

CODE & DAGGER

VOLUME II

```
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  / </name>
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    5951
  </dur>
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</scry>
```

CREDITS

/ROOT/CREDITS

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THANK YOU ALL FOR THE FICTION, CHARACTERS, PUZZLES, AND THOUGHTFUL QUESTIONS THAT THIS SOURCEBOOK WAS BUILT UPON.

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/ROOT/SUDO APT-GET INSTALL CODE_AND_DAGGER_VOL_II
READING PACKAGE LIST... DONE
BUILDING DEPENDENCY TREE
READING STATE INFORMATION... DONE
THE FOLLOWING NEW PACKAGES WILL BE INSTALLED:
    CODE_AND_DAGGER_VOL_II
1 UPGRADED, 1 NEWLY INSTALLED, 0 TO REMOVE AND 0 NOT UPGRADED.
NEED TO GET 1,337 KB OF ARCHIVES.
AFTER THIS OPERATION, 2,017 KB OF ADDITIONAL DISK SPACE WILL BE USED.
DO YOU WANT TO CONTINUE [Y/N]:Y
INSTALLING CODE_AND_DAGGER_VOL_II
TRYING URL 'HTTPS://MOZILLA.ORG/EN-US/FOUNDATION/SPRINT.TAR.GZ'
CONTENT TYPE 'APPLICATION/X-GZIP' LENGTH 1337000 BYTES <1337 KB>
OPENED URL
=====
DOWNLOADED 1337 KB

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...DONE.

/ROOT/CD CHANGELOG
/ROOT/CHANGELOG/LS

-RW-RW-R--  ROOT ROOT #MOZSPRINT.....5
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#MOZSPRINT

MOZSPRINT

On a healthy Internet, privacy doesn't mean you have something to hide. It means you have the ability to choose how much you share online. At Mozilla, we work to provide tools and fight for policies that respect people's identity and data across the Internet.

During the 2017 Global Sprint, as part of that work, we asked, "What might happen when the Internet shows up in a fantasy world full of mythical creatures?"

That's the question Cryptomancer tries to answer. Cryptomancer is a role-playing game (RPG) about information security (infosec) in a fantasy-setting that includes open and closed networks made up of crystal shards that connect people to each other. They let you find information and communicate with others, but the shards can also be used to track you and learn your habits. Together, they form a "Shardnet," like our Internet.

We invited the game's author, Chad Walker, education professor Antero Garcia, and security expert Romand Tiphane to co-lead a Global Sprint project inviting players to invent and share their own Cryptomancer adventures to help others:

- Create a safe and inviting space for players from diverse backgrounds.
- Enact strong online safety habits.
- Enact core Internet health principles like Digital Inclusion.
- Problem-solve challenges related to privacy, security, and inclusion.
- Make connections between the game and life online.

We're excited to see this issue of Code & Dagger shared online. Written by Global Sprint contributors and edited by Chad Walker, it's a fun, engaging, and educational example of collaboration across the Mozilla Network and the movement for Internet health.

Have fun storming the Shardnet!

```
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ESCAPE THE NETWORKED DUNGEON

OVERVIEW

This chapter contains a generic standalone adventure for *Cryptomancer* that is stripped of plot elements so it can be incorporated into any campaign. The premise is simple: the party wakes up in a dungeon full of scrying shards and crypto-gear security mechanisms and they must hack their way out. This adventure was designed to introduce the networking elements of *Cryptomancer* to new players, while also giving advanced players a fun playground to test their hacking chops.

Why was the party brought here? Who owns and operates this mysterious place? We purposely leave those details up to the GM. However, a useful way to incorporate this adventure into existing campaigns is to play it after the party gets captured by adversaries. Perhaps they are being detained until the Risk Eaters arrive to interrogate them, or they are awaiting their execution.

To make this adventure module as user-friendly as possible, we have included some descriptive (and sometimes didactic) text that can be read aloud to players throughout the session of play. **These sections will be in bold print for your convenience.** We suggest players who want to play this adventure stop reading now, lest they ruin some of the puzzles and surprises they'll face.

We definitely recommend that GMs read this adventure module in its entirety before running it for players. While it was written to be walked through methodically, at a teaching pace, advanced players will potentially take actions that will break out of the narrative guardrails we've provided. For example, a player that subverts the dungeon's scrying shard surveillance system will be able to survey (and potentially teleport to) areas of the dungeon that aren't introduced until later in the module.

PART I: THE CELL BLOCK

You wake up in a dank, dark stone cell. Your equipment is missing and you're wearing nothing but a ratty sack cloth garment. Vermin scurries about on the floor. The party has been split up, put in separate but adjacent cells, each one secured with a door made of iron-wrought bars and locked from the outside. Only the flicker of torch sconces lining the cell block corridor provide any light. While there are many more cells in this corridor, none of them seem to be populated. Just as your eyes begin to adjust to the low light, you hear the foot steps of an approaching guard.

Here, the GM can either invent who the guard is and what they look like, or choose one of these descriptions that best suits the type of dungeon they want this to be:

The guard is a human male wearing oiled chain-mail and coif, topped with a green surcoat. He uses a wooden quarterstaff as a walking stick, though its actual purpose is to bang against the cell bars to wake prisoners, and thrust at the ones who get too close to the door of their cell. A keyring dangles tauntingly from his belt, and a shard amulet hangs from his neck.

...OR...

The guard is a shambling, undead creature that was once an elf, adorned in chipped and rotten carapace plate, and dragging a flail along the floor behind him. Chunks of rotten meat are stuck in the flail's spikes. It wears a key on a necklace made of braided roots, and has a shard embedded in its ancient chest plate.

...OR...

The guard is a steam-powered bipedal automaton of dwarven design, animated by magical means thought forgotten with time. Its mythril chassis is built

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around a small furnace burning where a heart would normally be. It has blades for hands, and a small third limb protruding from its belly looks to have keys for fingers and a shard for a palm.

Regardless of how this guard (and others like him/it) look in the story space, guards are considered a *challenging* threat, though they are generally more than a fair match for the party because they have weapons, armor, and can call for backup using their shards.

The guard passes through the cell block corridor slowly, making sure that the prisoners are orderly and docile, and then wanders off. You know that he, or another guard just like him, will be back soon, and when that time comes, there might be an opportunity to pick-pocket his keyring, pull him towards the cell bars and overpower him, or socially engineer him into opening a cell (perhaps to respond to a medical emergency or look for a "missing" prisoner). Now would be a great time to discuss a plan in secret.

However, before your scheming begins, you look up to see a large melon-sized shard resting in a fixture hanging from the ceiling, just barely out of jumping reach. You assume this is a scrying shard, which works like a surveillance camera. There is a good chance that whatever transpires, a dispatcher sitting in a cryptovault somewhere might see what happens and respond accordingly. A very agile prisoner (i.e. someone good at Escape Artistry) might even be able to climb up on the horizontal bar of their cell door, reach through the bars, and lay a finger on it.

We have now provided our trapped heroes a number of interesting possibilities for getting out of their current predicament. Also consider that the characters, even without their equipment, may have many skills, talents, and spells at their disposal to solve this situation. If the characters are able to acquire the keyring in a rapid and orderly way (e.g. pickpocketing the guard or dispatching him and

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pulling him into a cell in a few seconds), they will be able to proceed stealthily. If the encounter is chaotic and the guard is able to resist (e.g. call for backup with his shard), the characters assume that more guards will be coming soon.

Regardless of the outcome, let's discuss the two shards that are in this scene: the guard's shard (assuming the party commandeered it) and the scrying shard hanging from the ceiling.

The guard's shard is small, about the size of a chicken egg, while the scrying shard is about the size of a melon. As with any shard, you know you have a number of options regarding what you want to do with it. The first thing you want to do is hold it in your hand, close your eyes, and review the messages that have been sent to it recently, to see what the guards have been talking about and maybe learn secret information.

After that, some useful options might include pretending to be a guard and communicating with other guards, or perhaps casting a spell such as Tracer or Shard Scry. If someone has the Tracer spell, they could find out how many other shards communicate with this shard (which might tell the party how many guards are in the dungeon), and where they are currently located. If someone has the Shard Scry spell, they could touch the shard and see through all the shards connected to it, as if they were surveillance cameras. These are just a few examples.

Another thing to keep in mind is that a shard can be destroyed (severing its connection to other shards), or expertly split by a character with the Shardsplitter talent (which also severs the shard's connections, but does create a new private shardnet for the party, one small shard for each of them). The guard's shard is too small to be split, but the big scrying shard is just the perfect size.

If the players listen in on the guard shardnet, they will notice right away that there is a lot of clear-text chatter, as well as a couple of encrypted messages they are unable to read. It seems like the guards don't use encryption, reporting

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their movements (and perhaps making small talk) in clear-text. This will make it potentially easy to masquerade as a guard, so long as the players talk just like the other guards talk, whether they are mortals working for the weekend, undead ghouls, or steam-powdered automatons (though doing this right will likely require a Performance skill-check).

There is clear-text chatter you can read, but there is also encrypted communications you cannot read. Of the clear-text chatter, guards seem to be reporting their location and status. For instance, the most recent (and brightly lit) message says "This is Rover One, Cell Block is Clear, Proceeding to the Cave," and it was likely sent by the guard you just outsmarted. Another message says "This is Sentry Two, requesting a break." Judging by the clear-text chatter, there are more than a dozen guards. The ones called Rover appear to be patrolling, while the ones called Sentry appear to be stationary.

It is hard to say what the encrypted message says without knowing the keyphrase that was used to encrypt the message. It appears someone on this shardnet is practicing good security and privacy. Perhaps a guard can be convinced to provide this keyphrase in exchange for letting him escape, or it can be harvested from a guard using the Mind Read spell, if that is available to one of the players. Alternatively, a player could attempt to socially engineer someone on the shardnet to tell them the keyphrase, pretending to be a guard who forgot it (which would likely require a Deception skill-check).

On the topic of getting information from unwilling participants: using violent coercion (e.g. torture) to get information from someone does not actually work in real life and should not be rewarded in fantasy gaming. Someone under duress will offer fake information just to make the pain stop or offer false information that will lead interrogators into a trap. Violent coercion is *always* a terrible strategy, never mind that its also morally repugnant.

If an effective strategy is used to learn the keyphrase (which is "doves daggers danger"), the players will be able

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to read the encrypted message, which says **"Tonight's keyphrase for the Cell Block door is "Wistful Wildlings Wander."** This is particularly useful information when facing the final obstacle keeping the party contained in the Cell Block area of the networked dungeon: a crypto-locked door.

A fortified, dwarven-built door stands before the party and their freedom (at least, from this section of the dungeon). It has no handle and no keyhole. Instead, it has a single exposed shard embedded at the center of the door. The only way to open a crypto-locked door is to touch its shard, encrypt with the designated keyphrase, and then create a message containing the same keyphrase. While this may seem redundant, encrypting first prevents someone from simply touching the shard and looking for the last message that was used to open the door, and replaying that message. When you touch the shard, you see that all guards who have used it tonight have not forgotten to encrypt.

Once the party is able to open this door, they are able to move on to the next part of the dungeon.

SUMMARY OF PART I

With the characters about to escape the Cell Block, let's review practical lessons we've learned so far:

- All information systems are vulnerable when an attacker is able to gain physical access to them. They can be broken, stolen, or used in ways the people who created them never intended (e.g. against their creators).
- Attackers capture credentials (e.g. keyphrases, or combinations of username and password) so they can use them to capture even more credentials, all to attack more systems. This is how real life hackers methodically bypass controls in information systems and traverse victim networks.
- Encryption makes an attacker's job much harder.

PART II: THE CAVE

If it was not already clear that this dungeon is partially underground, it is now. The crypto-locked door creeks open and reveals a massive, cavernous vault full of stalagmites, stalactites, and glowing gems embedded in the jagged ceiling creating artificial starlight. There seem to be a number of paths branching off from this cave, but of most interest here are the iron-wrought beams of what appear to be a dwarven elevator that ascends upwards, and the enormous ogre sitting down right next to it with a dazed look on its face.

Were the ogre to be standing upright, it would be several meters tall, with a hunched back, mangy blue fur, and muscular limbs that have the girth of a horse's torso. There's something unusual about this ogre, however. Under normal circumstances, an ogre would likely be stomping towards those who trespass in its layer and crushing them into a pulp. Seemingly grafted into the back of its head is a dwarven mechanism very similar to the crypto-lock mechanism of the door you just opened. It appears possible that this ogre's behavior is remotely controlled via shardnet. There is also another scrying shard hanging high up near the vaulted lair's ceiling, surveying the area. That must be how the troll's master can observe it. While the ogre appears docile for now, it's probably best to stay out of view of scrying shard (which is a challenging Sneak skill-check).

The dwarven elevator appears to go up to the surface, but the platform seems to be stuck several dozen meters above. There does not seem to be any calling mechanism or control shard immediately visible. Perhaps it is somewhere in this cave, down one of the three pathways that lead north, east, and west, respectively.

The ogre's behavior is indeed remotely managed by the dungeon's cryptoadmin. The device in the ogre's head is a crypto-gear switch that uses sequential logic to rotate be-

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tween behaviors. Any time the cryptoadmin issues the command "operation ogre lord" (encrypted with the same) via his control shard, the ogre's behavior cycles in the following manner: sleepy > helpful > enraged > helpful > sleepy, etc. The ogre is currently set to sleepy, which means it will just loaf around and scratch itself unless someone tries to harm it. When the ogre is set to helpful, it will obey spoken orders (in fact, the ogre helped build this facility under this condition). When the ogre is enraged, it assumes its natural state: smash and eat everything in sight. If the cryptoadmin observes our heroes from the scrying shard, he will cycle the ogre to enraged. The ogre is a *tough* threat, has 30 HP, and is more than a match for the party, especially without any equipment.

Next, we're going to discuss the three paths leading out of this room. It does not matter which order the party proceeds to these places, though they will likely discover secrets and devices in each place that will help them throughout their escape.

The Eastern Path

You slowly proceed down the eastern path, noting quickly that it seems to descend and spiral down to a chamber that is directly below the elevator. It is possible that some of the machinery that operates the elevator, and maybe even a control shard, will be found down this path. However, before you can get very far, it appears as if the walls begin to spin and close in on you. A powerful sense of nausea overcomes you as you stagger backwards. It appears that someone has casted Maze in this tunnel, encrypting it so that only those who know the correct keyphrase can progress forward. You'll need to figure out its keyphrase to go any further in this direction.

When and if the players do acquire the keyphrase for the Maze ("trespassers tread treacherously"), or disable it some other way (like forcing the person who cast this spell to revoke it), they are permitted to proceed further.

At the end of this path, there is a large dwarven

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engine that powers a winch used to pull and release the heavy iron chains that raise and lower the elevator. Fixed to the engine is a control shard. When you touch the shard and observe historical messages, you see what must have been a recent dialogue between the dungeon's cryptoadmin and his assistant. The assistant says, in clear-text, "I unjammed the chain. Try it now." There is then an encrypted message, likely the cryptoadmin activating the elevator remotely. Finally, there is another message, again in clear-text, from the assistant. "It works! I will now go perform maintenance on the lightning pylons, so we can make sure no one comes or goes from this island, at least by air."

You've heard of lightning pylons before. They are small towers that work like magical bug zappers, designed to shoot lightning bolts at incoming or outgoing gigaphids, the giant flying insect mounts popular among the elves. It also appears this mysterious dungeon is on an island, which means a proper escape must be by either air or sea, although air is out of the question unless the lightning pylons are disabled.

A dusty tome rests on a small table in the corner of the room, next to a few tools. Opening it up, the first line reads "Congratulations on your purchase of an elevating device from Grayrift Gears! In this user's manual, you will find instructions to operate and maintain this machine, as well as the default keyphrase used to engage its crypto-gear. **BE SURE TO CHANGE THIS IMMEDIATELY!**"

Of course the guards failed to change the elevator's default keyphrase ("lifts levitate loads"). The elevator platform can be summoned to the floor of the cave via the control shard attached to the engine. There is another control shard built into a kiosk on the elevator platform, which the players can use to ascend out of the labyrinth once everyone has stepped onto the platform. Note, the elevator platform is a wide iron disc weighing several tons. It drops at a somewhat rapid pace and smashes to the floor, kicking up clouds of dust and causing the room to shake. In the case that the

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ogre has been enraged, players can possibly coordinate (perhaps over their own shardnet) to drop the elevator platform on the ogre's head, pinning it down until the platform is raised again.

The Northern Path

There appear to be mining cart rails leading directly from the base of the dwarven elevator to and through a path that leads to the north. Presumably, there was a mining operation that cleared out the tunnels that weren't already part of the labyrinth's natural formations, and stone from the excavation was transported up the elevator.

Traveling up the tracks, a soft humming sound slowly grows into a mechanical racket. An ancient dwarven engine is busy at work, it's gears whirring at a steady clip. It appears to have one input gear and two output gears. It seems the input gear is being spun by another gear that is attached to a spinning shaft originating from the ceiling. It is likely that this shaft is attached to a simple machine above ground, such as a water wheel or a windmill, and its turning of the input gear provides power to the engine. The two output gears are turning two separate gears attached to shafts coming out of the walls. There is a third shaft coming out of the wall that is not being turned.

Inspecting the machine further, it becomes somewhat clear what it is doing. The engine is receiving enough input energy to power two machines connected to the output gears. It appears to be powering the elevator and some other machine at this time, while a third machine is powered down. It also appears to be built around a crypto-gear that is inaccessible from the outside but can be remotely controlled. When the cryptoadmin issues the right command, the output gears will change configuration, disabling one machine to power another. It is probably not a good idea to tamper with this machine until you figure out what other two machines, besides the elevator, are powered by this engine.

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This engine is connected to a windmill above ground and provides power to the elevator, the lightning pylons, and an experimental suit of animated armor called a "siegemech," which will be discussed later in this adventure. Currently, the engine is powering the elevator and the lightning pylons, while the siegemech lies dormant. If the players gain access to the control shard for this shardnet (which is in the dungeon's cryptovault), and they know the correct keyphrase to switch the output configuration ("power produces promise"), they can access the crypto-gear's sequential logic to cycle through these power configurations: elevator + pylons > pylons + siegemech > siegemtech + elevator > elevator + pylons, etc. Alternatively, if they sabotage this engine (a challenging Craft skill-check), they will kill power to all three machines attached to it. However, given the elevator won't work if they do this, they better figure out how to get out of the cave first before doing so.

The Western Path

As you proceed through a corridor to the west, the natural stone of the cave gives way to rigidly cut blocks of stone forming the vaulted ceiling of a castle's undercroft. The lair you are in must be located beneath a castle or keep of human design. The gem constellation does not light this area, but torch sconces on the walls do. Shelves cut into the stone host the withered corpses of ancient persons, each one wrapped in a dusty shroud. The corridor widens into a very large chamber the size of a cathedral hall with a shorter ceiling. The room is full of pillars and sarcophagi, with a single scrying shard hanging from the ceiling just out of jumping reach. You hear the slow shuffling of multiple guards ahead, but something is wrong. As you scan the area, looking for where the sound is coming from, your vision blurs and feel a sense of vertigo. This is the telltale sign that someone has casted the Maze spell between some of the pillars holding this room up. Someone has created a maze out of Maze spells! Only someone who knows the keyphrase used to encrypt these spaces can pass through them, let alone see through them. Proceed with caution: it is possible that the guards in here know the keyphrase and will see you

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before you see them!

There are three guards patrolling this space and they know the keyphrase ("trespassers tread treacherously") that will decrypt the Mazes casts in this room and the blocking access to the eastern path. However, this area is dangerous! Sneaking up on a guard will require a tough Stealth skill-check. If a player rolls good enough, they can add those Stealth successes to any attack roll made to dispatch the guard, lethally or non-lethally. If a guard is defeated in one blow, the other two guards won't hear anything, respond, or call for backup. To acquire the keyphrase they need, the players will have to interrogate a captive guard, or cast the Mind Read spell to harvest the keyphrase. Alternatively, one of these guard is the one who cast all the Maze spells in the cave and can revoke those spells so the characters can proceed, either voluntarily or involuntarily.

Throughout this scene, if things go south (the players are heard by guards or spotted through a scrying shard), the cryptoadmin will notify all guards in the dungeon that the prisoners have escaped and set the ogre's behavior to aggressive. Guards will muster at the top of the elevator, while the ogre will smash everything in sight (though he is too large to enter the eastern, northern, or western paths). The cryptoadmin will not remove power from the elevator because he believes there is no way the players could figure out the keyphrase, and he doesn't want to strand any fleeing guards in the cave once the ogre is enraged.

By the way, why are guards patrolling this undercroft? We'll let the GM decide by picking one or more of the following:

At the far end of the undercroft is a sarcophagus that seems to contain the body of an ancient warrior. Sliding it open, you see a withered skeleton wearing a dusty suit of fine plate mail and clutching a claymore against its chest. There is a dagger in one of its boots. There is also a bow slung around its torso and quiver of

arrows resting alongside it.

At the far end of the undercroft is a tunnel that has been caved in and barricaded. There is also the sign of what must have been a battle. Broken swords, snapped spears, and shattered shields litter the floor, as well as pools of black blood and large insectoid limbs scattered everywhere. Was this place invaded by deep-dwelling creatures recently? Either way, there is a makeshift arsenal on the ground.

At the far end of the undercroft is a raised, circular platform with a stone kiosk at its center. Embedded firmly in this kiosk is a single shard. Unlit red candles, each of them melted down to nubs, surround this space, and there is a gentle, otherworldly hum emitting from the platform. This area appears to be a ritual chamber, and the fixed shard can only have one purpose: to safely Shard Warp to another location far away!

SUMMARY OF PART II

With the characters about to escape the cave, let's review practical lessons we've learned so far:

- This section introduced some simple machines that can be remotely operated, similar to Internet of Things (IoT) devices that might be in your home. As convenient as these devices are, they can introduce risk to your home if not properly managed. Be sure to change default passwords on these devices as soon as you get them, so bad guys don't use your smart toaster to DDOS someone's golem!
- Some of the machines introduced in this section also resemble Supervisory Control and Data Acquisition (SCADA) systems, which are used to control and monitor big systems like electrical grids, railroad switches, and traffic lights. Abusing these systems often involves getting physical access to them, because they are separated from the Internet. Another method of attacking these systems is to go after their power source. As society continues to embrace industrial automation, systems must be secured with both physical security and cybersecurity in mind.

PART III: THE FORTRESS

The heavy chains of the elevator begin to grind around spinning gears, and the party is carried upward. As the elevator ascends, you can smell the ocean and hear distant waves crashing against the shore, along with the occasional crack of thunder. You ascend to the center of a tall, cylindrical room that has iron-grated windows cut into the sides. Daylight! Or at least, it might be. It is hard to say what time it is exactly with all of the ominous clouds outside and the heavy rainfall washing over the island. With all the wind whipping through this room, the torch sconces on the wall can barely stay lit and the scrying shard hanging from the ceiling swings back and forth.

Looking through the windows more, you appear to be inside a tower at the center of a large fortress. There are tall walls and parapets blocking much of your view, but you can at least see the beach, what appears to be a gigaphid aviary across a long courtyard, and a number of lightning pylons crackling with electrical arcs, eager to scorch anything flying to or from the island. There is a wooden door leading further into the fortress. There are rails here, too, leading to a heavy iron-wrought crypto-locked door that is currently closed tight. Even if you knew its keyphrase, it looks like you can't access its control shard, which is built inside its hinges. Looks like you'll have to proceed through the wooden door, because you can't get outside any other way.

Before you go, however, there is also a very large crypto-locked chest in this room. If only you had the keyphrase to open it!

There is the possibility that the party has already acquired the keyphrase to open this chest ("pilfered prisoner provisions") if one of the player's used Shard Scry to see it written down on a piece of paper inside the cryptovault. Otherwise, they will see this information if they gain ac-

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cess to cryptovault. Either way, this chest contains all of the weapons, outfits, and equipment that were confiscated from the party when they were initially captured.

There is also the possibility that the party is greeted by several guards who have been alerted of the party's escape and awesome fantasy violence will ensue. If that's the case, let's hope they've scrounged enough weaponry and have hoarded enough HP and MP to survive this melee.

Now for a quick overview of what players will find during this last leg of the adventure. To escape this island, the party must leave the fortress and gain access to the gigaphid aviary, where three of these giant flying aphids are resting. However, blocking their path is one *siegemech*, a massive suit of mechanical armor piloted by a guard and powered by the dwarven engine below ground via a thick, chain-mail-covered cord tethered to its body. It is currently powered down, but the pilot will likely use a shard to request that the cryptoadmin power it up once the party is detected. If this powerful warrior (a *tough* threat with 30 HP) wasn't problematic enough, the lightning pylons will destroy any gigaphid riders who attempt to flee (or fly in to liberate the party) unless they are powered down (via a control shard in the cryptovault) or sabotaged. The players have their work cut out for them!

The Hallway

The wooden door leads down a dimly lit spiraling stone staircase that opens into a hallway lit again by torch sconces on the wall. A single scrying shard hangs from the ceiling, just out of jumping range. As you creep down the hallway, you pass by several of the rooms and corridors it is connected to, though most of these spaces seem to be functional. There is a stone latrine dropping waste to who knows where, a Spartan mess hall with a single wooden table surrounded by benches, a barracks containing maybe 30 currently-empty bunks, and a poorly-stocked larder that stinks of fish (probably the only thing anyone eats out here). At the end of the hall is

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a large set of double doors that look as if they lead to the courtyard outside, if the daylight shining through the seems is any indicator.

However, there is also a short hallway leading to a large set of fortified double-doors that clearly lead to the cryptovault. These doors are fortified with steel plates and operated by dwarven gear-works of some kind. In fact, there are two lock mechanisms on either side of the door, several meters apart from each other. It looks as if this door was designed so that it could only be opened from the outside by two people inserting keys at the same time. Maybe one of the keyrings that the guards carry holds the key or keys required to open this door?

If the party starts tossing the place to look for useful items or information, they can find a number of Strong Healing Potions and Strong Mana Potions equal to the number of players. They can also find pretty much any other useful mundane item they can think of, like rope (to descend and ascend the elevator shaft), fishing rods, backpacks, etc. Leave it up to the players to say "I'm looking for [insert item]" and succeed at a challenging Scrounge skill-check.

The Cryptovault

The cryptovault is a small domed room that contains a large wooden desk and a half-constructed skeleton of a golem, missing only the large black Shardscape shard required to animate it. Cowering behind the wooden desk is the cryptoadmin, who reaches for a shard resting on the desk, casts a spell, and vanishes in an explosion of magical light, his clothing and equipment falling to the ground. It appears he has opted to Shard Warp away from danger, but now the cryptovault is yours to explore.

The golem looks as if it is a cross between a squid and a spinning orrery used for studying the stars. There seems to be a large cord attached to it, sleeved in chainmail, but ending in a coupling. This cord must be

used to provide power to the golem, but it's not currently plugged into anything. There are no shards currently held in the golem's many hands. Instead, there are a number of shards, each of a different size and hue, resting on squat stands made of silver atop the wooden desk. There is also a massive, dusty tome with its pages open, laying on the desk, with the keyphrase "pilfered prisoner provisions," being the last thing written in it.

One of the shards on the desk looks very familiar. It appears to be a scrying shard, and the one the cryptoadmin was using to remotely view the other scrying shards throughout the fortress. Another shard looks identical to the small shards carried by the guards. He must have used this one to communicate directly with the many guards in this fortress. Another shard looks very similar to the shard embedded in the gearbox below the elevator. The cryptoadmin likely used this shard to raise or lower the elevator when one of the guard's requested it. Perhaps it controls the orge and the crypto-locked doors too? Lastly, there is a shard you haven't seen before, but a scroll next to it containing a diagram hints at its purpose. This shard is used to switch the configuration of the dwarven engine providing power to the elevator, the lightning pylons, and something else... either the golem, or something else that is plugged in right now (but not here).

Lastly, there seem to be a pile of books and journals in one of the desk drawers. Perhaps they give insight into the purpose of this strange, isolated fortress...

Once they have commandeered the cryptovault, the party has acquired control of all of the fortress's shards and know all of its keyphrases (which are written in the dusty tome). They can switch the power configuration of the dwarven engine to power down the siegemech, pylons, or elevator. They can raise and lower the elevator, command the orge, or open and close the crypto-locked doors. They can read all of the keyphrases the remaining guards might be using to protect their communications in case of emer-

- - MORE - -

gency. They also have access to the fortress's secrets. The pile of books and journals will tell the story of this place and its strategic purpose. We leave those details up to the GM as an opportunity to tie this adventure to an existing campaign, or provide a teaser for the next adventure.

The cryptoadmin who fled has warped to another scrying shard somewhere in the fortress. The best candidate would be the shard that's in undercroft, where he would attempt to escape by crawling through the barricaded exit, or warping to another mysterious location via the ritual chamber. It depends on what the GM has determined is best for this story.

The Courtyard

The courtyard is barren, save for stacks of wooden crates and canvas satchels full of spare parts soaking in the rain, and a single menacing siege-mech, a mechanized suit of armor standing several meters tall, tethered to a chain-mail cord that runs to a small shed. It stands in front of a barn door that leads to a gigaphid aviary, and the closed portcullis that leads to the beach. This siege-mech is not fitted for the purposes of siege, lacking any type of battering ram to cave in doors or tower shield to protect columns of infantry from arrows. Instead, this siege-mech looks to be designed to help build the fortress, doing the heavy lifting and stone-setting that it would take dozens of people to perform with simple machines like lifts and pulleys. It is still a very formidable threat, however, and the guard inside it sees you and readies his giant suit of armor for combat.

Of course, depending on the actions the party has already taken by this point, one of the following outcomes happen.

The gears in the siege-mech begin to whirl, and this mechanical monstrosity charges towards you, dust and dew shaking loose from the courtyard walls with every thunderous step it takes. Prepare yourselves for battle!

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Or...

The guard attempts to turn the siegemech towards you, only to realize that someone has killed its power. The guard pops open the suit's breastplate and begins hastily unstrapping himself so he can climb out to run away, or surrender.

Assuming the party has to fight the siegemech or try to get past it to get to the aviary or the lightning pylons, the siegemech is a tough threat with 30 HP. It's immense strength allows it to add +3 to the damage of any successful strike. However, a player that successfully grapples the siegemech (which is extraordinarily dangerous) can attempt to make a tough Craft or Feat of Strength skill-check to unplug it from its power source, ending the battle.

The Aviary

The aviary is essentially a barn designed to house gigaphids. There are currently three of these giant flying insects inside the aviary. They are all wearing a harness that is tied to a post, and all seem to be content and munching away at bales of hay. There is a wooden lever that, once pulled, causes the trap-door composing the ceiling to open downward, exposing the aviary to the open air, allowing untethered gigaphids to fly away. However, unless the party is certain that the lightning pylons have been powered down, they should not attempt their escape. These giant, bug-zapping towers will destroy any gigaphid passing overhead.

The Lightning Pylons

There are a total of six lightning pylons fixed to the top of the walls surrounding the fortress and courtyard, distributed to cover every avenue of aerial entrance or egress. Each of these slender stone towers is topped with a spinning orb that ripples with electrical arcs. Inside each tower is a battery that resembles a massive black cauldron full of acid, which collects and saves the electricity from when the orbs above get struck by lightning,

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which is very frequent in this stormy part of the sea. The batteries are so heavy that the only way to remove one, effectively disabling the pylon, is to use the siegemech, or maybe even enlist the aid of the ogre.

The Beach

The beach contains a single long dock composed of rickety wood covered in sea-grime. Several small fishing boats that have been pulled up into the sand. The dock is likely used to port larger vessels that bring in supplies, whether it is building materials, food and supplies for the guards, or hay for the gigaphids. The fishing boats are too small to traverse the raging sea and could only be used near the island to catch fish or explore underwater caverns buried below the island. Is there more to see of this strange place?

Conclusion

By the end of this adventure, the party is flying on gigaphids towards their freedom on the mainland. Alternatively, they have defeated all the guards or forced them to flee or surrender.

If the party has fled, the island fortress itself might be a fantastic place to return to once they have gathered allies, resources, and a large enough ship to return to this place and raid it. If the party has already effectively commandeered the island, they can potentially begin the process of taking it over immediately, offering safety (and eventual escape) to the guards who help them maintain it until allied vessels arrive. This place might serve as an exciting remote safehouse for the players, especially if they can have someone deliver a Shardscape stone for the golem, and then power it with the cable that normally powers the siegemech. And if it was fun to take over, it might be even more fun to defend in the case that its previous owner wants it back! After all, someone spent a lot of time and resources constructing this fortress. Surely they have a contingency plan should it fall into enemy hands.

SUMMARY OF PART III

Now that the adventure has come to a conclusion, let's reflect on all the applicable learning points:

- To gain their freedom, the players likely had to exploit a number of system vulnerabilities, up to and including: keyphrases appearing in clear-text, default keyphrases not being changed on connected devices, and keyphrases left lying around in the open (the dusty tome may have well have been a sticky note with a password written on it and stuck to your computer monitor).
- With its high walls, remote location, and bug-zapping towers, this fortress is easily defended against attacks by land, sea, and air. However, it was clearly not designed against threats already on the inside. It appears the only controls to manage internal threats were the scrying shards and the two-man key needed to open the cryptovault, and these proved ineffective (assuming the party survived the adventure). Almost any insider, whether it was an escaped prisoner or a disgruntled guard, could do serious harm to this larger security system by simply destroying the dwarven engine powering the lightning pylons or the siege mech. We call this a "single point of failure," and something every type of system should avoid, whether it is an information system, a supply chain, or a human network of actors organizing in secret.
- Lastly, every good system should be designed to recover from disaster, because the only sure thing in technology is that systems will eventually break down when you need them the most. What is the contingency plan for the mysterious organization who lost this tower? Do they even know it has been lost to the enemy yet? Will they send an armada of ships and gigaphid riders to take it back? Will they just cut their losses and abandon the place entirely? Will they convince the Risk Eaters to destroy the place with an orbital bombardment of magical hellfire to protect its true secrets?

/ROOT/THE NETWORKED DUNGEON/CD ..
/ROOT/CD ENTERPRISE SHARDNET ARCHITECTURE
/ROOT/ENTERPRISE SHARDNET ARCHITECTURE/LS

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ENTERPRISE
SHARDNET
ARCHITECTURE

OVERVIEW

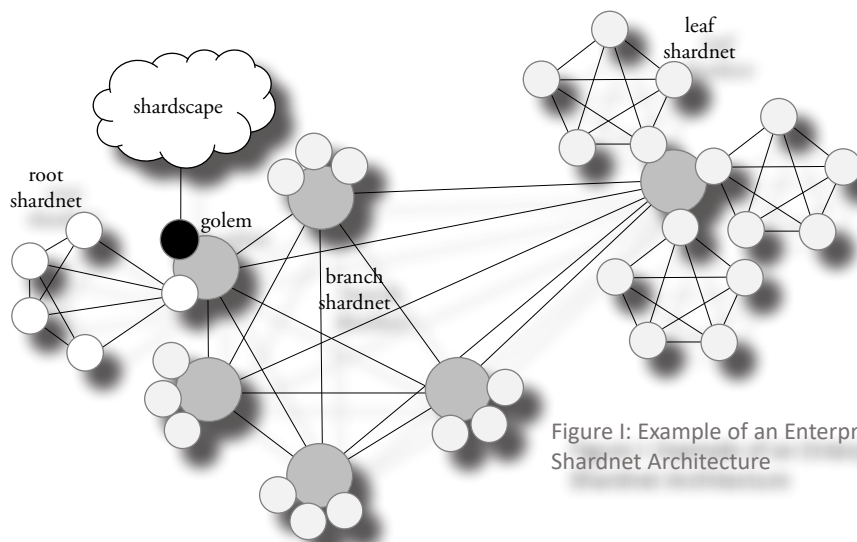


Figure I: Example of an Enterprise Shardnet Architecture

BIG ORGANIZATIONS, BIG SECRETS

How do really, really big organizations, also known as *enterprises*, protect their secrets? Enterprises employ many people, organize those people into functional groups, and distribute those groups across several physical locations throughout the world. The information systems of an enterprise must be able to facilitate rapid and organized communication between many individuals, many groups, and many locations. This also introduces risk, however, because a threat to one part of this system could become a threat to the whole. To secure these very complex information systems, enterprises can utilize security best practices like role-based access control, network segmentation, and information compartmentalization. This section will present an example of an enterprise security model for the denizens of Cryptomancer. In the image above, think of each dot as an individual shard, and think of the lines as representing a shard's affiliation in a shardnet. Lastly, keep in mind that there are characters in the game world who are holding and interacting with these shards. Some have access to a single shard, while some have access to several.

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THE ENTERPRISE SHARDNET

At its simplest, an enterprise shardnet is essentially a system of private shardnets that directly or indirectly connect back to a single cryptovault for the purposes of 1) connecting to each other, and 2) connecting to the Shardscape. Think of an enterprise shardnet as a *strategy* of utilizing a cryptovault, a golem, and multiple private shardnets to meet an enterprise's needs related to communication, privacy, and security. There are many different ways to build an enterprise shardnet, and designs are defined by the enterprise's business needs, its threat model (i.e. its understanding of likely adversaries), and its available resources.

The enterprise shardnet is built around a golem. The advantages of having a golem have been discussed at length in *Cryptomancer*, but to quickly review, a golem permits users out in the field to use the Shardscape no matter where they are, instead of having to wait in line for access to a public Shardscape shard. A golem also permits instant communication between shards that would not normally be able to communicate with each other because they are not part of the same shardnet. These capabilities permit an enterprise to centrally manage many employees who are organized in different groups and distributed across many locations, and provide all of them real-time Shardscape connectivity.

This all makes for an enterprise whose employees can act autonomously, rapidly, and in a coordinated manner, regardless of the geographic distance between its employees. In the context of a trading company, an enterprise shardnet allows the company to orchestrate and track its shipments, leverage buyers in distant bazaars to compare prices, and monitor for individuals skimming from the company's coffers. In the context of a security agency, an enterprise shardnet allows the agency to remotely manage covert assets placed behind enemy lines, protect sensitive information from threats inside the organization, coordinate actions between assets where one might not even know the other exists.

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However, a complex and highly connected shardnet architecture can introduce a lot of risk to the enterprise. What if a new employee who has access to the enterprise shardnet is actually an enemy agent? What if an employee has her shard stolen by an adversary who can now directly access the golem? What if a disgruntled employee bridges her personal shard to the Shardscape to flood the enterprise shardnet and render it useless? What if several shards in the larger enterprise shardnet have been compromised by the enemy?

It takes more than a golem to build and protect and enterprise shardnet. A sound enterprise shardnet architecture accounts for these scenarios and more, adding layers of security and resiliency while also ensuring that the business uses of the shardnet continues to function as intended. This will require skilled cryptoadmins, enforceable policies on acceptable usage of enterprise assets, and smart shardnet design decisions accounting for security, privacy, and availability. This chapter will be discussing all of these factors at length.

/ROOT/ENTERPRISE SHARDNET ARCHITECTURE/

USER GROUPS

Fundamental to enterprise shardnet architecture is the idea of *user groups*. A user group is essentially a group of people who share the same set of permissions. If an individual is added to the "archivist" group, she is permitted to enter the city-state's archive, peruse its records, and update records to account for legal changes (e.g. births, deaths, marriages, inheritances, etc.). If she is removed from that group, she is no longer permitted to do any of those tasks. As another example, an individual added to the "constable" group is permitted to arrest people, sleep at the local barracks, and be allowed entry into any building so long as he announces himself. If he is removed from that group, he loses those privileges. Lastly, an individual can be part of multiple user groups depending on their role. For example, an inquisitor who hunts down, interrogates, and meets justice on enemies of the state is added to both the "archivist" and "constable"

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groups. If she falls out of favor with the local regent approving her authority, she is removed from the inquisitor role, and subsequently removed from both the "archivist" and "constable" groups.

An enterprise shardnet uses groups in much the same way. The proposed design in Figure I features three generic user groups: root, branch, and leaf. These groups are listed in descending order of *privilege*. By privilege, we mean the level of sensitive information an individual can access and how much she is permitted to do. An individual has shardnet access equal to the level of trust placed in her. For example, a new employee, a temporary contractor, or a disposable asset (e.g. a spy or assassin) would likely be part of the leaf group. A cryptoadmin, a guild boss, or the head of a noble house, meanwhile, would likely be part of the root group.

Let's discuss what privilege looks like on an enterprise shardnet.

Participants in the leaf user group are non-privileged users who are part of a small private shardnet that is not directly connected to the golem. They can only communicate to other parts of the enterprise, such as the golem or other leaf user groups, when a member of the branch user group determines it is necessary.

Participants who are part of the branch user group are semi-privileged users who can directly access the Shardscape safely via the golem. A branch user is typically also part of one or more leaf user groups, usually composed of employees that report to her directly.

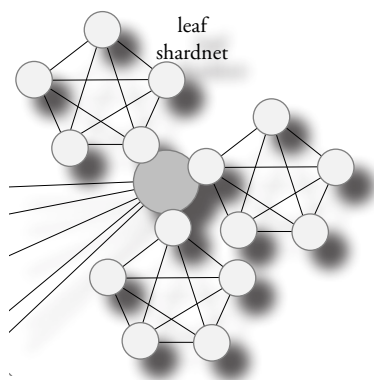
Participants who are part of the root user group are privileged users who are able to access the shardnet's most sensitive data (e.g. the golem's registry), make substantive changes to the shardnet (i.e. reset or reconfigure the golem), or issue orders to all other users on the enterprise shardnet. They are also part of the branch user group, so they can communicate directly with the bosses who manage the various leaf user groups.

COMPARTMENTALIZATION

Compartmentalization is the process of keeping some information subjects separate from others. In an espionage context, it is done to minimize the damage that an individual insider threat or captured/interrogated agent can do to the larger organization. Consider the spying agency of a human city-state, keeping an eye on neighboring factors.

This organization might have a spy placed at a nearby dwarven clanhall and a spy placed at a nearby elven lacuna tree. Through compartmentalization, these two spies don't know anything about each other. If the dwarven spy gets caught and is interrogated, there is no chance of him giving up the identity of the elven spy, because he doesn't even know she exists, and vice versa. Going up the chain, there are likely two separate case managers back in the human city-state handling these spies. These case managers know each other exists, and maybe even work in the same building, but they don't know anything about the other's work. If the dwarf spy is compelled to turn on his case manager, and she is caught and interrogated as a result, the case manager might know everything about spying operations against the dwarves, but doesn't know anything about spying operations against the elves.

A sound enterprise shardnet architecture will be built with these principles in mind. The design must 1) keep compartmentalized groups separate from each other and 2) be resilient against a scenario where an individual shard is compromised. The proposed architecture from Figure I attempts to achieve this, at least partially. There will always be lingering security problems (in fact, *Cryptomancer* was designed to ensure this). Let's dig into it on the next page.



Consider the actor at the center of this image. She holds a four shards. The dark gray dot represents the shard she holds from the branch shardnet, while the light gray dots represent shards from three separate leaf shardnets. We will consider her a lieutenant or manager in the larger organization. With her branch shard, she is able to communicate directly with other lieutenants as well as communicate directly with the enterprise golem. With her leaf shards, she is able to communicate with the three field teams that report to her. These discrete subgroups are composed of workers, soldiers, or mooks who take their orders from the lieutenant. It is very possible (and likely) that these groups don't even know of each other's existence. She can communicate with all of them, but they cannot communicate with each other, at least over shardnet, unless she chooses to create a bridge.

Leaf shardnets are disposable. The enterprise shardnet threat model assumes that leaf shardnets are the most likely to be stolen or compromised, because the people carrying them are agents out in the field, doing the dirty work of the organization. They are also the lowest ranking, least trusted, and most easily replaced members of the organization. If one of the leaf shards are compromised by an attacker, there might be serious trouble for the rest of the leaf shardnet, but there is no further harm done to the larger organization. In fact, the lieutenant could sever all ties to a compromised leaf network and even do so instantly by disposing of or shattering her leaf shard associated with a compromised shardnet.

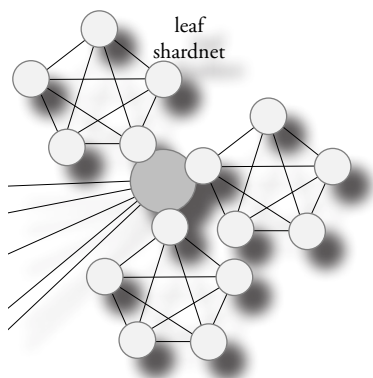
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However, if the lieutenant loses her branch shard, which she uses to communicate with other lieutenants and the golem, there is considerable risk to the larger organization. An adversary now has the ability to eavesdrop on communications in the branch shardnet, masquerade as her, or disrupt the network in other ways (e.g. cast Denier, drop Shard Spikes, geolocate the other lieutenants, or bridge the branch shardnet with the Shardscape in order to flood it and bring normal communications to a halt). It is for this reason that lieutenants are assigned personal security details, are instructed to destroy their branch shards if capture is imminent, and are often kept in the dark regarding what the other lieutenants are up to.

Now that we've had a chance to talk about some of the big principles behind an enterprise shardnet architecture, we're going to be discussing the leaf, branch, and root user groups at length, from the perspective of a character in those groups.

/ROOT/ENTERPRISE SHARDNET ARCHITECTURE/

LEAF SHARDNETS



I am an individual worker in a large organization. Perhaps I am an accountant sitting inside the one of the offices of a inter-realm bank that has locations in every major city-state, clanhall, and lacuna tree. Perhaps I am a field agent for a secret resistance organization spread across the region or perhaps a mercenary in a guild that does the dirty work for different rulers throughout the lands. Either way,

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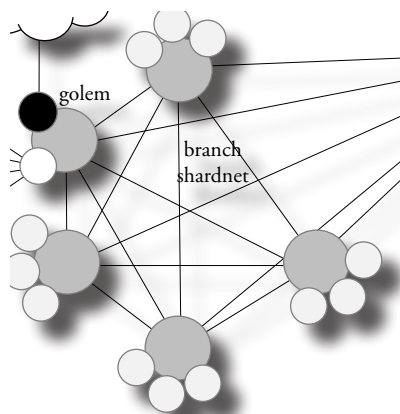
I am part of something very big and very organized, but I don't have access to all of it, because I am just a worker.

The organization gave me a shard. They call it a "leaf shard," because just like a leaf on tree, when a leaf is cut or falls off of a tree, no harm is done to the tree. My leaf shard is part of a small shardnet, composed of maybe four to six other leaf shards. My immediate comrades and coworkers are holding on to the other shards, as is my local boss, the one who gives me assignments. We use our leaf shardnet to talk to each other and coordinate our actions during an assignment. We try to use cryptomancy to encrypt our communication in case one of our leaf shards falls into the wrong hands, but sometimes we forget. The boss yells at us for this and we try harder next time.

When I am out in the field doing my duties, and I need to access the Shardscape, I don't actually have to go find a public Shardscape shard in the city. I can simply use our leaf shardnet to tell my boss what information I need to find or what message I want to send someone on the Shardscape. This means I have to tell her everything, including the keyphrases I use if I want her to send an encrypted message. That's OK, though, I mostly trust her. And if I was keeping a secret from my organization, I certainly wouldn't use their shards to talk about it.

Most of the time, the boss tells me what to do. But sometimes, she gets orders from her boss. Us workers never get to see those conversations though, because they happen on the "branch" shardnet.

THE BRANCH SHARDNET



I am a local boss or lieutenant in a large organization. Perhaps I am the regional manager of a soma distribution company in elven controlled lands. Perhaps I am the spymaster handling and secretly communicating with agents I have placed behind enemy lines. Either way, I manage and orchestrate the activities of many workers. I have one shard from multiple separate shardnets. I use this one to communicate with the team I have in the forest, this one for the team in the dwarven depths, and this one for the team squatting in the city. I can communicate with any of these teams, but none of teams know the others exist. Our organization does that so if one team gets captured or compromised, they can't betray the other teams.

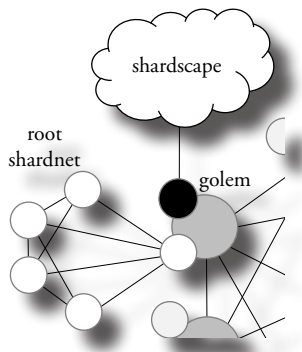
I check these leaf shards constantly to stay up to date on what my teams are doing. However, I spend a lot of time using my branch shard. Other managers like me, managing their own teams, have a branch shard, too. We talk to one another frequently on this shardnet and sometimes collaborate. If a manager needs help, for example, I might instruct one of my teams to travel to that manager's region and provide assistance. None of our workers have access to this shardnet, so we can discuss our plans freely. However, we still use cryptomancy to protect our messages, because what we talk about is very, very sensitive.

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Aside from the other managers, there are two very important beings who also possess a branch shard: our cryptoadmin and our golem. They are both in our organization's secret and heavily fortified cryptovault. I sometimes talk with the cryptoadmin about security matters, but most of the time, I am talking to the golem. Sort of. When I want to access the Shardscape, I encrypt my request using the golem's true name. Only the cryptoadmin and the other managers know the golem's true name, for security purposes. Sometimes I tell it to perform queries to find information that one of my workers asked for. Sometimes I tell it to send an encrypted message and then start listening for a certain keyphrase that my recipient will use to reply back to me. Because I am encrypting my requests to the golem with its true name, none of the other managers can see these communications. However, the golem logs everything in the registry, so I know the cryptoadmin can review what I'm up to. Sometimes, I have to have a chat with someone on the root shardnet because of what I have been querying.

/ROOT/ENTERPRISE SHARDNET ARCHITECTURE/

THE ROOT SHARDNET



I am our organization's cryptoadmin. My job is mission critical. I keep the golem in working order and manage our overall shardnet infrastructure. You could say our entire mission rests in my hands. I have been extensively vetted, but the big bosses have taken measures to ensure I don't get any ideas about betraying the organization. Every once in a while, they send an inquisitor to have a chat with me. Sometimes, he'll cast the "Mind Read" spell on me to

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make sure I tell them the truth. It's all part of being trusted with this responsibility, I guess. They also have leverage on me. They know my true name, and the true names of my family members. They can and will find me if something goes wrong. However, it won't come to that, because they take good care of me. And the last thing I want to wake up to is a Risk Eater crawling through my window.

I spend almost every waking hour in our cryptovault. This place is a veritable fortress. There is a whole garrison of guards outside the vault doors to protect me and also protect the windmills that are providing power to the golem. Inside the vault, there are shards everywhere. Most of them are in the golem's hands, though, literally. I use my branch shard to communicate to the other members of branch; the managers and lieutenants running the teams out in the field. I use my cryptomantic and magical know-how to support them when they need it. For example, if a manager wants to know exactly where one of her agents are, I'll ask her to temporarily bridge her branch shard with the leaf shardnet that has the missing agent. I'll then cast "Tracer," a spell that builds a mental map of the physical location of every shard I'm connected to. So yes, I'll be able to tell you where every branch shard is, but now I can also tell you where all four or five leaf shards are in that shardnet the manager has bridged. Don't get me wrong, I don't like to do this. When that bridge is made, it creates an opportunity for someone on that leaf shardnet to eavesdrop on the branch network or even access the golem. That's why I usually tell branch to maintain silence while I do this, and tell the manager to sever the bridge the moment I am done casting the spell.

There was one time we were getting shard stormed from the inside. One of the lieutenant's had his shard stolen, and the thief was crushing us by bridging that branch shard with the public Shardscape. We have a plan for this. All branch users check in, using a special keyphrase just for this occasion. The shardnet traffic is a mess, but I can at least focus on that keyphrase. The one who doesn't check in? That's our troublemaker. I then cast Tracer to locate them and then pick up a shard (not connected to the golem) that

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I use to contact a stormer crew we contract in emergencies. I create a bridge for them to join our (noisy) shardnet, and they Shard Warp over to the troublemaker and solve the problem. Violently.

I have access to a special shardnet that not even the managers have access to, and we call it the "root shardnet." The root shardnet is used by me and the organization's big bosses. The golem has one, too. They really don't use it much, but when they want to talk to me directly, they'll encrypt their messages with my true name so only I can see it. The message will contain a keyphrase I should use to respond back. They usually ask for a status report on what's going on in the organization, or ask me to look up something in the registry. These folks are paranoid, and often want to see what kind of queries the managers are making in the Shardscape. Sometimes they want to talk directly to a manager, and they'll ask me to create a bridge between root and branch. They'll usually encrypt with that manager's true name, so I can't really see what is being talked about. Neither can the golem, which means I couldn't see what they are talking about even if I wanted to take a look in the registry. That's probably for the best.

There was one time when the big bosses asked me to reset the golem's true name, and then only share the golem's true name with four of the six managers. I told them that those two managers and their teams won't be able to access the Shardscape if I do that, and they told me not to worry about it. Then they asked me to bridge root with branch and started contacting the four managers they trusted, presumably using their true names for encryption. The remaining two managers kept asking what was going on, but I didn't reply, because I didn't know and figured the brass were up to something. Then a few hours later, those managers went silent, completely. No more echoes, nothing. I figured out what happened a few days later, when an agent dropped of two branch shards in a blood-soaked bag and tore a few pages out of the registry.

MY SECRETS, THEIR ASSETS

This section discussed some elements of enterprise IT that may be relevant to real life, even if our reader is not directly part of an IT or security department. Consider the voice of the worker bee on the leaf shardnet, saying "[If] I was keeping a secret from my organization, I certainly wouldn't use their shards to talk about it."

While privacy laws vary wildly from country to country, it is typically a safe bet to assume that an individual worker has no expectation of online privacy when leveraging company assets. Many organizations log all of their employee's online activity, and not just because they are nosy or worried about your productivity! They are often compelled to log all online activity in order to comply with regulations or compliance obligations, or to detect malicious traffic from company devices that have been compromised by malware. Unfortunately, using anonymizing services such as TOR or a private VPN at work are rarely viable alternatives and are frequently prohibited. Again, this isn't because companies are nosy. It is because they are trying to protect their organization from data loss. An encrypted, anonymous, outbound connection is exactly the type of thing that an adversary would use to exfiltrate sensitive data from your organization. When security analysts see this type of activity, it is often their duty to investigate it and treat it as malicious until they can verify otherwise.

All this is to say that if a secret is worth keeping from someone, don't use their devices to keep it from them. It is often their right and their obligation to know what's happening on their property. It's nothing personal. For secrets worth keeping, stick to your own devices, like your phone.

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/ROOT/ENTERPRISE SHARDNET ARCHITECTURE/CD ..  
/ROOT/CD OFFLINE SECURITY  
/ROOT/OFFLINE SECURITY/LS
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-RW-RW-R-- ROOT ROOT OVERVIEW.....43  
-RW-RW-R-- ROOT ROOT PSYCHOMETRIC CRYPTO.....44  
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OFFLINE SECURITY

OVERVIEW

This chapter explores fantasy methods of evading physical surveillance, disrupting techniques to geolocate shards, and securely generating/exchanging shared secrets (e.g. keyphrases) when traditional methods are either impracticable or presumed compromised.

PRIVACY AND SECURITY IN THE MEATSPACE

This chapter was written to get our readers thinking about how we can maintain information security and privacy in the *meatspace* (i.e. the actual physical world) also known as IRL (in real life). The applicability of these topics, in real life, really depends on your individual threat model (i.e. the universe of possible threats to your physical safety and privacy) and your individual risk tolerance (i.e. your willingness to forego taking countermeasures against realistic threats because you think the likelihood of these threats materializing is so low). This is not, and should not, be confused with "how paranoid you are." Your threat model may be very different from someone else's threat model based on experiences and affiliations. If you have ever participated in a protest, it is possible that you have been photographed, identified through facial recognition technology, and added to a law enforcement database. If you live in the Middle East, military drones surveying and sometimes striking the population is a very real possibility. For those who have dealt with stalkers, device geolocation can absolutely impact one's safety and privacy. Even if you don't count yourself among these groups, the laws and technology of surveillance continue to change, compelling us all to review our personal threat models. If there is one takeaway here, it is to not dismiss legitimate concerns over physical surveillance as "being paranoid."

PSYCHOMETRIC CRYPTO

The Psychometry spell in Cryptomancer permits a spell caster to receive psychic impressions from an inanimate object. This spell has clear investigative purposes. For example, an investigator can cast Psychometry on a discarded murder weapon to get impressions of the last person who touched it. However, the spell also has immense potential to facilitate secret communication outside the context of the Shardscape. Consider the following scenario of a case manager communicating secretly with one of her clandestine assets in broad daylight.

The case manager is undercover as a simple merchant running a fruit stand in the city-state's bazaar. Every afternoon, she shows up to her vendor stall to sell the fruit she has picked from an orchard the night before. Her favorite customer stops by every morning and asks her for the best apple she's picked. She reaches for an apple that she's withheld from the apple bin and hands it to him. He takes it, flips her a coin, and walks away munching on an apple. This entire exchange happens in front of constables patrolling the bazaar, not to mention other customers.

Her favorite customer then walks to the privacy of a nearby alley. There, he casts Psychometry on the half-eaten apple. If his player rolls 1 success, he merely gets impressions of the exchange that happened at the bazaar. However, if his player rolls 2 or more successes, he gets a stark vision of his case manager holding the apple in her hand and speaking directly at it, as if it was alive. "Your mission tonight," she says, "is to tail the captain of the guard and determine which haunts he goes to after his shift. I expect a full report in the morning. Imbue it in the coin you use to pay for your next apple, using this same technique."

Then, he eats the evidence.

GIGAPHID DRONE SURVEILLANCE

There is no Sylvettic canopy or Subterranean mountain obscuring the sky above the human-ruled city-state. There is only open air and a handful of riderless gigaphids slowly and silently circling overland. Each of these gigaphids is fit with a leather harness. Embedded in the harness padding that covers the gigaphid's lower abdomen is a shard, aimed downward at the land below. Inside a cryptovault deep within the regent's keep is a cryptoadmin using the Shard Scry spell to monitor the rooftops and open streets of the city-state, keeping a watchful eye on the populace. Whether it is a fire or a riot or an orcish invasion, the cryptoadmin, with eyes in the sky, can see these events break out and immediately dispatch personnel to deal with the crisis.

At least, that was the vision sold to the people. A few years ago, the regent and his court heard a proposal by a local elven tribe looking to sell off a handful of gigaphids that refused to take on riders, rendering them useless to the elven armada. The open sky above the city-state created an opportunity to use them for something ineffective in Sylvertica: aerial surveillance. While a few of the regent's political rivals raised concerns over the idea of giving the regent such power, these rabblers were shouted down. The city-state faced many crises, including terrorists blowing themselves up with alchemical bombs in crowded bazaars. Any advantage that could be given to the constabulary to fight this new menace was in the public interest. Besides, the regent was a good and just man, they said.

They were right. The regent was a good and just man. Under his guidance, the gigaphid drones were only used to detect and help manage major crises that arose in or near the city-state. However, the regent would soon pass away and his eldest son, heir to the throne, was neither good nor just.

Today, the gigaphid drones have a very different mission from the one that was proposed years earlier. They

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are used to spy on enemies of the state (real or imagined, but mostly imagined) as well as keep tabs on the paranoid regent's political rivals. The cryptoadmins monitoring the streets and public squares that the drones survey are not simply watching passively, looking for problems. Instead, they are scribbling down the times and locations of meetings occurring between the subjects under scrutiny in massive tomes, and correlating events to establish possible relationships between actors who never actually met under the gaze of the gigaphid drone. Thrace was seen in the marketplace with Moriarta, and Moriarta was seen in the gardens with Herkin, so Thrace must know Herkin. Guilt by association is the new regent's favorite tool for culling his rivals.

Political agents and concerned citizens alike avoid the drone's gaze by traveling at night, traveling amongst large groups, or taking tunnels and interior paths from one point to another. Most of the city-state's folk take no such precautions. They shrug, saying "I've nothing to hide from my king," though he has shown his willingness, if not eagerness, to use his analysts' crude relationship-mapping to prove *something* where *nothing* actually exists.

Those paranoid few who decried the initial plan under the old king fled the city-state long before things degenerated in such a manner. They now form an echo-collective on the Shardscape cautioning people throughout all of Sphere about ceding too much liberty to those in power, regardless of the threats facing the people. "Never cede liberty to the regent you love and trust," they say, "unless you are willing to cede the same liberty to the regent you most fear." Their message resonates with people. That is, until the state whips the people into a panicked frenzy, propping up a single act of violence to declare the humans, or the elves, or the dwarves, or some other group, as eternal enemies hiding in plain sight amongst the people.

And somewhere, an elven accountant laughs and counts his coin.

ASTRAL CRYPTO

The Astral Eye cantrip in *Cryptomancer* permits a spell caster to perceive traces of magical or physical evidence that would otherwise be invisible to the naked eye, such as fingerprints or cleaned blood splatters. Much like the Psychometry spell, this cantrip has clear investigative purposes but can also be used to facilitate secret communication outside the context of the Shardscape. Consider another scenario of a case manager communicating secretly with one of her clandestine assets in front of witnesses.

After a long shift of picking fruit for her front operation, the case manager goes to the local temple to observe prayers to her god. She sits down in the back bench, picks up the hymnal book, and rubs her finger against the pages, as if she was silently reading along. She then closes the book, leaves the temple, and retires for the evening. Shortly thereafter, a cloaked temple patron sits down where she sat, picks up the hymnal book, flips through a few pages, and then leaves. All of this occurs before the clergy and other faithful temple goers.

What the witnesses to this event did not see, however, was that the case manager was using her fingerprints to imprint a message onto the pages of the hymnal, and the cloaked patron (hiding his glowing Astral Eyes from on-lookers) was flipping through the pages to read this invisible message. It read "We cannot wait any longer. Strike the target tonight."

Several blocks away, in an exclusive and secure gated community, a handmaid stands on the third-story balcony of the baron's estate, taking in some night air. When she hears the town's clock-tower strike midnight, she gestures in the air and her Astral Eyes glow blue. She surveys the rooftops outside of the gated community, squinting, and sees a glowing Scout Sprite, which would normally be invisible. The sprite moves in a fashion as to scrawl a message of light in the night sky: "Strike tonight." The handmaid procures a blade from her boot and walks back into the estate.

COUNTER-LOCATION TECHNIQUES

You've acquired a shard that doesn't belong to you. Perhaps you've pick-pocketed it from a constable, or looted it from the corpse of an enemy you just bested in combat, or maybe you just found it somewhere and you don't really know who it belongs to. Either way, you've stumbled into someone else's shardnet and now have access to their secrets. At the same time, you've inherited some potentially serious security and privacy problems. Let's count the ways this could come back to haunt you:

- Someone casts Tracer to ascertain where their missing shard went.
- Someone casts Shard Scry to visually spy on you.
- Someone casts a weakly-encrypted Shard Spike to physically locate you the moment you access the shard.
- Someone casts Shard Warp to teleport to your location, and they are very unhappy with you.

Given these risks, it is tempting to stomp on a stolen shard, breaking it into a million pieces and destroying its connectivity to whatever shardnet it came from. As much as you'd like to use it to eavesdrop on and monitor your enemies, you couldn't possibly risk carrying it around with you, let alone bring it back to your safehouse. Thankfully, there are a few methods to manage this magical liability sitting in your inventory.

Shadow Cache

One method of securely managing a stolen shard is to bury it in the shadow realm, using the Shadow Cache spell from *Cryptomancer*. When a shard is buried in a shadow cache, it no longer exists in the physical plane, making it impossible to geolocate via Tracer or Shard Spike, impossible to spy on via Shard Scry, and impossible to teleport to

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via Shard Warp. The shard still receives echoes in the shadow realm, however, meaning that it can be extracted later and reviewed for previous communications. Of course, the stolen shard maintains all of the previously mentioned security problems once it is pulled back into the corporeal realm.

Faraday Bond

Another method is to stow the stolen shard in an aerated jar inhabited by two Echoeater familiars who have developed a *Faraday Bond*. When two or more Echoeaters are trapped in close proximity and resist the urge to destroy each other (due to their mortal master's skillful rearing), a Faraday Bond is formed. A Faraday Bond causes Echoeaters to emit a chemical that *literally* eats echoes that are inbound to a shard, effectively severing that shard's connectivity to its shardnet until it is removed from the jar. The conditions for a Faraday Bond are readily available for characters who have acquired two Echoeater familiars (by purchasing the Whisperer talent twice).

Moving Target

For those who are neither magically-inclined nor willing to foster a pair of bloated, fist-sized beetles, there are a few mundane options, though none of them are nearly as convenient. A straightforward method is to stow the shard in a location that is easily surveilled and/or heavily trapped. Given that shards are an expensive commodity, it is likely that members of the compromised shardnet would do everything in their power to recover or destroy a stolen shard. If the shard is secured in a very public place, such as a town square, it might provide an excellent excuse for the two parties involved to parlay peacefully. A less straightforward method designed to misdirect and torment the owner of a stolen shard would be to wrap it in a wad of meat and feed it to a roaming animal, such as a street dog. This will lead the owner on a wild-goose chase, likely through some unsavory places, until the animal passes the shard... a truly sordid prize.

KEY GENERATION UNDER DEEP SURVEILLANCE

Under ideal circumstances, it is simple for two actors to communicate securely on the Shardscape, so long as at least one of the actors know the other's true name. However, let's consider the worst possible circumstances: neither actor knows the other's true name, and all in-person communication between the two actors is being monitored closely by enemy agents, or neither actor knows where the other is but still needs to reach them. In order to generate and then use new keyphrases that they both know, but others won't know, they need to leverage some piece of information that is provided by the physical world that is both somewhat random and somewhat reliable. They also need to agree on this source of information before they find themselves separated or under deep surveillance, as an emergency measure.

Let's first consider a technique for two actors who are separated for a long period of time but must down reconnect on the Shardscape. One technique would be to leverage a regularly occurring and publicly available string on the Shardscape as keyphrase material. For example, both actors could agree in advance to query the Shardscape for "the cost of barrel of soma in Prantis" and then encrypt using a keyphrase based on what's being reported, coupled with some word or string they agreed on earlier (e.g. "rabbits"). For example, if a barrel of soma costs 1,187 coins today, their keyphrase *today* might be "one thousand one hundred and eighty seven rabbits." Both actors know to perform the initial query on a daily basis, and then query for messages encrypted with the newly formed keyphrase. No matter where they are, what has transpired, or what previous keyphrases have been compromised, they know they will be able to stay in touch and reconnect securely.

Next, let's consider two actors who are able to interact in person, but are under deep surveillance, and find it

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impossible to exchange notes or even whisper to each other without being compromised. A possible technique to use here is to play a game with each other that produces random or semi-random results, and then use those results as keyphrase material. For example, two actors under surveillance can go to a tavern nightly, and play a few turns of chess against each other while drinking a mug of ale and making perfectly innocent small talk. Perhaps they play three turns a night, and ask the barkeep to not disrupt their board. What they are doing is generating keyphrases. After three turns, the keyphrase for the evening might be "pawn moves, bishop moves, rook takes bishop." Tomorrow, after three more moves, the keyphrase will be different. The agents monitoring these two actors might be watching the game and even tracking the movements, but it would take a pretty savvy analyst to determine what's actually going on here.

Both of these techniques do have a number of security problems. First and foremost, if the thing generating the keying material is broken (e.g. soma is banned in Prantis, someone steals the chess board, etc.), communication is broken until a new keyphrase generator is found. There isn't much to address this, other than having a fall back keyphrase. Secondly, if an adversary learns the methodology behind the keyphrase generation (either through analytic genius or interrogation), they can use the methodology to eavesdrop on future communications (and potentially past communications).

However, both of these techniques are somewhat resilient even against eavesdroppers who have compromised the methodology. In the case of a the soma price cypher, the adversary would have to get historical records of soma price fluctuations and generate keyphrases for every day going backwards, potentially for months or years. This is an enormous amount of labor and much harder than simply using one keyphrase to harvest months or years worth of conversation. In the case of the chess cypher, the adversary would have to somehow reverse engineer the previous movements, or generate a brute force list of all possible movements, which would likely take a Code Cleric's lifetime. Either way, harvesting previous message utilizing these techniques is extraordinary painful.

/ROOT/OFFLINE SECURITY/CD ..
/ROOT/CD NEW TALENTS AND SPELLS
/ROOT/NEW TALENTS AND SPELLS/LS

-RW-RW-R-- ROOT ROOT NEW TALENTS.....53
-RW-RW-R-- ROOT ROOT NEW SPELLS.....56

NEW TALENTS
AND SPELLS

NEW TALENTS

This section introduces new talents for *Cryptomancer* characters, some of which were designed to better facilitate the adventure modules in this sourcebook.

Caster's Carry-On

2 Talent Points

An actor is able to attune her trademark outfit or trademark weapon (and associated ammo) to her magical essence and transport it with her when casting Shard Warp. This talent may be purchased twice.

Feral Ferocity

1 Talent Point

An actor is able to use her knowledge of animal behavior and physiology to prevail in combat against the natural fauna of the forest and the deep. Once per scene of combat, she can make an additional Beast Ken skill-check immediately after doing damage to any non-sentient beast (e.g. bears, giant vermin, wolves, etc.) and add any successes to the damage she delivered. The difficulty of this skill check is identical to her attack roll.

Martial Mana

3 Talent Points

An actor can convert her mana reserves to vitality. She can convert 3 MP (of her own) to 1 HP (of her own) at will, at any time, including immediately after sustaining damage.

Mechanical Malice

1 Talent Point

An actor is able to use her knowledge of metallurgy and clockwork to prevail in combat against constructs and mechanized foes. Once per scene of combat, she can make an additional Craft skill-check immediately after doing damage to a mechanical foe (e.g. behemoths, siegemechs, etc.) and add any successes to the damage she delivered. The difficulty of this skill check is identical to her attack roll.

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Pattern Recognition

1 Talent Point

An actor is able to instinctively separate the signal from the noise and find patterns hidden in data. Once per session, she can invoke this talent to automatically determine if there is a useful pattern hiding within a set of data, which includes but is not limited to encrypted shardnet communications, financial records, golem registry logs, and town board posts. No skill check is necessary. She simply needs to say she is using it, and the GM should provide as much information as possible.

Shardsplitter

2 Talent Points

An actor has acquired the very secret and exclusive knowledge of shard-splitting from a dwarven gem-cutter. She is able to split any shard into several equally-sized parts, thereby creating a new shardnet. To do so, she must succeed at a Craft skill check, the difficulty of which is determined by how many shards she is trying to create: trivial for less than 6 shards, tough for more than 20 shards, and challenging for anything in between. Failure results in not being able to figure the correct calculations and needing some downtime to stew on it. Dramatic failure destroys the shard. Remember, a shard cut any smaller than a chicken egg becomes a mundane gem with no connectivity. This talent may only be learned by another character who possesses the talent.

Sudden Snares

3 Talent Points

An actor is able to see and exploit opportunities to turn scenery (including objects and architecture) into traps at moment's notice, without premeditation. Once per scene, she can make a Traps skill check to determine how many points of traps she can leverage against her enemies, as if she had already spent a session of downtime preparing them. Her player is still on the hook for narrating how these improvised traps are sprung (e.g. pulling out the rug underneath foes, knocking down large chandeliers, smashing support beams to create a cave-in, etc.).

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Tempered Taste

1 Talent Point

An actor is a bard of beverage and minstrel of meals, able to recount fascinating details and unearth hidden nuances of food and drink, to the delight of her audience. Ignore 1 botch for any Charm, Deception, Menace, or Performance skill check so long as the character is using anecdotes about food or drink that is present in the current scene to inform her yarns, insults, or compliments.

True Named Blade

2 Talent Points

An actor can consecrate her trademark weapon with her true name, making it more effective against that adversaries that know her true name. She paints or etches her true name onto the weapon, and then uses basic cryptomancy to encrypt that mark with her soul key. The weapon now does +1 damage to anyone who knows her true name. However, there is immense risk in revealing your true name to enemies, so be careful!

True Named Plate

2 Talent Points

An actor can consecrate her trademark outfit with her true name, making it more resilient to attacks from adversaries that know her true name. She paints or etches her true name onto her outfit, and then uses basic cryptomancy to encrypt that mark with her soul key. The armor now has +1 DR against attacks made by anyone who knows her true name. However, there is immense risk in revealing your true name to enemies, so be careful!

Vermin Vantage

3 Talent Points

An actor always has a useful set of tools available to her, by virtue of her relationship with insects and other vermin offering their services to her. At any time, she has access to insects that can substitute for a lockpick and torsion wrench, a stylus and ink, and a silken rope (which can also function as a stabilizing tourniquet). She simply wills the insects and vermin in the area to come to her, and they contort their bodies into tools, or produce as much ink or silk as she needs.

NEW SPELLS

This section introduces new spells for *Cryptomancer* characters, some of which were designed to better facilitate the adventure modules in this source book.

Anti-Scry (Cantrip)

A spell that irritates a caster with a tingling sensation or a dull pain whenever she is in the line of sight of an active scrying shard. The sensation or pain becomes more acute when the eye of the scryer is gazing upon her. Caster makes an unopposed Willpower skill check of challenging difficulty. Upon success, the target is instantly notified any time she is in line of sight of an active scrying shard, and ignores a botch when making a Stealth skill check to avoid their gaze. She is also instantly notified if she has been seen through a scrying shard. She can cast this spell on herself, or another target, so long as she can lay a hand on them. Lasts for the duration of a scene.

Mana Mold (Cantrip)

A cantrip that permits a caster to hold a small item in one hand and then conjure a magical replica of that item in the other hand. This is a stealth spell, cast without the verbal evocation and light show associated with most spells. Caster holds a small item (small enough to fit into a pocket) and makes an unopposed Willpower skill check of challenging difficulty. If she succeeds, she has conjured an exact physical replica of the object, though anyone with Astral Eyes can determine the object is a magical replica, and its creator can be found with Astral Trail. This cantrip is particularly useful for making copies of keys, coins, scrolls, and other objects that might be pick-pocketed from their owners (and maybe even returned). However, Mana Mold does not work on any object that already has magical properties (e.g. encrypted scrolls, potions, shards, or another magical replica).

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Rope Sprite (Basic Spell)

A spell that conjures a translucent, silent wisp that floats around and leaves a glowing magical trail in its wake. As soon as the caster revokes the spell and makes the sprite vanish, the magical trail it carved into the air becomes a solid rope, strong enough to climb, bind a captive, or tight-rope across a chasm. Caster makes an unopposed Willpower skill check of challenging difficulty. Upon success, the sprite appears and begins to slowly fly in a pattern dictated by its conjurer, creating a physical rope in its wake. Upon failure, the magical trail sprinkles to the ground like dust. The sprite is too obvious and moves too slowly to be used in a combat capacity, and can only create enough rope to extend medium range between any two points.

Uncanny Eye (Basic Spell)

A spell that permits a caster to touch the subject of a painting, drawing, or sculpture, and then see and hear from the vantage point of that subject represented in paint, ink, or ceramic, any time she closes her eyes. For example, she could touch a bust of a long dead philosopher, walk away, and then see and hear everything occurring near the bust when she closes her eyes. This is a stealth spell, cast without the verbal evocation and light show associated with most spells. Caster lays a hand on a piece of art that contains a mortal or sentient subject (e.g. dwarf, elf, human, orc, etc.) and makes an unopposed Willpower skill check of challenging difficulty. Upon success, she has transformed that art subject into a viewing and listening device she can access instantly by closing her eyes. The piece of art does not need to be fixed in place. For example, this spell can be cast on a statuette and placed strategically somewhere. Lasts for the duration of a scene. This spell can be detected by Astral Eye and traced with Astral Trail. Yes, the gargoyles are watching you.

/ROOT/NEW TALENTS AND SPELLS/CD ..
/ROOT/CD THE CRYPTO MASQUERADE
/ROOT/THE CRYPTO MASQUERADE/LS

-RW-RW-R-- ROOT ROOT OVERVIEW.....59
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THE CRYPTO
MASQUERADE

OVERVIEW

This chapter contains material that is not so much an adventure module as it is an interesting social *sandbox* that can be incorporated into any *Cryptomancer* campaign. By "sandbox," we're referring to a very open-ended scenario where players can explore, immerse themselves in the story space, and pursue the plotlines that interest them the most, as opposed to playing a module that has a distinct beginning and end (like most dungeons).

The basic premise is as follows: the local regent is hosting the annual masquerade ball, an evening of entertainment and splendor where all the wealthy, powerful, and famous people of the kingdom can mingle with each other anonymously for one evening. However, instead of just wearing masks, all guests must show up with their very *faces* encrypted by the Dissemble spell. This event gives all guests the rare liberty of engaging with each other without worrying about political rivalries, court intrigues, or other societal baggage that complicates relationships. Of course, this anonymity also provides an opportunity to engage in some serious plotting, scheming, and skulduggery. And that's where things get *really* interesting.

To make this sandbox as user-friendly as possible, we have included some descriptive (and sometimes didactic) text that can be read aloud to players throughout the session of play. **These sections will be in bold print for your convenience.** But remember, this isn't a ready-to-play adventure module; it's a sandbox, or a toolkit. Still, we encourage players to not read any further in this chapter if their GM indicates a desire to use this material during a session or campaign.

THE INVITATION

The party has acquired invitations to the local regent's Crypto Masquerade. Given that player characters in *Cryptomancer* are fugitives trying to keep a low-profile, it is unlikely they were directly invited. It is far more likely that their patron provided them with invitations, or they were able to successfully steal invitations from another group during a previous caper.

Each separate invitation is a scroll that reads as follows:

"His Highness Cordially Invites You

The 27th Annual Crypto Masquerade

**Join us at the Castle, 4 hours before Midnight,
on the Holiday of Secrets.**

Before arrival, faces must be dissembled, garments must be stripped of identifying heraldry.

After arrival, only guards and servants are permitted to make their faces public. Anyone else who defies the Masquerade will be removed from the event and banned from future masquerades for no less than 5 years."

Below the invitation's text is what appears to be a crypto-signature: a string of nonsensical and ever-changing letters. It is likely the crypto-signature is a counter-forgery technique. Someone at the door of the event will likely be reviewing each invitation and decrypting the crypto-signature to assert the invitation's validity.

There is always the possibility that the encrypted text says who the invitation was originally sent to, as a means of potentially tracking and punishing those who gave their invitation to unwanted guests, or those who

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stole someone else's invitation. It is also feasible that the regent's investigators could use the Psychometry spell to review how the invitations changed hands before the event. Then again, these types of accountability measures would violate the very spirit of the Crypto Masquerade, wouldn't they? If the guests suspected the regent was spying on them during this event, all attendance would stop.

Regardless, the party might want to consider these possibilities as they prepare the event.

HONOR AMONG CRYPTO-THIEVES

Is the Crypto Masquerade as secret as it is sold to be? The regent is certainly in a position to spy on guests, but if he did, no one would attend this event ever again. There are behavioral and economic factors at play in any security equation. Let's consider the behavioral and economic factors of ransomware, for instance:

- If you are a victim of ransomware, you might ask yourself "What incentive does the bad guy have to actually give me my data back if I pay them?" Well, consider behaviors in the ransomware economy. If everyone *knew* that the bad guys never honored the arrangement, no one would pay them. So, if not enough of the bad guys "honor their half of the bargain," the entire ransomware economy would dry up. The bad guys who don't restore a victim's data are ruining the ransomware market for other bad guys!
- On the other hand, if victims of ransomware universally stopped paying the bad guys, this would also make ransomware no longer profitable, and the bad guys would move on to some other type of fraud to generate money. However, the reality is, some victims are put in situations where they have no choice but to pay, which keeps these attacks profitable for the bad guys. In a way, this creates a shared security problem, similar to "Everyone should drive the speed limit, but I can't today because I am having an emergency." We're all in this together, and the attacks won't stop until we find a way to make them no longer profitable.

UP To No GOOD

The players are not attending the Crypto Masquerade just to hobnob with the most powerful and well connected people in the kingdom. In fact, they aren't even supposed to be there. They are there because they have a very important task to carry out, likely assigned to them by their patron. This is a rare opportunity for their patron to send deniable operatives into the most secure and exclusive place in the kingdom wearing the equivalent of magical ski-masks. So, what are the players hoping to achieve during this event? Here are a few ideas:

- The party is tasked with identifying and spying on someone at the Crypto Masquerade and eavesdropping on their meetings with other guests. Perhaps the subject is one of the patron's closest allies or most feared rivals. Perhaps the subject is using the Crypto Masquerade to acquire allies in order to conspire against the patron, whether it is through business negotiations, political pacts, or outright aggression. The patron hopes to figure out what's coming in advance and plan accordingly.
- The party is tasked with acquiring a very expensive piece of art or a very powerful artifact that is securely stored inside the regent's castle. Executing an infiltration of the castle on any other day of the year would be nearly impossible, as it is the most secure location in the realm and the seat of the regent's power. The Crypto Masquerade, with the access and anonymity it affords, is the best possible chance to pull off such a caper.
- The party is tasked with either carrying out or preventing an assassination plot. Someone wants another someone else to be murdered at this very prominent event to send a message to the regent and the court. If the patron is trying to prevent this outcome, there is a reason that information about this plot cannot simply be shared with the regent or the potential victim. Perhaps the information was acquired through very illegal means or

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perhaps the regent is suspected of being in on the plot.

Rest assured, the party's patron is not the only person hoping to use the Crypto Masquerade to further some end. While a majority of the guests attending will actually be those prominent persons the regent intended to invite, many of them will be operatives and assets placed here to spy, cause trouble, or carry out secret missions. In fact, most of the nobility would agree that this is why attending the Crypto Masquerade is so exciting in the first place. And the regent is no fool: the event's security staff is always the finest the king can muster.

/ROOT/THE CRYPTO MASQUERADE/

ON YOUR VERY BEST BEHAVIOR

The party will be able to learn about the majority of the event's security protocols and expected behaviors through their patron, who has attended the event in the past, or through research on the Shardscape (the event always results in a flurry of public gossip, only some of it true). Below are the things players should be permitted to know straightaway, written in bold in case the GM wishes to read them aloud:

The regent's personal guard will be at every entrance and exit, in full battle dress, and ready to respond rapidly to emergencies. These are some of the most storied and decorated warriors in the kingdom who have not yet retired into politics or a mercenary's life. Of those great warriors who have left the service of the regent, some of them are among the event's guests. Either way, open aggressors during this event have approximately 1 turn to act before being swarmed by an overwhelming force.

Guest are required to keep their face dissembled at all times during the Crypto Masquerade, and anyone who drops this magical mask will be forcibly removed from the premises by the regent's guard. Guests are cer-

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tainly permitted to share the keyphrase encrypting their own face with other guests they have chosen to trust, if only to prove that they are who they say they are. However, sharing someone else's keyphrase or their name without their consent is considered taboo, and will be considered a sign that you are untrustworthy. Obviously, this doesn't stop some guests from doing so, and occasionally, the regent's guard is forced to remove someone who is subverting the spirit of the event.

Guests are permitted to carry "civilized" weaponry, such as ceremonial daggers, sheathed rapiers, and maces hanging from a belt, etc., so long as the weapon is carried openly, sheathed at all times, and bare no identifying marks. Duels are forbidden at the event, though they can certainly be arranged there and then executed at another place and time. Guests are also permitted, if not encouraged, to carry unique accouterments, such as fans, distinct jewelry, canes, and so forth, to assist in what might be called "temporary identification." Given that Dissemble makes everyone appear as a stranger as soon as you look away, it is useful to be able to recognize people as "the lady with the fan" or "the man with the sapphire amulet." However, none of the weapons or objects discussed above should contain identifying heraldry or be something the person is known to wear (e.g. "There goes the mage Zyrthane with his gnarled staff").

Guest are permitted to attend the event with their voices encrypted by Babel if they choose to do so. This means that no one will be able to eavesdrop on their conversation unless they know the keyphrase used when the spell was cast. Of course, this makes it very hard to mingle or have conversations without also carrying around a scroll that has the keyphrase written on it, so that it can be shared with intended parties. Further, all guests are required to speak plainly and directly when addressed by the regent's guard (however unlikely this event is), for the safety and security of all guests. Refusing to do so is grounds for removal.

Guests understand that the Crypto Masquerade begins before they arrive at the event. They must cast Dissemble in a secure location, travel under cloak, take diversionary and roundabout methods to get to the castle, and not arrive on a carriage or mount known to be affiliated with their houses. Once a guest leaves the event, they are not permitted re-entry.

Shard scrying during an event is an offense even more egregious than dropping your Dissemble spell. Shards are certainly permitted during the event and used frequently, but if regent's guard become suspicious that someone is shard scrying through a guest's shard (e.g. a guest is "aiming" their shard to get a good vantage point, or wearing it on an amulet, etc.), this behavior will be addressed immediately and potentially result in removal and/or a permanent ban. The primary concern with shard scrying is the risk that there could be Code Clerics on the other end of a shardnet seeing and then decrypting everyone's face and sharing this intelligence with their client.

While guests are expected to be under the influence of magic spells during this event, the act of actually casting spells in the castle is absolutely forbidden to the guests. A fair number of the regent's guard possess the Spellbreaker talent and will use it to neutralize any mage who appears to be conjuring something like a Kill Ball or a hazardous Maze.

Lastly, there are court cryptomancers available at the event to perform cryptomantic services for the guests. They are readily available to cast Dissemble or Babel on a guest who wishes to reset their keyphrases, or create secure enclaves within the ballroom itself by casting Maze and sharing the keyphrase with the guest who requests it. Given that the court cryptomancers already have their voices encrypted with Babel, they can perform these services in plain sight, without being concerned about someone overhearing the keyphrases they are using.

SOCIAL, SECURITY

That's a lot of security procedures and rules to unpack, with a lot of interesting lessons and/or real life parallels. Let's discuss a few of them:

- While we sometimes don't think of clothing as an identifier, it absolutely is when it comes to law enforcement. Clothing selection is extremely important if you are attending a demonstration that has the possibility of becoming chaotic. If you are dressed exactly like the most active or out-of-control elements of an advocacy group, you stand the risk of being implicated in any illegal activity they are up to, even if you had nothing to do with said activity. Nondescript, unmemorable clothing is probably your best bet.
- The "No Shard Scrying" rule should be thought of as "No Flash Photography" or "No Recording This Concert." While these rules are driven by anti-piracy measures, there are also social norms to consider when it comes to photography or recording. For example, it can be extraordinarily anti-social to take someone's picture without their permission, even in a place with no reasonable expectation of privacy. Be considerate. Ask first.
- The court cryptomancers practice good operational security by using an already secure channel (i.e. their encrypted voices) to create and use new keyphrases for their spells. Because of Babel, they can cast cryptomantic spells in front of people, and still protect their keyphrases. However, the first time they casted Babel that evening, they did so in a secure location where no one could hear them say the keyphrase. If someone overheard them doing this, they would have heard the clear-text keyphrase they used, and be able to harvest every new keyphrase they create during the evening's activities. It goes to show that a system of secrets built on one initial secret can fall apart if that initial secret is exposed. Consider how the compromise of your email credentials, for example, could lead to a complete takeover of all your other online accounts.

THE BALLROOM

The following text can be read aloud to the players, to introduce them to the venue they'll be spending the evening in:

When guests arrive, they are greeted by one of the regent's finely-dressed retainers wearing a black robe and a massive white ruff around his neck. He is flanked by a handful of the regent's guard, each of them wearing a polished bronze breastplate and a crimson sash around the waist. The retainer checks the validity of each invitation: he must know crypto-signature's keyphrase, or perhaps he encrypted it himself with his own true name. He then places the invitations in a strongbox next to him, telling the guests that all invitations will be thrown to the fire so long as the event goes off without a hitch. He then beseeches each guest to enjoy themselves while also observing the strict rules of the event.

The ballroom's walls are decorated with tapestries depicting historical or mythical events; the coronation of kings, epic battles between ancestral armies, and loyal subjects triumphing in times of flood and famine, thanks to their regent. Carved marble columns hold up a long balcony wrapping around the room, which is accessible from a grand staircase via at the far end; above the staircase is a painted portrait of the founders of the Crypto Masquerade, the grandparents of regent. Guests looking to get a bit of distance from those they have already revealed themselves to can converse on the balcony - depending on how you position yourself you can also keep an eye on the ballroom floor below or conceal yourself to an extent from the view as well as the hearing of those below.

On the lower floor, there are six distinct enclaves spanning from the ballroom to the left and right. Each enclave contains luxurious furniture surround an ornately carved wooden table, all standing before a grand fire-

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place. There is a court cryptomancer on either side of the ballroom, each one dressed in gray and wearing a hood, ready to create or tear down a cryptomantic Maze to afford privacy to the groups wishing to use these spaces.

Along one side of the wall is a banquet table spread with roast spiced meats, fruits (grapes, sliced melon, pitted apricots), sweet rolls, candied nuts, tarts (filled with cherries, lemon custard, or goat cheese), and a platter of small cakes elaborately decorated to look like flowers. Servants wearing white gloves and crimson tunics or dresses circulate throughout the hall carrying wine and silver trays of sweet and savory pastries. Their faces are not obscured by the Dissemble spell, but they are humorless.

In one corner are a group of musicians playing the lute, flute, and tambourine. Twice during the night the musicians will take a break and a different set of entertainers will take the stage - first a band of acrobats, and second an illusionist.

/ROOT/THE CRYPTO MASQUERADE/

INTRIGUES

Intrigues are interesting bits of drama, gossip, or intelligence that can be gleaned by talking with guests and earning their trust, eavesdropping on conversations, or maybe even pick-pocketing their shards. It is up to both the GM and the players how they'd like to interact. Some players will want to role-play out conversations with GM characters, while other characters will want to chuck dice resolve social interactions using their characters' Charm, Deception, Menace, Performance, or Sleight of Hand skills. The Highbred talent from *Cryptomancer* is also very likely to pay dividends here, as is the Veteran talent, given that many guests in attendance are storied war heroes.

Below are several of examples of intrigues, but the GM is encouraged to modify these or build her own:

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- One of the servants carrying wine to the guests is spying on the regent and intends to use this opportunity to pass off important information regarding the castle layout or the regent's political machinations to one of the guests. The party could intercept this information or at least notice it - which implicates the spy, though probably not the guest.
- A merchant has discovered that a respected officer of the law concealed evidence that her son was involved in a notable act of vandalism. The merchant seeks to blackmail the officer, but has to find her first. If the players can uncover the blackmailer's identity they could earn the gratitude of the officer - or attempt to blackmail her themselves.
- A criminal has recently stolen an important contract which he now wishes to sell to the highest bidder. He'll approach at least one member of the party - they might be able to buy the contract if they offer a good price. The contract contains the True Names of two notable individuals and further, its content is potentially relevant to one of the secret meetings.
- The lutist, a well-known bard, has previously romanced three separate guests at the party, none of whom are aware of the others existence and all of whom are inclined to have a private conversation during one of the musicians' two breaks.
- The lords and ladies of surrounding lands who have sworn fealty to the regent don't get along with each other. The regent abides their infighting (which sometimes escalates into wars), so long as it ends quickly and has a decisive winner. That being said, many of these lords and ladies are in attendance, and negotiating the terms of their next feud with potential allies and enemies.
- At least one guest has not only dissembled their face, but they have expertly deployed the Glamour spell to change their apparent age, presumed gender, physiolo-

- - MORE - -

gy, and race (i.e. dwarf, elf, or human). Of course, this could only be detected by someone who casts the Astral Eye cantrip. This guest is clearly trying to hide something. Or they are trying to ensure they are not recognized if they drop their Dissemble spell... and perhaps they intend to in order to execute a very public false flag operation implicating another fantasy race or faction for what they are about to do.

- A number of guests are using this event's anonymity and high security as Elysian grounds for negotiations that would otherwise be impossible. At least two soma-cartel bosses are in attendance to discuss a bloody dispute they normally settle with assassins in alleyways. A faction who has kidnapped a noble's heir, and warned against attempts to contact the authorities, is discussing terms of release with the captive's family.
- Agents of the local constabulary are in attendance, gaining intelligence on threats to the city-state and possible corruption among high-ranking officials. Given that the regent gives nobles a wide berth when it comes to unscrupulous dealings, the constabulary must sometimes take the law into its own hands in order to expose corruption (and share it with the people or use it for leverage against the regent).
- One of the guests is acting particularly erratic. Interactions with him lead the party to believe that he is a Stranger, one of the unfortunate souls who have had his face and voice encrypted against his will by the Risk Eaters. There must be a reason he is here, and it is unlikely to be a pleasant one. Further, there is really no way to tell if there are other Strangers in the crowd. Trouble could be brewing.
- And of course, the regent just might be in attendance, masquerading as just another noble...

FED, RIPPER, SKID, OR TIME-WASTER?

The Crypto Masquerade, in many ways, resembles a real life deep web or dark web forum, whether it is a forum dedicated to monetizing stolen data or sharing information between political dissidents. The people who frequent these places usually hide their identities with aliases, anonymizing services like TOR, and good tradecraft. While this protects users, it also makes it so you never really know who you are talking to. You might be chatting with a criminal, a freedom fighter, or a journalist who wants to publish your story. You might also be talking to a law enforcement agent, an online predator, or members of an oppressive regime you are trying to avoid. These crypto-communities can be very dangerous places if you have not done the work of protecting your identity or assuring that you can trust the people you are communicating with. While this is nowhere near an exhaustive guide, here are some security and privacy measures a user should take before exploring these places:

- Develop a persona, which is a personality that is different from your own, and never break character. Never tell people your true identity or real details about yourself.
- Never use a device, email address, phone number, or account name that you use for your personal day-to-day activities. Avoid accessing these communities from home.
- When you are setting up the email addresses, forum handles, and chat accounts for your persona, anchor them to a disposable phone you bought with cash, and only use the phone for purposes of account set up.
- Never click on a link or open an attachment that someone shares with you, unless you are doing so from a temporary device disconnected from the internet, such as a virtual machine with the network settings turned off.
- Expect that you *will* make mistakes along the way which *could* be used to identify you, and that law enforcement (or worse) are in the same anonymous spaces you are.

WHAT'S NEXT?

What ultimately transpires during this event is up to the GM and the players. We've endeavored to create an interesting and exciting social encounter ripe with opportunities for espionage, intrigue, danger, and maybe even some humor. To make this sandbox an adventure, the GM is going to have to either specify a specific goal for the party or present them with some kind of seriously dramatic event. Will the discovery of a murder in one of the Mazed enclaves send shock-waves throughout the party? Will some type of grand announcement by the regent or one of the regent's retainers change the very contours of all the conversations and dealings that have been happening during the evening? Have enough skilled warriors infiltrated the party to finally execute the coup they have been planning for years? We leave all that up to you, GM.

Finally, a parting note. We've presented the Crypto Masquerade as an exclusive, anonymous gala for the upper echelons of a fantasy society, occurring once a year. But what if there were social structures like the Crypto Masquerade all over the *Cryptomancer* setting? Consider illegal markets where people trade in illicit goods and information, protected by the anonymity of the Dissemble spell. Or what about political voting events where the identity of the people casting ayes and nays for a policy proposal is protected? These possibilities, and others, could serve for equally interesting and exciting social encounters.

APPEARANCE QUALITIES	
BUILD	FRAIL, SHORT
EYES	GOLDEN
HAIR	BLACK, CHIN-LENGTH
SKIN	TANNED

PERSONALITY QUALITIES	
DESIRES	PRESTIGE
FEARS	OBSCURITY
TENDS TO	LOSE HER TEMPER
USED TO	BE A GEM-CUTTER

TALENTS & SPELLS	
SHARDSPLITTER (CAN SPLIT ONE SHARD INTO MANY SHARDS).	
CODEBREAKER (1% CHANCE TO KNOW ANY SYMMETRIC KEYPHRASE).	
TRACER (1 MP, UNOPPOSED OF VARYING DIFFICULTY, LOCATE SHARDS).	
ARTISAN (IGNORE 1 BOTCH TO CRAFT, SOMETIMES PERFORMANCE).	
ANTI-SCRY (1 MP, UNOPPOSED CHALLENGING, IGNORE 1 BOTCH TO AVOID SCRYING).	
INNOCENT (IGNORE 1 BOTCH TO SLEIGHT OF HAND AND DECEPTION, SOMETIMES).	
DENIER (1 MP, UNOPPOSED OF VARYING DIFFICULTY, PROHIBITS NEW ECHOS).	

COMMON NAME	ALISEA MAGMAFORT
TRUE NAME	CHARL
SEX, AGE, RACE	FEMALE, DWARF
THE PARTY	

WITS

TAKE COVER
VS MISSILE

8

4

4

KNOWLEDGE

CUNNING

ALCHEMY

DECEPTION

CRAFT

SCROUNGE

MEDICINE

TRACKING

QUERY

TRAPS

RESOLVE

RESIST
VS MAGIC

4

2

2

PRESENCE

WILLPOWER

BEAST KEN

MANA POINTS

CHARM

MENACE

PERFORMANCE

SPEED

DODGE
VS MELEE
VS MISSILE
+ 1 DAMAGE

6

3

3

AGILITY

DEXTERITY

ACROBATICS

FIRE MISSILE

ATHLETICS

LOCK PICKING

ESCAPE ARTISTRY

PRECISE MELEE

STEALTH

SLEIGHT OF HAND

POWER

PARRY
VS MELEE

6

3

3

STRENGTH

ENDURANCE

BRUTE MELEE

HEALTH POINTS

FEAT OF STRENGTH

THROWN MISSILE

UNARMED MELEE

○ CRITICAL WOUND / WEAK POISON

-1 HP IF MOVE AND ACT

○ MORTAL WOUND / STRONG POISON

-1 HP PER TURN

TRADEMARK WEAPON: HAMMER AND SPIKE	
RULES	HAMMER: BRUTE MELEE, CONCEALABLE, DIRTY, DAMAGE 0, LIGHT, MELEE, SHORT, THROWN MISSILE (PLUS SPIKE): TWO-HANDED, PRECISE MELEE INSTEAD OF BRUTE MELEE, DAMAGE + 1.
QUALITIES	SHODDY

TRADEMARK OUTFIT: BRIGANDINE	
RULES	LIGHT DEFLECTION
QUALITIES	DWARVEN MAKE (RESEMBLES A RAIN-COAT FOR MINERS), DISTRACTING FEATURE (STUDDED MANTLE).

EQUIPMENT, CONSUMABLES, AND LOOT	
CLOCK, TORCH, STRONG HEALING POTION, STRONG MANA POTION	
AMETHYST DRAGON FIGURINE	

APPEARANCE QUALITIES

BUILD	ATHLETIC, BUILT
EYES	BLUE, DETERMINED
HAIR	MESSY, BROWN
SKIN	DELICATE

PERSONALITY QUALITIES

DESIRES	JUSTICE, PLEASURE
FEARS	PEASANTS
TENDS TO	SHIRK RESPONSIBILITY
USED TO	BE AN HEIR

TALENTS & SPELLS

HIGHBRED (CAN SAVE OTHERS FROM SOCIAL GAFFES WITH NOBILITY).

TEMPERED TASTE (IGNORE 1 BOTCH TO CHARM, DECEPTION, MENACE, OR PERFORMANCE WHEN USING FOOD/DRINK AS ANECDOTE).

TRUE NAMED PLATE (+1 DR AGAINST ANYONE WHO KNOWS HIS TRUE NAME).

BRAWLER (+1 TO UNARMED ATTACKS)

POWERHOUSE (IGNORE 1 BOTCH TO FEAT OF STRENGTH AND ATHLETICS)

ROPE SPRITE (3 MP, UNOPPOSED CHALLENGING, CONJURES A MAGICAL ROPE).

COMMON NAME	ROBRIC RAVENWING
TRUE NAME	ROBENITTON
SEX, AGE, RACE	MALE, 20, HUMANN
THE PARTY	

WITS

TAKE COVER
VS MISSILE

4

13

KNOWLEDGE

CUNNING

ALCHEMY

DECEPTION

CRAFT

SCROUNGE

MEDICINE

TRACKING

QUERY

TRAPS

RESOLVE

RESIST
VS MAGIC

6

42

PRESENCE

WILLPOWER

BEAST KEN

MANA POINTS

CHARM

MENACE

PERFORMANCE

SPEED

DODGE
VS MELEE
VS MISSILE
+ 1 DAMAGE

6

33

AGILITY

DEXTERITY

ACROBATICS

FIRE MISSILE

ATHLETICS

LOCK PICKING

ESCAPE ARTISTRY

PRECISE MELEE

STEALTH

SLEIGHT OF HAND

POWER

PARRY
VS MELEE

8

44

STRENGTH

ENDURANCE

BRUTE MELEE

HEALTH POINTS

FEAT OF STRENGTH

THROWN MISSILE

UNARMED MELEE

○ CRITICAL WOUND / WEAK POISON

○ MORTAL WOUND / STRONG POISON

-1 HP IF MOVE AND ACT

-1 HP PER TURN

TRADEMARK WEAPON: RAVENWING FAMILY SWORD

RULES	BRUTE MELEE, DAMAGE + 1, MELEE, SHORT
QUALITIES	PRECIOUS (JEWEL), STRIKING STORAGE (THE SCABBARD HAS RAVENWING HERALDRY, NOT THE SWORD)

TRADEMARK OUTFIT: SCALE ARMOR

RULES	ENDURANCE REQUIREMENT 3, HEAVY DEFLECTION, MAX AGILITY 3.
QUALITIES	HUMAN MAKE (SHINY STEEL SCALES, EACH STAMPED WITH A RAVEN EMBLEM), STORIED (IT'S BEEN IN THE FAMILY..)

EQUIPMENT, CONSUMABLES, AND LOOT

CLOCK, TORCH, STRONG HEALING POTION, STRONG MANA POTION

SIGNET RING, SCROLLS, WAX FOR SEALS

APPEARANCE QUALITIES

BUILD	LITHE
EYES	LONG EYELASHES, BROODING
HAIR	SHAVED HEAD
SKIN	PINK, WITH BLUEISH HUE

PERSONALITY QUALITIES

DESIRES	WEALTH
FEARS	SYLVETTIC ELVEN ELDERS
TENDS TO	LOOK FOR AN ANGLE
USED TO	LIVE WITH A HUMAN FAMILY

TALENTS & SPELLS

LOWBORN (CAN SAVE OTHERS FROM SOCIAL GAFFES WITH STREET ELEMENTS).

LIAR (IGNORE 1 BOTCH TO DECEPTION).

SILVER-TONGUED (IGNORE 1 BOTCH TO CHARM IN WRITING AND OVER SHARD).

SMUGGLER (CAN SMUGGLE ONE SMALL ITEM).

TREACHEROUS (SACRIFICE ALLY TO HIT THAT WOULD REDUCE YOU TO 0 OR LESS HP).

SHARD SCRY (3 MP, UNOPPOSED OF VARYING DIFFICULTY, SEE THROUGH SHARDS).

SHARD WARP (5 MP, UNOPPOSED OF VARYING DIFFICULTY, WARP THROUGH SHARDS).

COMMON NAME	EVONESS GUTHREX
TRUE NAME	(ABANDONED VERY YOUNG, DOESN'T KNOW)
SEX, AGE, RACE	UNSPECIFIED, 31, ELF
THE PARTY	

WITS

TAKE COVER
VS MISSILE

6

3

3

KNOWLEDGE

CUNNING

ALCHEMY

DECEPTION

CRAFT

SCROUNGE

MEDICINE

TRACKING

QUERY

TRAPS

RESOLVE

RESIST
VS MAGIC

8

3

5

PRESENCE

WILLPOWER

BEAST KEN

MANA POINTS

CHARM

MENACE

PERFORMANCE

SPEED

DODGE
VS MELEE
VS MISSILE
+ 1 DAMAGE

4

2

2

AGILITY

DEXTERITY

ACROBATICS

FIRE MISSILE

ATHLETICS

LOCK PICKING

ESCAPE ARTISTRY

PRECISE MELEE

STEALTH

SLEIGHT OF HAND

POWER

PARRY
VS MELEE

6

4

2

STRENGTH

ENDURANCE

BRUTE MELEE

HEALTH POINTS

FEAT OF STRENGTH

THROWN MISSILE

UNARMED MELEE

○ CRITICAL WOUND / WEAK POISON

○ MORTAL WOUND / STRONG POISON

-1 HP IF MOVE AND ACT

-1 HP PER TURN

TRADEMARK WEAPON: LUMBER AXE

RULES	BRUTE MELEE, CUMBERSOME, DAMAGE + 2, MELEE, OVERWHELMING, STRENGTH REQUIREMENT 3, TWO-HANDED
QUALITIES	HUMAN MAKE (STEEL BLADE FIXED TO OAKEN HANDLE), MUNDANE (JUST LOOKS LIKE IT'S USED TO CHOP WOOD).

TRADEMARK OUTFIT: TUNIC

RULES	INNOCUOUS
QUALITIES	HUMAN MAKE (SLEEVELESS, MADE OF WOOL), DISTRACTING FEATURE (LARGE WOODEN MEDALLION), AWKWARD FIT (TIGHT AND BAGGY IN ALTERNATING PLACES).

EQUIPMENT, CONSUMABLES, AND LOOT

CLOCK, TORCH, STRONG HEALING POTION, STRONG MANA POTION

ABACUS, CARVING KNIFE