --Irmorom: Grey priest robe, War Hammer, Hatchet, Pickaxe, Carving tools
- priestItems[13]={2421,40,280,354,222}; --Sirani: White priest robe, Cleric's staff, Diamond ring, Strawberry cake, Amulet
- priestItems[14]={368,20,2701,40,333}; --Zhambra: Yellow priest robe, Large metal shield, Longsword, Cleric's staff, Horn
- priestItems[15]={2420,2689,384,365,285}; --Ronagan: Black priest robe, Poisoned ornate dagger, Thieves gloves, Half leather armour, Diamond
- priestItems[16]={2420,552,39,69,2746}; --Moshran: Black priest robe, Deer meat, Skull staff, Raw leather, razor blade

A minimum alignment of 400 with the god is necessary. Dropping below that value temporarily deactivates all powers of the Priest until he either re-devotes himself to another god or recovers alignment by e.g. prayers. Note that becoming a priest is basically already implemented but just deactivated in the altar script.

6.1.5 Skills

For each category of blessings, there is one skill. Those five skills are independent of each other, there is no cap or other limits.

Raising the skills is done by two ways: First, by the time needed for the actual divine service to form the group. It is obvious that the time for the divine service has to scale with the number of effects invoked and their minimum skill required for learning. Otherwise, this time is a constant and raises the skills of the involved categories.

Example

A Templar holds a mass to honour Zhambra. He asks for a Blessing with minimum skill 20 and performs a Confession with a minimum skill of 40. The mass' duration is $X=Y*2+Z*(20+40)$. His blessing skill is raised by using $20/X$ actionpoints and the Confession skill is raised by $40/X$ actionpoints. In this context, the number of effects scales the Y contribution while the minimum skills the Z contribution.

Furthermore, the actual effects themselves raise the skills of the Templar over time. Hence, the invoking and upkeep of effects shall require action points. These action points shall also scale with the minimum skill of the effect. A reduction of action points means that the Templar is hampered constantly in movement/fighting. This hampering is the price for the effects to pay. One should note that the number of reduced actionpoints shall be small but the frequency may be high (e.g. 1 Hz).

The benefit of the skills is, on one hand, the availability of further effects one can learn and on the other hand, improvement plus reduced upkeep of the effects the Templar invokes. The upkeep, the reduction of mana over time, is reduced with higher skill - this means the Templar can upkeep the effects for a longer time, see "Use of mana".

6.1.6 Supporting circumstances

The effects shall benefit from several supporting circumstances. It is possible to scale the upkeep with a bonus, derived from supporting circumstances (to be discussed). The bonus from equipment, as presented for the Arcanians, shall also hold for Templars for each invoking of an effect.

Nevertheless, this bonus shall be comparable small. More important shall be the bonus from the members of the group. The bigger the group, the better the bonus. The total alignment of those who attend the divine service, including the Templar, shall scale the result. Also, the

more devotees of the god of the Templar are within the group, the bigger that bonus. The devotees of the same gods shall count as 2-3 normal members that are not devotee of the god of the Templar. The alignment of devotees is multiplied with that factor when calculating the total alignment. In order not to create uber groups with boni beyond reason, an upper threshold for the bonus shall hold (e.g. 10 members).

Furthermore, it shall be considered to have a god specific bonus on one scalable aspect of each affect or cooldown of effects. As we have five categories and eleven gods, it might be a good idea that every category is supported by two gods - this leaves one "neutral" god, Moshran, who grants a slight bonus on all effects. If it turns out that such a god bonus is too complicated to balance, we should drop it.

- Blessing - Buffing of physical attributes
    - Irmoron, Nargùn, Adron, Malachín
- Prayer - Healing of hitpoints over time and under special circumstances
    - Ronagan, Sirani, Zhambra, Elara
- Vows - Resurrection and life saving
    - Ronagan, Sirani, Oldra, Cherga
- Confession - Protection and creation of sanctums
    - Irmorom, Zhambra, Oldra, Elara
- Ceremony - Weakening of enemies, especially undeads and demons
    - Nargùn, Malachín, Adron, Cherga
- Neutral (small bonus on everything)
    - Moshran

At this moment, it appears unlikely that there is the need for magical resistance against priest magic. If such a resistance is necessary, it shall follow the same principles as for arcanians.

6.1.7 Attributes

Lead attribute of all skills of the Templars shall be willpower. As for all magic classes, their mana regeneration is scaled by essence. Due to the needed upkeep for blessings, essence somewhat determines the maximum duration of blessings. Willpower also assists them in resisting magical effects. There are no fixed attribute requirements for becoming a Templar.

6.1.8 Use of mana

Mana, or better called divine power, is used by Templars to upkeep the blessings they received from the gods. No other action or event influences their mana. As Templars recover mana like every other magician by essence, their essence attribute vastly influences for how long they can upkeep effects. The upkeep of simple effects may be below the normal mana regeneration, but for more complex effects and also, for various effects that are active, the

upkeep shall be above the mana regeneration. The upkeep cost is reduced by the skill of the Templar in the category of each effect that might consume mana. Generally, we should guarantee that a highly skilled Templar with high Essence can upkeep five effects of moderate level for many minutes. Since the upkeep cost is scaled by the minimum skill of the effect, combining high level effects with several low level effects may cost the same upkeep as two high level effects. The Templar has to anticipate what type of effect is needed most and cannot just have all kinds of high level effects active even with high skill and high essence. A low essence Templar should also have a fair chance to upkeep some effects for a reasonable time. Once the Templar cannot "pay" the upkeep of the effects anymore from his mana bar, the whole group of the Templar is dissolved. This once again makes anticipation the key; a Templar can decide not to go to battle with tons of effects, but can possibly be able to upkeep few effects for a long time. Also, the estimation when the effects run out requires some training and adds to the overall attraction of the role of the Templar. As the mana bar takes quite a while to recover, a natural cooldown is implemented to the activities of Templars.

6.1.9 GUI

For Templars, we need two distinct GUI elements. Those are the altar dialogues and the actual display of the effects that are affecting the group of the Templar.

The altar dialog should be based on selection dialogs and the preparation dialog that is also used for the Arcanians. The preparation dialog shall have the five slots for the effects the Templar wants to invoke. The effects are dragged from a list to the five slots. The list has five tabs to separate the different categories. The slots can be filled in any order or with gaps. Clicking the "Hold divine service" button starts a progress bar and the mass is held with lots of blessing GFX/SFX and informs to all members of the founded group.

The actual effects are displayed in an icon bar with five slots, just like the one used for quick access to spells for the Arcanians. All effects are represented as icons that give a description of the effect on mouse over. If effects need to be triggered, clicking on them would do this.

This approach makes use of elements that are similar to the Arcanians'. We can save a lot of development time by reusing basic conceptions. If it is not wanted that Templars and Arcanians share GUI elements, an alternative is a window that lists the members of the group by name and the effects in text form in a list with small icons to illustrate the category of the effect. This list could also have icons to dismiss members from the group manually.

6.2 Sanctificators

Sanctificators bless the weapons and armours of their brothers in faith to overcome evil (or good). Just like the Glyph Forgers, the effects are of passive nature and are meant to improve the use of the used items. Unlike the glyph forgers, the effects wear down over time and can

be recharged. The effects are bond strictly to the eleven gods and shall help to distinguish one follower of the eleven from another.

6.2.1 Typical effects

Each weapon or armour piece can be blessed. In this context, shields, tools and wands act as weapons. The effects do not need any activation or action but improve the properties of bearer directly. The effects get removed after a certain time, see below.

As there are eleven younger gods, it is a good idea to have 22 effects, 11 for weapons and 11 for armours. As there are two weapon slots and five armour slots, the effects should stack and also, not contradict each other. Generally, the effects should not just cover combat but be of general use.

Example

A Sanctificator blesses a sword in the name of Zhambra. As long as the sword is equipped, the character gets a bonus of +1 on constitution.

Please find a list of possible weapon effects below. Note that every char has two weapon slots and five armour slots. All effects stack and items, blessed by different gods, can be combined at will. Your ideas for effects are, as usual, very welcome.

- Adron: +1 WIL
- Cherga: +1 ESS
- Elara: +1 INT
- Irmorom: +1 DEX
- Malachín: +1 PER
- Moshran: +1 STR
- Nargùn: +1 WIL
- Oldra: +1 ESS
- Ronagan: +1 AGI
- Sirani: +1 PER
- Zhambra: +1 CON

For the armour boni, a more sophisticated method is proposed. Each god has a pool of possible skills to buff. Upon blessing of the item, one skill +2 is chosen at random from the pool or two skills +1 are chosen at random. The probabilities for each skill could be different, e.g. could Adron have a high chance to buff cooking and baking but also a low chance to buff peasantry. The drawback of this method could be that players end up with blessed items no one needs because the random result is not what they wanted. Example of such pools for the gods, based on the crafting package approach:

- Adron: cooking and baking, brewing
- Cherga: Blunt weapons, heavy armour
- Elara: Woodcutting, carpentry
- Irmorom: Mining, gem grinding, blacksmithing, finesmithing, armourer
- Malachín: Slashing weapons, medium armour
- Moshran: Parry, archery
- Nargùn: All skills (random)
- Oldra: Peasantry, farming, fishing, herb lore
- Ronagan: Stabbing Weapons, light armour
- Sirani: Tanning and weaving, tailoring
- Zhambra: Digging, glass blowing, pottery

Note: The skill boni do not increase the skill itself but provide a bonus "as if". Whether they can raise the effective skill over 100 or not is left for discussion. It should be noted that the blessed item itself has no influence on the effects whatsoever. A high level sword grants the same bonus as a junk club.

6.2.2 Invoking of effects

Sanctification is basically a support craft-like activity that requires some planning and anticipation. As the effects of blessings run out over time, without planning, one might end up with "pants down" right in front of the evil archdemon. Santificators provide the blessed items, but the actual effect is available for everyone who equips the item. Equipping grants the effect immediately and it vanishes upon unequipping the item again. Only the time when the item is equipped counts for the overall calculation of the effect time. So, if someone decides not to wear the blessed sword of doom, the sword won't lose its blessing over time. Once the blessed time is over, the item loses its effect but is not destroyed and can be re-blessed. Compared to glyph forgers' artefacts, sanctificators' items effects do not get triggered by an event but are active as long as the item is equipped. As rings and amulets cannot be blessed, there is no conflict between both magic types. The main difference here is that rings and amulets are considered consumables and get deleted once all charges are used up.

Equipping the item is free for everyone who fulfills other requirements of the item (free slot, level, strength,...). This means that a Moshran follower can equip an item, blessed by Oldra. However, wearing an item, blessed by a god, increases alignment with the god who granted the blessing. This risks the status as devotee or even priest of another god. For gaining a "+1" in alignment with the god, another god's alignment is reduced by -1 per chapter 6. Note that these changes should happen comparable slow (e.g. +1 each ten minutes for a full set, fractions of that for individual items).

The actual sanctification is done at an altar, dedicated to the god of the Sanctificator. Obviously, sanctificators can only bless items in the name of their god. Likewise to the Templars, a divine service is the action that blesses the items. A divine service always succeeds in blessing the item if the minimum requirement on attenders' alignment is met. Every character that stands close to the Sanctificator and the altar (radius 10-15 tiles) is counted as attender and may act as supporting circumstance, see there. The divine service itself is handled by specific GUI dialogs of the Sanctificator, see GUI.

As blessing weapons is its own skill and blessing armours is another, blessing weapons should take longer (5:2 ratio) than blessing armours to guarantee comparable skilling chances. An already blessed item cannot be blessed again before the effect runs out. The blessing god won't agree to override his/her colleague's blessing and also, this prevents blessing of item for the pure sake of training.

6.2.3 Learning effects

Like for glyph forgers, there is no dedicated "learning" necessary to be able to bless an item. Alignment is a minimum requirement that can be increased, but not an individual skill that needs to be trained to be able to invoke better effects. The key to blessing is to gather a group of followers that support the ritual of blessing. The alignment of the attenders of this divine service support the event of blessing, similar to forming a Templar's group. The attenders need to have a certain total alignment with the god of the Sanctificator. As a single sanctificator can have "1000" alignment, a proper minimum value is around 1000. Only positive alignment is counted, negative values are not deduced. This means that a Ronagan follower who dislikes Adron (negative alignment) cannot prevent or disturb a divine service to Adron. Nevertheless, his presence also does not help the divine service.

As the proposed effects for blessed items are of similar nature, learning them one by one is not necessary. A Sanctificator can, in theory, start out with blessing any item in any way. However, with higher skills and especially with more attenders, the time of the blessing increases.

6.2.4 Becoming a Sanctificator

A Sanctificator has to choose one of the Eleven Young gods as his god to devote to, see preface in chapter 6. Becoming a Sanctificator requires to be a devotee of the god. After becoming a devotee, the apprentice has to sacrifice another set of items with rather rare items (e.g. merinium, pure elements, crafted items, artefacts) to become a Priest (Templar plus Sanctificator). A minimum alignment of 400 with the god is necessary. Dropping below that value temporarily deactivates all powers of the Priest until he either re-devotes himself to another god or recovers alignment by e.g. prayers. Note that what is described above is basically already implemented but just deactivated in the altar script.

6.2.5 Skills

In total, there are two skills for the sanctificator, one for blessing weapons and one for armours. Each blessing of the sanctificator related triggers the learn function. Since these actions do not happen frequently, they should take very long. A duration comparable to the longest crafting actions (up to three minutes) is proposed and the duration does not become shorter with rising skill. There is no minimum skill required for sanctificators' actions. But for a successful divine service, a minimum total alignment of all attenders is necessary.

The benefit of having a high skill is that the blessing on one item lasts longer. The effect itself stays the same, but the duration until the blessing is gone is extended. This obviously results in experienced sanctificators being able to achieve more with less effort. It can be considered that a high skill reduces the minimum total alignment of attenders of the divine service. This way, an experienced sanctificator could even "solo" some blessings. The positive aspect about this is that gaining skill gets another meaning that just "extended duration".

The total time the blessing lasts shall depend on the skill, equipment bonus (common magic bonus of robes etc.) and the total alignment of attenders. A good range is 30-300 minutes. By giving the total alignment an influence, it is assured that even if someone can "solo" a blessing, there is still a benefit from having attenders of the divine service.

The blessed item itself plays no role. Its level or quality is not relevant. This can result in some powerful blessed items being ordinary hats or clubs. As for glyph forgers, the act of blessing always succeeds if the requirements are met. Similar to glyph forgers, the divine service should take a while to succeed and hence, raise skills a lot. Note the 5:2 ratio for blessing weapons vs. armours, as described in 6.2.2.

6.2.6 Supporting circumstances

As the effects of blessings are fixed, the supporting circumstances affect the action of blessing and the resulting maximum duration of the blessing. Like all magic users, sanctificators shall benefit from the common equipment bonus. The total alignment of those who attend the divine service shall also result in a better result. Devotees of the god of the sanctificator count more than characters that are not devoted to the god, a ratio of 2-3:1 shall hold. The alignment of devotees is multiplied with that factor when calculating the total alignment. In order not to create uber items with durations beyond reason, an upper threshold for the bonus shall hold (e.g. 10.000 alignment). The god determines the effect, so no bonus is associated to the god.

6.2.7 Attributes

Lead attribute of all skills of the Sanctificators shall be willpower. As for all magic classes, their mana regeneration is scaled by essence. Willpower also assists them in resisting magical effects. There are no fixed attribute requirements for becoming a Sanctificator.

6.2.8 Use of mana

Blessing items consumes mana (divine power). The use of mana does not depend on skills or other circumstances. Since blessing takes a long time and happens rarely, it shall simply consume up to the complete mana bar in one action (5:2 ratio for weapons:armour recommended). Hence, mass production is not possible.

The upkeep of effects does not use mana. This would mean a potential conflict with other magic categories. Also, characters that are no magic users would have to have mana.

6.2.9 GUI

The GUI for sanctificators does not need distinct GUI elements. Blessing can be performed, using an altar as static tool, with a normal selection dialog. If a sophisticated GUI element is available, the total alignment should be shown. An additional character window that shows the alignment to each god with a bar is a helpful addition. The effect of each blessed item and its duration is shown in the lookAt of the item.

7 Nature Magic

Nature magic covers the magic of Alchemists and Druids. Both types of magic can be combined at will.

7.1 Alchemists

Alchemists brew potions and are already present in the game. Their potions have a wide scope of effects that borrow elements from other magic classes or are unique to alchemists. The potions can be used by anyone.

This chapter will just focus on basic requirements that make the alchemy system compliant to the overall magic conceptions. Please help to define the delta between the current alchemy system and these requirements. As I am only vaguely informed about the details of the current system ("Go away!"), I rely on your input.

7.1.1 Typical effects

Alchemist potions increase attributes temporarily and e.g. heal the users of potions. Some potions invoke effects upon being thrown on the map. There are also be pastes that can be applied on items or characters. Generally, alchemists "borrow" their effects from other schools and there is no hard restriction on the available effects.

Example

A potion can raise strength and dexterity by +2 each and lowers intelligence and perception by -2 for a certain time.

7.1.2 Invoking of effects

Drinking (using) or in some cases throwing the potion invokes the associated effect. There are basically two classes of potions: Fixed recipes and dynamic recipes. The former requires an exact recipe to be conducted to have any effect while the latter covers a variety of effects that depends on the actual herbs, tossed into the stew. There is no information available what a potion does unless you analyse it or use it. Alchemists are able to analyse potions by using gems as a "magnifying glass". Alchemists can also label potions, but the label is a free text and not a summary of the potion's effect. Merung is against an auto-set label of the potion.

The actual brewing consists of throwing herbs into a kettle and "finalising" the brew with gem dust. If you do something wrong, you may end up with a not working potion or the cauldron may even blow into your face. The type of gem dust determines what kind of potion is brewed. Alchemists can write reoccurring recipes into scrolls. The quality and hence, effectivity of the potion is scaled by the skill of the alchemist, only.

7.1.3 Learning effects

There is no formal learning process for recipes. Recipes can be found out by "trial and error". Apparently, there are OOC lists around that are shared among player groups how to brew potions. The status quo is that "complex" recipes (e.g. shape shifter) need to be learned by NPCs. Just knowing the recipe will not enable you to brew the potion, while simple potions (e.g. healing and attribute potions) do not have such regulations. It is unclear what the criteria for such restrictions are.

7.1.4 Becoming an Alchemist

Becoming an alchemist seems to be a riddle game at fixed positions one can find by accident and the necessary information can be read in a big book that can be found accidentally at some places or is included in the druid starting package. There is no clear quest or guidance through the process. Currently, there are strict attribute requirements on becoming an alchemist. I'd like to see these requirements dropped as there is no technical reason for them and other classes also have no such requirements.

7.1.5 Skills

In order to get in compliance with the other magic systems, alchemy must have additional skills compared to the current "all in one skill" approach. One skill could be used for the normal brewing, that is mixing stuff in the cauldron. The second skill can handle the use of gem dust for finalizing potions or analysing potions.

7.1.6 Supporting circumstances

Currently, there are no special supporting circumstances. As the process of brewing determines the effectivity of the potion exclusively, this action shall benefit from the common magical bonus of equipment as proposed for the other magic classes. As a side note, such boni shall be handled by a common core script and not by each magic system individually.

7.1.7 Attributes

Lead attribute of all skills of the Alchemists shall be perception, not essence. As for all magic classes, their mana regeneration is scaled by essence. Willpower assists them in resisting magical effects. Since gathering herbs is a necessary action for Alchemists, constitution is also a helpful attribute. Dexterity helps in glass blowing bottles.

7.1.8 Use of mana

Since all magic classes shall make use of the blue bar, also alchemists have to use "mana". Adding herbs to a brew and finalizing the brew with gem dust seem to be the most obvious actions that might use mana. As the brewing of potions is not a mass production action, it shall be considered to have high mana requirements alike the glyph forging process.

7.1.9 GUI

Brewing potions currently lacks a distinct GUI. As brewing potions is an act of combining herbs, an obvious GUI approach would be to have a container like window with several slots where you can put the herbs into. An additional dialog is needed for the used gem dust or the process of finalizing the potion is handled by a normal selection dialog. As of now, GUI changes are optional but not necessary.

7.2 Druids

Druid is a collective term for all nature oriented magic users. Under this category fall witches, conjurers, beastmasters and various other approaches. The term druid is used as collective description. Originally, this was meant to be part II of alchemy as part of Falk's original concept to give druids spells. Merung detailed a general approach towards this expansion of druidism and I want to focus on the aspects that are needed to bring druids in line with the other magic classes.

7.2.1 Typical effects

Merung gave some examples of abilities:

- Tree network (major, nature lore): Special trees are placed all over Illarion. Characters can use them as transporters in the wilderness

- Poison immunity (normal, poison skill): Temporary immunity against poison

- Improved herb gathering (minor, nature lore): Get 30% more herbs from plants

- Synthesise gem powder (minor/normal, cauldron abilities): You can create gem dust from something cheap (raw gems?)

- Friend of animals (major, animal taming): You will not be attacked by normal animals

- Calling cauldron (normal, cauldron abilities): You can brew without a cauldron

- Toxic master (major, poison skill): You can absorb all the poison in an area (weapons, poisoned characters,...) or make an area a poisoned place of death

Find below icons that can represent the druid's abilities:

7.2.2 Invoking of effects

Abilities are "cast" like spells of Arcanians. There are abilities that have instant effect while others last a while (LTE). For abilities, a cool down shall be defined. Major abilities have a longer cool down than minor abilities.

7.2.3 Learning effects

It is Merung's concept that a druid cannot master all abilities. There shall be six abilities for each skill (6x5=30 in total). A character will have a certain amount of points he can spend on abilities. The points should get a fancy name. So for the players it might be something like "Connection capacity", being able to connect with different aspects of the world. High levels in abilities cost more than low levels. Every ability is bond to a skill and can be regarded a "fixed spell".

For each skill, there is one major ability, two normal and three minor ones. To select an ability, one has to invest 3/2/1 points, respectively. It is the plan to give each character 24 points. The points cannot be allocated all at once. It is not planned to let players redistribute the points unless they restart from scratch. The following restrictions shall hold:

- You can only have two major abilities
- To qualify for a major ability, you have to invest at least three points into normal/minor abilities of that skill (e.g. three minor ones, one normal+one minor or two minor ones)
- For each ability, you need to fulfill a quest.
- The lower abilities can be learned right away; the higher abilities may require a certain skill or to have other specific abilities already.

The type of quest is TBD. A proposal:

- Minor abilities just require bringing a set of normal herbs to a NPC (master druid).
- Medium abilities could focus on animals - special animal NPCs in the wilderness could grant those upon e.g. saving them from dynamically spawned hunters.
- Major abilities (there are five) shall have unique quests that focus on holy places. At those places, a unique quest has to be solved. An example could be a druid ritual where you have to place certain natural items at specific places or plant some trees while fighting off woodcutting dwarven monsters...

In total, one needs 10 points for all abilities of one skill. This means that one can only have all abilities of two skills. The design criterion for the point number is that one would need 50 points for all abilities and a player gets half the points for that minus one. This would also mean you can master two skills and still have some points left.

The basic idea is the limitation of abilities, forcing the player to reflect what kind of "druid" (in the broaden, class-describing sense) their char is. The exact amount if points you can spent is open for discussion.

7.2.4 Becoming a Druid

There are no attribute requirements on becoming a druid. Taking any ability by NPC quest turns the character into a druid. As users of other magic classes usually don't want this, a clear warning should be issued before someone becomes a druid.

7.2.5 Skills

To bring druidism in accordance with the other magic systems, five skills are needed. The skills scale the strength of the effects. These skills are envisaged (names are placeholders):

- Animal taming: The abilities of this skill influence the aggro of animals and beasts. The druid can calm animals or make them aggressive. Directing animals to attack certain targets or to cease attacks on targets is also possible. However, the abilities shall not grant the power to cancel any attack of monsters that get beaten up by his comrades.

- Summoning of beasts: Summoning in a wider context means that the druid can call animals who are around anyway to come to his aid, summon creatures from far away (spawning) or turn himself and/or others into animals temporarily.

- Nature lore: Nature lore helps to analyse plants and nature. The abilities can be helpful to make more plants grow, help in farming and generally, can manipulate growth and stock of e.g. apples. Analysing characters and monsters (living beings) is also an ability of this skill.

- Poison skill: To poison or to resist poison is the main idea of this skill. Poison can affect living beings and can be caused by e.g. food. Curing poison, maybe even sicknesses and diseases, is part of this skill as well. Acids that might affect items negatively (corrosion/increased wear) is a further application.

- Cauldron abilities: This skill can be seen as support skill for alchemy. Its main purpose is to offer spell like abilities that affect potions (analyzing, improving, changing, maybe even decomposing).

7.2.6 Supporting circumstances

Druids shall benefit from the common magic bonus of equipment. Some abilities affect potions, so the abilities as alchemist might be supportive for the outcome of those actions.

7.2.7 Attributes

Lead attribute of all skills of the druids shall be perception. As for all magic classes, their mana regeneration is scaled by essence. Willpower also assists them in resisting magical effects. There are no fixed attribute requirements for becoming a druid.

7.2.8 Use of mana

Using abilities consumes mana, just like arcanian spells. There are abilities with instant effect and others last a while. For both types, the mana is consumed upon using the ability. There is no mana consumption over time that limits the duration of abilities but fixed times. The amount of mana used shall orientate on the type of ability with major abilities consuming more mana than minor abilities. Mana consumption per ability shall always be lower than 50% of the bar. The consumption is fixed and does not depend on the skill. An ability usually consumes just a little mana but a lot more than is regenerated during the casting time.

7.2.9 GUI

Druids shall use simple GUI elements. It is recommended to use the GUI elements that are created for arcanians and modify them accordingly. Other than that, Merung just needs buttons for the abilities that should turn grey if you cannot use the ability.

Merung proposes that there is window displayed on every entry point to such a quest. The top of the window should display all abilities. If you hover over them you see what requirements they may have (skill minimum, other abilities, needed points). The bottom is a skill tree. It shows the abilities the char already has. And then, you can click on the abilities on the top (those that are available are highlighted), so you can create your own skill tree. This way you see what abilities you can learn right now and what you will need to learn now in order to learn other abilities later.

8   Mana Lines

Mana lines are a supplementary add-on to the described magic system. It is not necessary to implement them for any magic system to function. The mana lines are closely associated with Arcanians.

8.1   Basic idea and inspiration

Mana lines shall add a persistent "conquer the flag" type mini game to Illarion. Also, by adding mana lines to the game, we can cope with the lore of Arcanian magic being based on something, described by players as mana grid. The mana grid can be a remainder of the creation process of Illarion, the handwriting of the five elder gods on the world or just something unexplainable. But they are there, an ingame fact that cannot be ignored.

The main idea is stolen from the augmented reality game Ingress (https://www.ingress.com). Ingress is a game where you conquer virtual "portals" in the real world by tapping on your mobile phone. Once conquered, you can connect portals to fields and conquer territory. The opposing faction of course will defend its portals and try to conquer yours.

For Illarion, we can adopt this basic idea and modify it so it perfectly fits the description of mana lines. We can also add our own thoughts and have a really unique feature. Even though other games have such lines (called e.g. ley lines), I am not aware of a game that offers a dynamic situation where players can interact with these lines.

8.2   Mana lines

The whole surface map is covered with straight lines, connecting two points at the edge of the map. These lines represent the world wide mana grid. Factions can claim the mana lines, so they take ownership. Mana lines itself have no actual use or benefit for the faction that claims them. But where mana lines intersect, they may form a mana node, see below. A mana line has the following properties:

- Two fixed coordinates to define them
- Mana content
- Defense

Unclaimed mana lines have no defence. Defence can be increased and lowered by Arcanian spells. It is an open point if the mana content regenerates by itself and/or if players can pump their own mana into the lines. Arcanians can "attack" mana lines with spells, reducing the mana content. Once the mana content reaches zero, the line is claimed for the attacking faction. The defence significantly reduces the dealt damage, so attackers are advised to lower the defence first with a dedicated spell. In any case, defence is set to zero when the line changes ownership. Outlaws can attack the mana lines, but as there is no outlaw faction,

outlaws cannot claim ownership of the lines. A mana line, attacked by outlaws, becomes neutralised upon reaching zero mana content.

It should be noted that mana lines go across the whole map. So one can claim a mana line e.g. in Kantabi Desert while it is defended in Elstree Forest. Also, the mana nodes might form far away from the attack point. This makes the whole thing very variable and less deterministic.

As an additional gimmick, we can have mana lines influencing also druids by placing rare herbs only along the lines by a scheduled script. This even gives non magicians a first access to mana lines. At this moment, I do not see any potential connection between priests and mana lines.

8.3 Mana nodes

Wherever two or more mana lines intersect, we may have a mana node. A mana node is claimed by a faction by claiming all mana lines that intersect at the node. The nodes are the things in the game that actually grant a benefit to the players. Mana nodes are, in principle, available to all players of the controlling factions. The nodes are shown in the game either by cyclic GFX or items (portals). The services of a mana node are:

- Arcanians can "tap" the mana node and reduce their mana consumption for a spell significantly.
- All characters of the faction can travel (warp) from mana node to mana node along the controlled mana lines.
- Characters (all types) can pump their mana into the mana lines (to be confirmed)
- Your idea here.

Mana nodes could be the representation of the Elder Gods in the game and be utilised for channelling the faith of characters in the Elder Gods. The most obvious approach, backed up by ingame stories, is that at mana nodes ritual magic can be performed. Individual, unique rituals shall be assigned to specific mana nodes. Each ritual shall be bond to one Elder God without the Elder God playing an active role in the ritual.

The rituals shall have requirements such as putting items on the ground, placing characters on certain tiles, requirements on time or month and so on. Each ritual should be fully unique but can be repeated over and over again, with a reasonable cooldown, as it is scripted. Rituals shall not result in any skill gain. Basic rituals could be:

- A message is sent to the Elder Gods (!gm) (Eldan, All).
- Flowers grow all over the land (Ushara).
- A meteor falls from the sky (Brágon).
- A wildfire is started (Brágon).
- The weather (rain, wind) changes significantly (Tanora, Findari).

8.4 Limitations and implementation approach

As it is mandatory for Illarion that things are not too static, adding or removing a mana line should not require more than adding a set of two new coordinates to the game. So all nodes need to be calculated on the fly and updated upon any change in ownership of a line. This requires a clever algorithm. As mana lines' status need to survive a server reload, we have to store their properties in a persistent scriptvariable. With this approach, we could even have dynamic mana lines.

9 Conclusions

The presented conception offers an overall approach to fulfil milestone III with reasonable effort. The three exclusive magic classes with six distinct magic types - Arcanians, Glyph Forgers, Templars, Sanctificators, Druids and Alchemists - cover a wide range of playing styles and deviate from generic implementations of other games enough to meet the claims on an indie game.

By intentional renouncement of requirements for joining a magic class, we open magic to every player and every character. We come back to the old state of Illarion, where magic was all around and not a toy of very few, hand selected individuals. Illarion becomes a more magic world and with the strong involvement of the gods, religion is made part of the engine.

The additional powers, given to the players, will result in a higher strength of players compared to monsters. Along with the changes to the fighting system, this will open up ways for players to overcome strong monsters and also, groups of other players. It is foreseen that a group of dedicated magic users can become an almost invincible team - if they team up and do not just go solo. The interaction of the different magic classes will greatly enhance the gaming experience one has to play Illarion and the additional goals to master a magic class will motivate players beyond the obvious collection of glyphs or holding divine services to honour the gods.

10 The Way Forward

1. ~~Have a chat about the first impressions on the overall concept with the whole team~~
2. ~~Finalise this concept by conclusive actions and no endless discussions under the premise to have a simple and unique conception rather than a complicated, generic solution~~
3. Form a team of developers and designers (no talkers but workers)
4. Derive an action list and create corresponding Mantis tasks
5. Spreadsheet work for determining spells, effects and core numbers
6. Implementation of core scripts, common for all magic classes
7. Implementation of GUI elements and the underlying scripts
8. Script work to implement magic
9. Adjustment of Alchemy to the new magic classes

11 Change log

Version	Changes
1.x	Forum based thread.
2.0	New document.
2.01	Implementation of all known change proposals, general rework of concept. For details on the change proposals see: http://illarion.org/community/forums/viewtopic.php?f=24&t=39756 http://illarion.org/community/forums/viewtopic.php?f=24&t=39361 http://illarion.org/community/forums/viewtopic.php?f=24&t=39929
2.02	Update to Templar effects per comments in: http://illarion.org/community/forums/viewtopic.php?f=24&t=40681
2.03	Chapter 6: Introduced alignment circle for priest magic. Chapter 6: Added altar distribution. Chapter 6.1: Replaced charges with cooldown for Templar effects. Update to priest magic per comments in: http://illarion.org/community/forums/viewtopic.php?p=700581#p700581
2.04	Add figure captions Chapter 6, Chapter 6.1.4, Chapter 6.2.4: Change arithmetic of alignment to positive values. Chapter 6.1.4, Chapter 6.2.4: Increase alignment requirement for becoming a priest to 400. Chapter 6.1.6: Change god specific bonus on Templar effects as per Teflon's proposal here: http://illarion.org/community/forums/viewtopic.php?p=701302#p701302
2.05	Chapter 5.1.6: Describe use of magic gems for magic bonus of equipment. Give more freedom for the application of wands. Chapter 5.2.3: Add a figure that illustrates glyph shards.
2.06	Chapter 6.2.1: Decide for pool approach for skill buffs of sanctificators.

2.07	Implementation of feedback per:
	http://illarion.org/community/forums/viewtopic.php?p=703267#p703267
	Chapter 5.1.6: Decide for bonus for wands rather than making use mandatory.
	Chapter 5.1.9: Clarify how to target. Add a draft GUI figure.
	Chapter 5.2.2: Add option for glyphed items losing durability upon the glyph being depleted.
	Chapter 6.1.1: Add summon effects for Templars.
	Chapter 6.2.1: Add tools and wands to items that can be blessed.
2.08	Chapter 5.1.2: Add rune graphics to spell table
	Chapter 6.1.1: Add symbols to table of templar effects
	Chapter 7.2.1: Add druid icons
2.09	Chapter 1: Remove restrictions on distribution and pictures.
	Chapter 5.1.6: Revision of boni principles.
	All: Remove idealisation pictures.
2.10	Chapter 6: Make Cherga and Moshran neutral gods in the god alignment circle. Visualise god/faction relation.
	Chapter 6: Add god favour calculation results.
	Chapter 8.3: Elaborate on rituals at mana nodes.